COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

October 10, 2014
File No. 82-01.01-55

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

2014 OCT 10 PM 5

Dear Mr. Unger:

Comments on Tentative Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) Permit for the Whittier Narrows Water Reclamation Plant (NPDES Permit No. CA0053716, CI No. 2848)

The Joint Outfall System[1] (Sanitation Districts) appreciates the opportunity to provide comments on in the Tentative Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit (Tentative Permit) for the Whittier Narrows Water Reclamation Plant (WRP) dated September 10, 2014. The Sanitation Districts have a number of comments regarding the Tentative Permit, and request that the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) modify the Tentative Permit based on the requests herein. We would also like to take this opportunity to thank Regional Board staff for meeting with our staff on October 1, 2014 and October 6, 2014 to discuss our concerns regarding the Tentative Permit. Our comments are detailed below, and divided into several sections. The first and second sections present general/legal and specific comments, respectively, relating to toxicity provisions in the Tentative Permit, while the third section contains other comments.

GENERAL/LEGAL COMMENTS ON TOXICITY-RELATED PROVISIONS

The general/legal comments prepared by the Sanitation Districts' special counsel are included as Attachment A as part of the Administrative Record.

SPECIFIC COMMENTS ON TOXICITY-RELATED PROVISIONS

Comment 1. Conditions of the permit must not limit or restrict 40 Code of Federal Regulations (CFR) Part 136 required and recommended data evaluation procedures. This includes a need to include language that will specifically allow the Permittee to conduct multi-concentration tests and conduct 40 CFR Part 136 required dose response relationship evaluations on bioassay data prior to application of the two concentration TST statistical hypothesis test.

[1] Ownership and operation of the Joint Outfall System is proportionally shared among the signatory parties to the amended Joint Outfall Agreement effective July 1, 1995. These parties include County Sanitation Districts of Los Angeles County Nos. 1, 2, 3, 5, 8, 15, 16,17, 18, 19, 21, 22, 23, 28, 29, and 34, and South Bay Cities Sanitation District of Los Angeles County.

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Biological systems are inherently variable. Whole effluent toxicity (WET) tests measure how certain organisms respond to a particular water sample. As such, the measurements are impacted by a number of factors including organism health, ionic changes in water chemistry, presence/absence of trace elements in the water, seasonality, light levels, temperature, analyst handling, and many others. While variability in WET tests cannot be eliminated entirely, the 40 CFR Part 136 promulgated methods and various United States Environmental Protection Agency (USEPA) guidance document procedures were intentionally developed and incorporated to address this variability and quantify data and result reliability.

Conducting multiple concentration WET tests and evaluating the dose-response relationship is one of the more critical and significant method-defined procedures for addressing this variability and validating data. The concept of a dose-response/concentration-response relationship has been described by toxicologists as "the most fundamental and pervasive one in toxicology"[2]. This concept assumes that a causal relationship exists between the concentration of a pollutant in a sample and the measured organism response. In other words, it is assumed that increasing organism response or effect is due to increasing pollutant/toxicant concentrations. Evaluation of the dose-response relationship provides the empirical evidence that supports this assumption. Therefore, evaluating dose response information is critical to associating any observed response to "toxicity". If an effect is caused by "toxicity", higher concentrations should logically exhibit the same or greater effects and lower concentrations should exhibit the same or lower effects. The only way this can be evaluated is by conducting multiple concentrations. Anomalies in this expected or assumed dose-response curve reduces confidence in the test's ability to accurately estimate "toxicity" or, more specifically, the test's ability to estimate effects associated with pollutants or toxicants. In fact, the USEPA determined that application of a relatively simple dose-response evaluation procedure reduced the false positive rate among non-toxic blank samples from over 14% to less than 5%[3]. Although more challenging to quantify, evaluation of the dose-response relationship is also expected to significantly reduce the false negative error rate as well (see example below).

[2] Casarett, L.J. and J. Doull. 1975. Toxicology: the basic science of poisons. Macmillan Publishing Co., New York. [Exhibit 1]

[3] 40 CFR Part 136. Guidelines Establishing Test Procedures for the Analysis of Pollutants; Whole Effluent Toxicity Test Methods; Final Rule. Federal Register / Vol. 67, No. 223 / Tuesday, November 19, 2002 / Rules and Regulations. Page 69963.

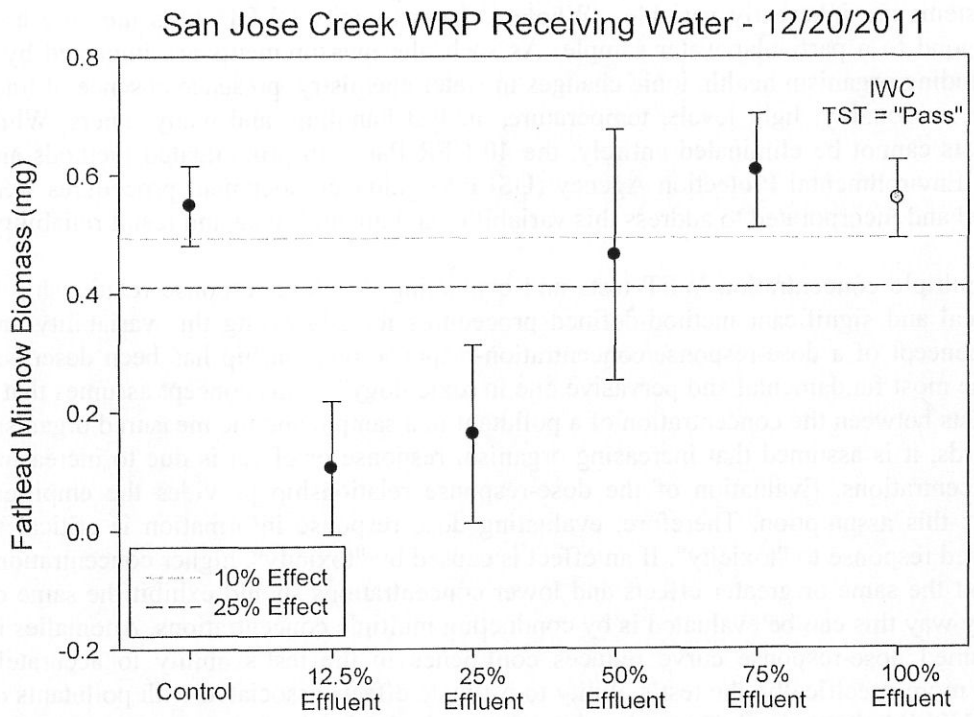

Figure 1. Dose-response pattern depicting a likely false negative error.

In the absence of multi-concentration testing and a dose-response evaluation, the results depicted above would have been identified as an unqualified "Pass" using the USEPA Test of Significant Toxicity (TST) protocol. However, pending the findings of additional data evaluations, this test that otherwise would have been declared "non-toxic" or "Pass", will likely be identified as "inconclusive" and repeated after conducting a dose-response relationship evaluation.

It is for these reasons that the 40 CFR Part 136 promulgated chronic toxicity testing protocols concluded that test review, including evaluation of the dose-response relationship, is necessary for ensuring that all test results are reported accurately[4]. In addition to being necessary for accurate result interpretation, the USEPA method manual (EPA 821-R-02-013) also directly requires that multiple concentration testing be conducted for all NPDES effluent compliance determination tests. It further requires that an evaluation of the dose-response relationship be conducted and strongly recommends against the use of two concentration (control and IWC) test designs for NPDES testing (see Attachment B for specific citations from the promulgated methods). Furthermore, the USEPA's National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (USEPA TST Guidance) [Exhibit 3] also recognizes that toxicity tests should be conducted following these same requirements and furthermore specifically references conducting multiple concentration testing before application of the two-concentration TST statistical procedure (see Attachment C for specific citations from the USEPA TST Guidance).

Therefore, we request that the following changes be made to the Tentative Permit to accurately reflect allowable and required 40 CFR Part 136 protocol evaluation procedures that includes the ability conduct multiple concentration tests and an appropriate dose response relationship evaluation.

Page 26, Section VII.J (first paragraph):

[4] Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Ed., EPA-821-R-02-013. October 2002. Section 10.2. [Exhibit 2] Page 49.

"The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a ~~single effluent concentration~~ chronic toxicity test ~~at the discharge IWC~~ using the Test of Significant Toxicity (TST) approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response ≤0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this nu ll hypothesis is reported as "Fail". The relative "Percent Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100."

Page 27, Section VII.J (last paragraph):

"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) test is not ~~tested using~~ a multi-concentration test ~~design; therefore, the concentration-response relationship for the effluent and/or PMSDs shall not be used to interpret the TST result reported as the effluent compliance monitoring result.~~ ~~While t~~ The Permittee can opt to monitor the chronic toxicity of the effluent using five or more effluent dilutions (including 100% effluent and negative control) and utilize all 40 CFR Part 136 specified procedures, including evaluation of the concentration response, to determine if results are reliable and should be reported, anomalous and should be explained, or that the test was inconclusive and should be repeated. O~~o~~nly results generated using the TST statistical procedure on bioassay data meeting 40 CFR Part 136 QA/QC requirements ~~result~~ will be considered for compliance purposes."

As indicated directly under Section V.A.5 heading, the subsections under Section V.A.5 represent additional requirements and recommendations not found in the previously referenced method manuals. Minimum control response test acceptability criteria (TAC) are clearly and unambiguously highlighted in the referenced method manuals. Therefore, inclusion of the specific TAC condition here is unnecessary and could be misconstrued to indicate that only tests failing TAC should be repeated within 14 days or that failing TAC is the only appropriate means for invalidating or determining a WET test as "inconclusive". Making the recommended changes will provide more clarity and ensure that all 40 CFR Part 136 protocol requirements can be applied as appropriate.

Page E-13, Section V.A.5:

Replace Subsection V.A.5.c including Table E-4 with alternative language, as follows:

"c. Tests identified as "invalid" or "inconclusive" using procedures specified in the referenced method manual and supporting USEPA guidance must be resampled and retested within 14 days.

~~If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, 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) (see Table E-4, below), then the Permittee must re-sample and re-test within 14 days.[22]~~

~~Table E-4. USEPA Test Methods and Test Acceptability Criteria[22]~~

Comment 2. Language in the Tentative Whittier Narrows Permit could be misinterpreted to indicate that receiving water toxicity monitoring is subjected to numeric chronic toxicity limits (MDEL and MMEL) or numeric receiving water triggers.

The Tentative Permit clearly identifies that a narrative chronic toxicity water quality objective applies to receiving water monitoring (Section V.A.19, page11). However, language in the MRP could be misinterpreted to mean that that chronic receiving water toxicity monitoring results are subject to the same maximum daily effluent limitation (MDEL) and monthly median effluent limitation (MMEL) numeric limits as are imposed on the final effluent. It would not be appropriate for the Permittee to be held responsible for receiving water toxicity not attributable to the Permittee's discharge. Furthermore, numeric accelerated testing and TRE triggers should only be applicable to the immediately downstream receiving water location and should be waived if concurrent testing indicates that the source of the observed receiving water toxicity was not due to the Permittee's discharge. Therefore, the quarterly receiving water toxicity testing should only be a monitoring requirement and we request that the following changes be made to the Tentative Permit:

Page E-11, Section V.A.2

"The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. ~~For the receiving water, sufficient sample volume shall also be collected for subsequent TIE studies, if necessary, at each sampling event.~~ All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation."

Page E-17, Footnote 19

"The Permittee shall conduct Whole Effluent Toxicity monitoring on receiving water samples as outlined in section VIII.D. If the monthly median chronic toxicity result at the immediate downstream receiving water location is identified as "Fail" and concurrent upstream and/or outfall testing does not rule out the Permittee's outfall as a source of the observed exceedance, the Permittee shall initiate accelerated and TRE Plan initiation testing as described in section V.A.7 and V.A.8. ~~Please refer to section V.A.7 of this MRP 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" with a "% Effect". Exactly three independent toxicity tests are required when one toxicity test results in "Fail".~~"

Add a Section VIII.D. on page E-19:

"D. Receiving Water Chronic Toxicity Requirements

1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity
The chronic toxicity IWC for this discharge is 100 percent receiving water.

2. Sample Volume and Holding Time
The total sample volume shall be determined by the specific toxicity test method used. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

3. Chronic Freshwater Species and Test Methods
If the receiving waters salinity is <1 ppt, the Permittee shall conduct the following chronic toxicity tests with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002;

Table IA, 40 CFR part 136). In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

a. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0).
b. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0).
c. A static toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

4. Quality Assurance and Additional Requirements.
Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

a. The results of the receiving water tests are to be reported as "Pass" or "Fail" and "Percent Effect" using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: undiluted receiving water response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent Effect" in undiluted receiving water is defined and reported as: ((Mean control response - Mean undiluted receiving water response) ÷ Mean control response)) × 100.
b. Tests identified as "invalid" or "inconclusive" using procedures specified in the referenced method manual and supporting USEPA guidance must be resampled and retested within 14 days.
c. Control and dilution water should be receiving water or laboratory water, as appropriate, and must be approved by the Regional Board before use. If the dilution water used is different from the culture water, a second control using culture water shall be used.
d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using the EC25.
e. Chlorine and ammonia shall not be removed from the receiving water sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F)."

Comment 3. The Permittee should not be required to conduct routine toxicity compliance monitoring and should not be liable for continued MMEL and MDEL WET violations after triggering accelerated testing and initiation of the TRE.

Since "toxicity" is a characteristic of an effluent and not a constituent, all toxicity efforts conducted after an exceedance of an MDEL or MMEL WET limit should focus on quantifying the persistence of toxicity and identifying the pollutant cause of the exceedance. The accelerated testing following an MMEL or MDEL exceedance is conducted to confirm that toxicity is persistent enough to warrant the exceptional efforts and costs that are incorporated in the TRE process, including TIE testing, and the TRE is specifically intended to identify the specific cause or causes of the observed toxicity (and ultimately confirm that toxicity is no longer present). Since the accelerated bioassay tests are conducted following all requirements of the 40 CFR Part 136 methods, they must be and are reported concurrently with all other NPDES results in the monthly report. Additionally, as part of our initial TRE Plan, the Sanitation Districts have been committed to conducting TIE toxicity testing immediately upon triggering

the TRE in addition to the other recommended actions. Therefore, the Regional Board will continue to receive chronic toxicity testing data throughout the accelerated testing and TRE Plan initiation process.

However, requiring additional compliance testing to be conducted concurrently with the accelerated testing and TRE initiation will result in several confounding situations. First, accelerated chronic toxicity testing is indistinguishable from routine compliance chronic toxicity testing in terms of how these tests are conducted. Both tests require following the 40 CFR Part 136 promulgated method, and current permit requirements obligate the Permittee to report all of these test results for NPDES compliance determination purposes. Since it would be reasonable to expect that two or more accelerated tests would generally be conducted during a calendar month, a Permittee could end up conducting five or more reportable chronic toxicity tests during accelerated testing if concurrent compliance testing is also required. Since it appears to be the intent of the Regional Board to base the monthly median on no more than three tests, the accelerated tests and the compliance tests would have to be interchangeable and used for both compliance determination AND evaluation of the TRE trigger. Otherwise, an exclusion of any accelerated testing into the calculation of the MMEL would need to be specifically mandated.

Assuming such clarification was provided or that accelerated tests could be used to demonstrate compliance, a second and even more challenging issue would arise. The regulatory threshold used during accelerated testing is different from the threshold for used routine compliance determination. For routine compliance determination, a monthly median TST is used to evaluate compliance while during accelerated testing, a single TST exceedance is used as a TRE trigger. Under this approach, separate and independent chronic toxicity tests would be conducted for accelerated testing and compliance determination. It is quite likely that a Permittee could "Fail" one of the four accelerated tests while "Passing" the MMEL compliance tests. This would result in the triggering of a TRE on a Permittee that is actually demonstrating compliance. Furthermore, a Permittee could also "Pass" all four accelerated testing bioassays while "Failing" the MMEL compliance monitoring tests. It is unclear if such an occurrence would result in the re-triggering of accelerated testing. Similarly, if the MMEL compliance monitoring tests and the accelerated monitoring both resulted in "Fail", it is unclear if additional accelerated testing would be conducted concurrently with the TRE in response to the new MMEL failure. Finally, during the TRE, a Permittee could demonstrate compliance with the MMEL while in the middle of the TRE analysis. In such a situation, it is unclear if the Permittee would end TRE or continue TRE implementation.

Overall, it seems to be of very little use to require accelerated testing or initiation of a TRE while the Permittee is actually demonstrating compliance with MDEL and MMEL. By requiring continued and independent compliance monitoring during accelerated testing and TRE initiation, such scenarios are likely to be observed. The only reasonable solution to these issues, if the Regional Board were to refuse to remove the continued compliance monitoring requirement during accelerated testing and TRE implementation, would be to allow the Permittee discontinue accelerated testing and/or TRE plan implementation if compliance with the MMEL and MDEL is demonstrated during a calendar month. Such a solution will require significant modifications to the tentative permits.

Additionally, State Water Resources Control Board (State Water Board) staff has been actively working on the development of a statewide policy/plan to address regulation of WET for several years now. A significant and meaningful part of this process includes working with multiple stakeholders across the state and the issue discussed above has been a part of the discussions with State Water Board staff. As a result, State Water Board staff has made its intentions known that after the initial MMEL or MDEL WET violation, no further violations should be incurred during accelerated testing and for a period of six months after initiation of the TRE implementation plan provided that the Permittee conducts the required

and appropriate actions to address the WET exceedance.[5,6] An extension of the six-month exemption could be granted by the regulating authority on a case-by-case basis. This approach would allow for the Permittee focus any and all available efforts on quickly confirming the persistence of toxicity during accelerated testing and/or more completely characterizing and identifying the toxicity-causing constituent(s) during the TRE instead of conducting additional independent testing that would not be useful in achieving the goal of controlling toxicity.

Because the State Water Board approach is an outgrowth of a wider stakeholder process, we believe that this approach should be applied to the tentative permit. Based on these comments, the following changes are requested:

Page E-14, Section V.A.7. (last sentence of the last paragraph):

"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~~."

Page E-14, Section V.A.8:

"~~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.~~"

Page E-15, Section V.A.8.d:

"~~The Permittee shall continue to conduct routine effluent monitoring for compliance determination purposes while the TIE and/or TRE process is taking place. Additional accelerated monitoring and TRE work plans are not required once a TRE is begun.~~"

Comment 4. Initiating accelerated testing within 24 hours of being notified of an MMEL or MDEL WET violation is not practicable.

There are several reasons why it is not possible to initiate accelerated testing within 24-hours after being notified of an MMEL or MDEL exceedance. The first reason relates to the time necessary to collect and deliver a 24-hour composite sample to an accredited laboratory. Upon receiving notification of an exceedance, Sanitation Districts staff will need to initiate sample collection to begin at approximately 6:30 am the day following notification. This sample will be ready for collection 24 hours later (two days after notification). If this bioassay test is contracted out to a commercial laboratory, it will need to be delivered via over-night express by 10:00 am the day after it is collected (three days after notification). Depending on the age of brood cultures or the time organisms are received from the supplier, it will typically take a laboratory an additional four to eight hours to initiate the required test (over 72-hours after notification). Should notification of an MDEL or MMEL exceedance occur on a Wednesday, Thursday or Friday, it may not be possible to initiate the accelerated test until the following Tuesday depending on whether the test requires *Ceriodaphnia* or fathead minnow testing. Fathead minnow testing requires test initiation with organisms less than 24 hours old. This limits overnight shipping of organisms to Monday through Friday to meet the age requirement with delivery the following day. This would result in test initiation occurring six calendar days after notification. Furthermore, a recognized holiday falling during this time would result in an additional 24-hour delay in test initiation. Therefore, for tests contracted to a commercial laboratory, initiation of accelerated testing could be accomplished no later than seven calendar days after notification. However, if the accelerated testing is conducted by our San

[5] State Water Board, Fact Sheet, Draft Toxicity Amendment to the Water Quality Control Plan for Enclosed Bays and Estuaries of California, Revision Summary, August 2013. [Exhibit 4]

[6] State Water Board, Draft Policy for Toxicity Assessment and Control, June 2012. [Exhibit 5]

Jose Creek Water Quality Laboratory (SJC-WQL), initiation of accelerated testing could be accomplished within six calendar days since the samples would not need to be shipped.

The Sanitation Districts understand and support the Regional Board's intention to be responsive after observing any trigger exceedance. In most instances, test initiation will not be delayed due to the observance of a holiday and it is the Sanitation Districts' intent to utilize our SJC-WQL whenever possible to conduct all required testing, which would result in tests being initiated within five calendar days of notification. Additionally, if notification of an exceedance is received on a non-holiday Monday or Tuesday, initiation of accelerated testing can be accomplished within three calendar days. However, as described above, there will be instances where six or even seven days will be necessary before accelerated testing can be initiated depending on the aforementioned circumstances. We request that the permit be amended to allow the necessary time, as follows:

Page E-14, Section V.A.7:

"The Permittee shall ensure that they receive results of a failing chronic toxicity test ~~W~~ within 24 hours of the completion of the test ~~of the time the Permittee becomes aware of this result, the Permittee~~ and shall ~~implement an~~ initiate the first of four accelerated monitoring tests ~~schedule~~ within seven calendar days for tests contracted to a commercial laboratory and within six calendar days for tests initiated at the San Jose Creek Water Quality Laboratory 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 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."

Comment 5. Median Monthly Effluent Limit (MMEL) should be clearly and unambiguously defined as the median of no more than the three tests conducted over a calendar month.

The first sentence of the third paragraph of Section VII.J of the Tentative Permit indicates that a monthly median of no more than three independent chronic toxicity tests conducted over a calendar month is used to evaluate compliance with the MMEL, as follows; "The Median Monthly Effluent Limitation (MMEL) for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests, conducted within the same calendar month and analyzed using the TST approach, results in "Fail". However, later in the same paragraph and in several other sections of the Tentative Permit there is language indicating that "exactly three independent toxicity tests are required when one toxicity test results in a Fail".

A requirement mandating that exactly three tests be conducted in response to a single "Fail" poses several problems. First, it can result in confusion regarding exactly when an MMEL exceedance is considered to have occurred. In cases where the first two compliance tests result in a TST "Fail", the results of the third test would be inconsequential in terms of evaluating whether a monthly median was exceeded or not. In such cases, it is not clear as to whether accelerated testing would be initiated in response to the "Fail" result on the second test, or if it would be necessary to wait for the result of the third test to be obtained before initiating accelerated testing. By limiting MMEL calculations to no more than three tests, an observed "Fail" in any two tests will result in an MMEL exceedance regardless of the result a third test, and accelerated testing can begin immediately after the second test. Second, requiring that a third compliance test be conducted after the first two were determined to be a "Fail" would represent an unnecessary waste of resources. The results of the test would not change the monthly median in any way, so the Permittee would be forced to conduct a meaningless test. While conducting one test does not consume a large amount of effort, it still makes no sense to run the test. The efforts and

resources of the Permittee would be much better applied to towards more quickly conducting accelerated testing. Therefore, we request that the following changes be made:

Page 7, Footnote 3:

"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~~ no more than three independent toxicity tests will be used to evaluate the MMEL ~~are required~~ when one toxicity test results in "Fail"."

Page 27, Section VII.J (third paragraph):

"The Median Monthly Effluent Limitation (MMEL) for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests, conducted within the same calendar month and analyzed using the TST approach, results in "Fail". 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~~ no more than three independent toxicity tests will be used to evaluate the MMEL ~~are required~~ when one toxicity test results in "Fail"."

Page E-9, Footnote 10:

"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~~ no more than three independent toxicity tests will be used to evaluate the MMEL. ~~are required when one toxicity test results in "Fail.""~~

Page E-13, Section V.A.5.b:

"The Median Monthly Effluent Limitation (MMEL) for chronic toxicity only applies when there is a discharge more than one day in a calendar month period. During such calendar months, ~~exactly~~ no more than three independent toxicity tests will be used to evaluate the MMEL. ~~are required when one toxicity test results in "Fail"."~~

Page E-17, Footnote 19:

"The Permittee shall conduct Whole Effluent Toxicity monitoring as outlined in section V. Please refer to section V.A.7 of this MRP 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" with a "% Effect". ~~Exactly~~ no more than three independent toxicity tests will be used to evaluate the MMEL. ~~are required when one toxicity test results in "Fail".~~"

Comment 6. Section V.A.4 of the Tentative Whittier Narrows Permit concerning most sensitive species screening is confusing and requires clarification.

First, the second sentence of Section V.A.4 of the Tentative Permit (page E-12) states that Permittee shall collect a single effluent sample to conduct the most sensitive species screening. It also contains a requirement to report the results of the most sensitive species screening as effluent compliance monitoring results. However, the fish and invertebrate chronic toxicity tests require that a minimum of three discrete samples be used to conduct the test if the results are to be reported for NPDES compliance purposes. These requirements conflict and need to be reconciled. If the Regional Board would like a

compliance determination made during most sensitive species screening, then the requirement to use a single effluent sample to conduct the screening needs to be deleted.

Second, Section V.A.4 requires that, "This sample [the single sample on which most sensitive species screening is to be conducted] shall also be analyzed for the parameters required for the discharge." This language appears to require that the sample used for toxicity testing be run for every analyte for which effluent testing is required. This appears to be a typographical error, as it would cost many thousands of dollars to run this sample for every effluent testing parameter, as the Tentative Permit contains parameter monitoring of over 200 different constituents. This sentence needs to be deleted or additional clarification needs to be provided.

Finally, Section V.A.4 is ambiguous regarding the process used to select the most sensitive species. In the case where the result for all three species is "Pass", this section specifies that the species exhibiting the highest "Percent Effect" be considered the most sensitive species. However, it is silent on situations where the results for one or more species are "Fail". The permit should contain clear language to address these situations. We recommend that, in such cases, the species with the highest percent effect is chosen as the most sensitive species.

Suggested language to incorporate these comments is as follows:

Page E-12, Section V.A.4

"Species sensitivity screening shall be conducted beginning the first month the permit is in effect. ~~If there is no discharge present, the effluent samples for the 3-species screening shall be collected from the offsite storage ponds near the effluent sampling point.~~ The Permittee shall collect ~~a single~~ effluent samples and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This~~ese~~ samples shall also be analyzed for the parameters required for ~~the discharge~~ toxicity testing purposes. ~~If the result of all three species is "Pass", then t~~The species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle. "

Comment 7. A compulsory reopener provision needs to be included that will require the Order be reopened and modified to be consistent with the requirements and implementation provisions incorporated into the State Water Board Toxicity Plan.

While Section VI.C.1.k of the tentative permit (page 16) includes reopener language related to State Water Board adoption of toxicity-related policies and plans, it only addresses changes to effluent limitations and allows some discretion and flexibility. However, the State Water Board has been actively working on a statewide toxicity plan for several years with the expressed intent and precedential mandate to standardize chronic toxicity regulation and implementation requirements for POTWs across all regions in the State. Incorporation of the numeric chronic toxicity limits as well as other toxicity-related implementation procedures by Regional Boards in advance of the State Water Board's adoption of their statewide toxicity plan could potentially result in conflicting and/or inconsistencies among permits and regions. Various implementation procedures incorporated into this tentative permit and addressed in detail in this comment letter would be deemed unacceptable to the regulated community if they were included or allowed by the statewide toxicity Plan. Therefore, no matter what decisions are ultimately made regarding our specific comments, it is imperative that this and any other permit adopted in advance of the statewide toxicity plan contain compulsory re-opener language that would incorporate all elements of any such plan. We therefore request the following changes:

Page 16, Section VI.C.1.k

"This Order ~~may~~ will be reopened and modified to revise any and all the chronic toxicity testing provisions and effluent limitations to incorporate all elements contained in the State Water Board adopted Toxicity Plan promptly after adoption of such Plan to be consistent with State Water Board precedential decisions, new policies, a new state-wide plan, new laws, or new regulations."

SPECIFIC COMMENTS ON PROVISIONS NOT RELATED TO TOXICITY

Comment 8. The effluent limits for lead are incorrect should be based on the metals TMDLs for the San Gabriel and Los Angeles River watersheds.

Section IV.A.1.a of the Tentative Permit, Table 4 (page 6), lists lead limits for Discharge 001 (San Gabriel River) as follows:

Parameter	*Units*	*Effluent Limitations*		
		Average Monthly	*Average Weekly*	*Maximum Daily*
Lead (wet-weather)	*µg/L*	*5.3*	*--*	*10.6*
	lbs/day	*0.7*	*--*	*1.3*

Section IV.B.1.a, Table 5 (page 8) lists lead limits for Discharge Points 002, 003, and 004 (Rio Hondo) as follows:

Parameter	*Units*	*Effluent Limitations*		
		Average Monthly	*Average Weekly*	*Maximum Daily*
Lead (wet-weather)	*µg/L*	*5.3*	*--*	*10.6*
	lbs/day	*0.7*	*--*	*1.3*

In 2005, the State Water Board adopted the current version of the Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The SIP establishes implementation provisions for priority pollutant criteria promulgated by the USEPA through the California Toxics Rule (CTR) and for priority pollutant objectives established by the Regional Boards in their basin plans. The priority pollutants covered by the SIP include lead. The SIP specifies that, for pollutants without a TMDL, an analysis must be conducted to determine whether there is a reasonable potential to cause or contribute to an exceedance of a water quality standard. Where there is a TMDL, this analysis does not have to be conducted but the effluent limitations are set based on the TMDL.

When the metals TMDLs for the San Gabriel and Los Angeles Rivers were first incorporated into the Whittier Narrows WRP NPDES permit (Order No. R4-2009-0077), the Regional Board conducted a reasonable potential analysis to determine if any of the metals covered under the TMDL had reasonable potential to cause or contribute to an exceedance of CTR criteria. At that time, lead showed a reasonable potential to exceed CTR criteria because a receiving water sample had a concentration in excess of the CTR criteria. Therefore, effluent lead limits were set using CTR criteria. These limits were more stringent than they would have been if wasteload allocations (WLAs) from the TMDL would have been used to set the limits.

The reasonable potential analysis conducted in support of the Tentative Permit did not show

reasonable potential for lead using the CTR, as per Fact Sheet page F-46, but it did show reasonable potential for copper. Therefore, copper limitations in the Tentative Permit have been based on the more stringent CTR criteria rather than the TMDL WLAs. However, the lead limits in the Tentative Permit were incorrectly kept at the more stringent concentrations that would be appropriate if reasonable potential under the CTR had been demonstrated. Instead, the lead limits should have been set using the WLAs and implementation provisions in the metals TMDLs.

The issue of inclusion of effluent limits when there is a lack of reasonable potential was addressed in a State Water Board precedential order, WQO 2003-0009, that resulted from a petition to the State Water Board of an earlier version of the Whittier Narrows WRP NPDES permit (R4-2002-0142). In that order, the State Water Board remanded the permit to the Regional Board to specifically reconsider effluent limitations for eight pollutants, including lead, based on the lack of reasonable potential to violate water quality criteria. The lack of reasonable potential to violate water quality is considered "new information" that is used to satisfy anti-backsliding criteria. This determination was made for lead in spite of it being considered an impairing pollutant in the San Gabriel River and Rio Hondo (see Footnote 32 on page 9 of WQO 2003-0009).

To be consistent with previous and current Regional Board practices, as well as WQO 2003-0019 which applied specifically to the Whittier Narrows WRP, the lead limits in the Tentative Permit should be revised to be consistent with the WLAs in the metals TMDLs rather than based on reasonable potential to violate the CTR.

Specifically, lead effluent limits for Discharge Point 001 should be based solely on the San Gabriel River Metals TMDL. For lead, this TMDL specifies a wet weather lead WLA of 166 ug/L, per Table 6-2 on page 38 of the San Gabriel River Metals TMDL. To translate the WLA to an effluent limit, the recommended implementation procedures in Section 7.2 on page 46 of the TMDL should be used. These procedures specify that, "...Wet-weather WLAs will not be used to determine monthly permit limits but will only be used in a determination of a daily limit." Therefore, a daily maximum wet weather limit consistent with a WLA of 166 ug/L should be set for Discharge Point 001.

Lead effluent limits for Discharge Points 002, 003, and 004 should be set based on the WLAs in the LA River Metals TMDL. This TMDL specifies a wet weather WLA of 62 ug/L.

Comment 9. Storm water requirements regarding oil and oily materials should not be included in the NPDES permit to avoid conflict with the general industrial storm water permit.

Section VI.A.2.l of the Tentative Permit states, "Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately."

This provision relates to requirements regarding the quality of storm water runoff from the facility. However, the discharge of storm water runoff from the Whittier Narrows WRP is currently regulated under Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, where the Whittier Narrows WRP is enrolled under WDID No. 4 19I007151 (General Industrial Permit). The General Industrial Permit already includes storm water discharge requirements. Additionally, the Fact Sheet of the General Industrial Permit, in the Section titled "Types of Discharges Not Covered By This General Permit", Item 2, states: "FACILITIES WHICH HAVE NPDES PERMITS CONTAINING STORM WATER PROVISIONS: Some storm water discharges may be regulated by other individual or general NPDES permits issued by the State Water Board or the Regional

Water Boards. This General Permit shall not regulate these discharges." If the oily waste provision in Section VI.A.2.l is retained in the Tentative Permit, it could have the unintended consequence of excluding the Whittier Narrows WRP from coverage under the General Industrial Permit. Therefore, Section VI.A.2.l should be deleted from the Tentative Permit.

Comment 10. The requirement for PCB congener analysis of influent, effluent, and receiving waters using method EPA 1668c should be deleted.

Footnote 3 on page E-7, Footnote 15 on page E-11, and Footnote 23 on page E-18 state: "Priority pollutants are those constituents referred to in 40 CFR part 401.15; a list of these pollutants is provided as Appendix A to 40 CFR part 423. PCB as arochlors shall be analyzed using method EPA 608 and PCB as congeners shall be analyzed using method EPA 1668c."

These footnotes refer to the "remaining USEPA priority pollutants", but lists test methods to be used for both PCBs as arochlors and PCBs as congeners. The USEPA priority pollutant list includes seven specific PCB arochlors, but it does not include PCB congeners. PCB arochlors are specific chemical mixtures of various PCBs congeners. EPA priority pollutant monitoring in the past has always been based on arochlors, to be consistent with the promulgated priority pollutant list. Therefore, PCB congener monitoring should not be required as part of the priority pollutant monitoring.

Additionally, no justification has been provided for the increased monitoring costs that would be incurred by PCB congener monitoring. There are no PCB water quality impairments in the receiving waters downstream of the WRP. PCB levels have generally decreased since PCB production stopped in the United States in August 1977 and there is no indication that PCB levels in the receiving waters in the vicinity of the Whittier Narrows WRP may be increasing. No specific areas of probable high PCB concentrations have been identified and no PCB-related toxicity effects have been observed to require determination of cause and sources.

The cost for PCB congener sampling is $875 per test; adding semiannual sampling for the influent, effluent, and six receiving water stations would impose an additional cost of $14,000 per year for the Whittier Narrows WRP, with no water quality benefit. The congener analysis using EPA method 1668c as specified in the Tentative Permit is more difficult to perform than arochlor analysis, and there are technical limitations on the ability of laboratories to reliably resolve co-eluting congeners. Co-elution of various congeners is a major impediment in PCB congener-specific analyses during gas chromatography (GC) analysis, where non-resolved congener compounds elute from the GC column at the same time, resulting in interferences that are difficult to discern and can easily lead to an overestimation of PCB concentrations. Congener-specific analyses demand greater effort in terms of data evaluation, quality assurance, and processing. Another problematic area in congener analyses is comparability between laboratories due to differences in co-elution patterns between different laboratories that are likely to be further compounded by normal inter-laboratory result variation.

Additionally, the footnotes do not specify if the congener results are to be reported as individual congeners or as total PCBs. If a total sum of PCB congeners were required to be reported, it could not be reliably calculated due to the co-elution issues discussed above. For the reasons discussed above, the Sanitation Districts request that all references to PCB congener testing be deleted from these footnotes.

Comment 11. Clarification of spill reporting requirements is requested.

Section VI.C.6.a.iii.(f) of the Tentative Permit requires the Permittee to provide to the Regional Board "a certification that the State Office of Emergency Services [Cal OES or OES, formerly Cal EMA] and the local health officer or directors of environmental health with jurisdiction over the affected water

bodies have been notified of the discharge."

The Sanitation Districts requests that this language be removed. First, this requirement was not included in the current NPDES permit for the facility, and no justification has been provided for its inclusion in the Tentative Permit. It is not clear how the Regional Board would use this certification. A similar certification provision was added in the Amended Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. WQ 2008-0002-EXEC (SSS WDR), but was removed from the SSS WDR when it was updated and streamlined in 2013. Per Order No. WQ 2013-0058-EXEC, Finding 7, the notification provisions added in 2008 were removed because "When notified of an SSO [sanitary sewer overflow] that reaches a drainage channel or surface water of the state, Cal OES pursuant to Water Code section 13271(a)(3), forwards the SSO notification information to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision."

Second, it is not clear under what circumstances such a certification would be required, and how much time the Permittee would have to make the certification. According to Section VI.C.6.a (pages 20-21), the Permittee is required to notify: 1) the local health officer or the director of environmental health for any spills, 2) OES for any spills less than 1,000 gallons, and 3) Regional Board if the first two agencies have not been notified. For spills less than 1,000 gallons, the Permittee would not be required to notify Cal EMA and would therefore not be able to send a certification of notification to the Regional Board. Finally, the timing of such certification is unclear. The SSS WDR required a certification within 24 hours, but no time frame is specified in the Tentative Permit.

Comment 12. San Gabriel River wet-weather flow monitoring data should be obtained from USGS Gauge Station No. 11087020, not Station No. 1108500.

Footnote 2 on Table 4 (page 6), the last row in Table E-1 (page E-5), Footnote 5 on Table F-9 (page F-49), Section VIII.C.1 (page E-19), and Section IV.C.4.b (page F-45), erroneously identify the USGS gauge station to determine wet or dry conditions for the San Gabriel Rivers Metals TMDL as Station No. "1108500".

The San Gabriel River Metals TMDL states: "In San Gabriel River Reach 2, wet-weather TMDLs apply when the maximum daily flow in the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam". However, USGS Station No. 11085000 is actually located below Santa Fe Dam in Baldwin Park. The USGS flow gauging station located in Reach 3 above Whittier Narrows Dam is Station No. 11087020. The station located above the Whittier Narrows dam is also identified as USGS Station No. 11087020 in Figure 3 of the TMDL. For your convenience, links to the USGS flow monitoring data portal and location description for these stations are provided below:

USGS 11085000 SAN GABRIEL R BL SANTA FE DAM NR BALDWIN PK CA

http://waterdata.usgs.gov/nwis/dv/?site_no=11085000&agency_cd=USGS&referred_module=sw

USGS 11087020 SAN GABRIEL R AB WHITTIER NARROWS DAM CA

http://waterdata.usgs.gov/nwis/dv/?site_no=11087020&agency_cd=USGS&referred_module=sw

The Sanitation Districts believe that references to the erroneous USGS station number were due to a typographical error in the text of the TMDL. This issue was previously examined as part of past NPDES permit reviews conducted for other WRPs operated by the Sanitation Districts that have discharges in the San Gabriel River watershed. As a result of this examination, a correction to the USGS station number was made to the NPDES permits for the Pomona, Los Coyotes, and San Jose Creek WRPs. These permits currently reference USGS Station No. 11087020 as the flow monitoring station to be used for determination of wet weather conditions in accordance with the TMDL requirements.

The Sanitation Districts thank you in advance for your careful consideration of these comments. If you have any questions concerning this letter or need additional information, please contact Ann Heil at (562) 908-4288, extension 2803.

Very truly yours,

Grace Robinson Hyde

Philip L. Friess

Philip L. Friess
Department Head
Technical Services

PF:ATH:PM:GG:nm
Attachments

cc: Cris Morris, David Hung, Raul Medina, Regional Board

Attachment A

General/Legal Comments on Toxicity-Related Provisions

The Whittier Narrows Water Reclamation Plant (WRP) is currently regulated under NPDES Order No. R4-2009-0077 [Exhibit 6], which contains the following language that was not objected to by the U.S. Environmental Protection Agency (USEPA) when adopted in 2009:

"IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Points 001, 002, 003, and 004

4. Other Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 004

h. Chronic Toxicity Trigger and Requirements:

a. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TUc = 100/NOEC$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

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

c. If the chronic toxicity of the effluent exceeds the monthly trigger median of 1.0 TUc, the Discharger shall immediately implement accelerated chronic toxicity testing according to Attachment E - MRP, Section V.B.3. If any three out of the initial test and the six accelerated tests results exceed 1.0 TUc, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E – MRP, Section V.D.

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

Using ***identical*** language, the July 2, 2014 pre-public notice draft of the new Whittier Narrows WRP permit [Exhibit 7] contained the following requirements relating to Chronic Toxicity:

"IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

C. Other Effluent Limitations Applicable to Discharge Points 001, 002, 003, and 004

g. Chronic Toxicity Trigger and Requirements:

i. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TUc = 100/NOEC$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

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

iii. If the chronic toxicity of the effluent exceeds the monthly trigger median of 1.0 TUc, the Discharger shall immediately implement accelerated chronic toxicity testing according to Attachment E - MRP, Section V.B.3. If any three out of the initial test and the six

accelerated tests results exceed 1.0 TUc, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in Attachment E – MRP, Section V.D.

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

The regulatory construct of both the last permit and the pre-public notice draft permit is consistent with the requirements of State Water Resources Control Board's (State Water Board's) precedential and binding Order No. WQO 2003-0013, which revised the earlier Whittier Narrows WRP permit (Order R4-2002-0142) to remove and replace numeric chronic toxicity limits with: "There shall be no chronic toxicity in the effluent discharge." Instead of numeric limits,[1] the State Water Board mandated the use of a narrative limit and supplemental numeric toxicity triggers.

Notwithstanding the fact that USEPA had allowed NPDES permits to be written in California in this prescribed manner for eleven years without formal objection, on July 31, 2014, the USEPA Region 9 filed an initial objection letter [Exhibit 8] on two NPDES permits up for reissuance for the Joint Outfall System[2] (Sanitation Districts), including for the Whittier Narrows WRP. This was followed by a formal objection letter on September 4, 2014. [Exhibit 9] Instead of following State Water Board mandates, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) modified the permits to now include new numeric chronic toxicity limits. These limits are contained in Section IV.A.1.a., Table 4, on p. 7 of the proposed Whittier Narrows WRP Permit (Tentative Permit) as "Pass" as a Median Monthly Effluent Limitation (MMEL) and "Pass or % Effect <50" as a Maximum Daily Effluent Limitation (MDEL). These terms are defined in Section VII.J (i.e., Compliance Determination, Chronic Toxicity) on pg. 26-27 of the Tentative Permit. The Sanitation Districts request that the numeric chronic toxicity limitations be removed and replaced by a narrative toxicity effluent limitation consistent with the State Board precedential order applicable to this facility, Order No. 2003-0013.

Additional details regarding this request, and other general comments relating to the toxicity provisions in the Tentative Permit are provided below.

Comment A-1. The chronic toxicity limits are premature until the State Water Board adopts its promised statewide toxicity policy.

On September 16, 2003, the State Water Board adopted two precedential orders, Order No. WQO 2003-0012, in response to petitions filed by the County Sanitation District No. 2 of Los Angeles County[3] and Santa Monica Baykeeper for the Los Coyotes and Long Beach WRP NPDES permits [SWRCB/OCC File Nos. A-1496 and A-1496(a)], and Order No. WQO 2003-0013, in response to a petition filed by the Sanitation Districts on the 2002 version of the Whittier Narrows WRP NPDES Permit, Order No. R4-2002-0142) [SWRCB/OCC File Nos. A-1509 and A-1509(a)]. In these 2003 precedential orders, the State Water Board found that the use of final numeric whole effluent toxicity (WET) limitations in permits for POTWs, particularly those that discharge to inland surface waters, is an issue of statewide importance that should be addressed in a statewide plan or policy. In addition, the State Water Board

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[1] Prior to the issuances of these orders, the Whittier Narrows WRP permit contained numeric effluent limitations with a daily maximum of 1.6 TUc and a monthly median of 1.0 TUc for chronic toxicity.

[2] Ownership and operation of the Joint Outfall System is proportionally shared among the signatory parties to the amended Joint Outfall Agreement effective July 1, 1995. These parties include County Sanitation Districts of Los Angeles County Nos. 1, 2, 3, 5, 8, 15, 16,17, 18, 19, 21, 22, 23, 28, 29, and 34, and South Bay Cities Sanitation District of Los Angeles County.

[3] Per the terms of the 1995 Joint Outfall Agreement, County Sanitation District No. 2 of Los Angeles County serves as the appointed agent for the Joint Outfall System.

instructed regional boards to replace any numeric chronic toxicity effluent limitations with the prescribed narrative chronic toxicity limitation until a statewide toxicity policy is adopted. The Sanitation Districts' 2002 NPDES Permit for Whittier Narrows WRP was modified to coincide with the requirements of State Board Order No. WQO 2003-0013, and the 2009 NPDES permit for the facility was issued consistent with the requirements.

Although the main issue on WET limits was decided by the State Board in WQO 2003-0012 and WQO 2003-0013 in 2003, this decision was later upheld and followed in other, subsequent precedential State Board Orders, including WQ 2008-08 (City of Davis) and WQ 2012-0001(City of Lodi). The 2012 Lodi order at page 22 recognized that "[t]he Board previously addressed this issue in a precedential decision" and has "concluded that a numeric effluent limitation for chronic toxicity was not appropriate in the permit under review, but that the permit had to include a narrative effluent limitation for chronic toxicity." [Emphasis added.] In the Lodi case, the State Water Board determined that because the discharge had the reasonable potential to cause or contribute to an excursion above the Basin Plan's narrative toxicity objective, on remand the Central Valley Water Board was ordered to "amend Order No. R5-2007-0113 to add an appropriate narrative chronic toxicity limitation." *See also* State Water Board Order No. WQ 2008-0008 at pgs. 5-7 (concluding that a numeric effluent limitation for chronic toxicity is not appropriate at this time).

Thus, no less than four precedential State Water Board orders, including an order directly applicable to the Whittier Narrows WRP, mandate a narrative chronic toxicity limit for inland dischargers, all of which are being violated by the language contained in the Tentative Permit. The Sanitation Districts merely ask the Regional Board to follow the State Water Board's binding precedential orders and include a narrative effluent limitation, consistent with the Basin Plan's narrative objective, along with a trigger for additional testing.

This approach would also be consistent with the Los Angeles (LA) Basin Plan, which states, in pertinent part, the following related to chronic toxicity:

> "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board." (LA Basin Plan at pg. 3-16 (emphasis added).)

Since the State Water Board has specified how compliance with chronic toxicity requirements for inland dischargers should be determined until such time that a new statewide policy is adopted, the Regional Board is bound by that determination, not only by Order No. WQO 2003-0013,[4] but also by the language of the Basin Plan.[5]

Because the State Water Board has not yet adopted its anticipated statewide policy for chronic toxicity, the inclusion of numeric chronic toxicity effluent limitations lacks adequate authority, violates State Water Board precedent, and represents an abuse of discretion. For these reasons, the Sanitation

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[4] The Tentative Permit does not even acknowledge the existence of Order No. WQO 2003-0013, and only discusses Order No. WQO 2003-0012. (*See* the Tentative Permit at pg. F-52.)

[5] In fact, the State Water Board's requirement in Order No. WQO 2003-0013 to include an effluent limit requiring "no chronic toxicity in the effluent discharge" is actually ***more stringent*** than the Basin Plan's Toxicity objective, which only requires "no chronic toxicity in ambient waters outside mixing zones." (LA Basin Plan at pg. 3-17.)

Districts respectfully request that the chronic toxicity limits as proposed should be removed from the Permit and replaced with a narrative chronic toxicity limit and triggers as contained in the previous permit.

Comment A-2. The chronic toxicity requirements improperly require use of an unpromulgated test method.

a) The Test of Significant Toxicity (TST) without inclusion of a concentration-response evaluation is not a promulgated Part 136 Method.

The proposed permit makes it very clear that, for parameters where such methods exist, the monitoring must use only approved Part 136 methods, properly promulgated by EPA. (See proposed permit at pg. E-2 ("Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136...."); pg. E-7, n. 2; pg. E-8, n. 5; pg. E-12 at para. V.A.3; pg. E-16, n. 18; pg. E-22 at para. X.B.4.; pg. F-60, Section VI.B.2.; pg. H-2 at para. A.4.a.) While the language currently in the Tentative Permit appears to intend to allow the use of a multi-concentration test design for chronic toxicity, with consideration of the resulting concentration-response pattern in assessing the validity of the test, the language is ambiguous and could be interpreted to mean that the concentration-response validation is not allowed. (Tentative Permit page 27, Section VII.J, "the concentration-response relationship for the effluent and/or PMSDs shall not be used to interpret the TST result reported as the effluent compliance monitoring result.") This is contrary to the promulgated method for freshwater chronic toxicity testing.

The 40 CFR Part 136 approved methods for freshwater chronic toxicity are listed in 40 CFR 136.3(a), Table 1A. These methods include Footnote 27, which mandates the use of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater* Organisms, EPA-821-R-02-012, Third Edition, October 2002 (EPA 821-R-02-013 or EPA's 2002 Methods) [Exhibit 2]. The 2002 methods make it very clear in several places that a multi-concentration test design with dose-response evaluation is required. Several examples are as follows:

> "The tests recommended for use in determining discharge permit compliance in the NPDES program are multi-concentration, or definitive, tests which provide (1) a point estimate of effluent toxicity in terms of an IC25, IC50, or LC50, or (2) a no-observed-effect-concentration (NOEC) defined in terms of mortality, growth, reproduction, and/or teratogenicity and obtained by hypothesis testing" (Section 8.10.1)
>
> "The concentration-response relationship generated for each multi-concentration test must be reviewed to ensure that calculated test results are interpreted appropriately" (Section 10.2.6.2)
>
> "Tables 1, 3, and 4 (labeled as 3)[6] - SUMMARY OF TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA WITH EFFLUENTS AND RECEIVING WATERS (TEST METHODS 1000.0, 1002.0, AND 1003.0):
>
Test concentrations:	Effluents:	5 and a control (required minimum)
	Receiving Water:	100% receiving water (or minimum of 5) and a control (recommended)"

[6] EPA-821-R-02-013. Tables 1, 3, and 4 (labeled as 3) on pages 76, 165, and 211.

In 2010 the USEPA released a guidance document, *National Pollutant Discharge Elimination System Test of Significant Toxicity [TST]Implementation Document*, EPA 833-R-10-003, 2010 (TST Implementation Document) [Exhibit 3] introducing the TST protocol for analysis of chronic toxicity testing data. This guidance document made it clear in numerous places that its intent was to introduce a new method of analyzing data collected during a valid WET analysis, including a multiple concentration test design. Examples are provided below:

> "The TST approach does not result in changes to EPA's WET test methods promulgated at Title 40 of the Code of Federal Regulations Part 136." (page ii on the Disclaimer)

> "Once the WET test has been conducted ***(using multiple effluent concentrations and other requirements as specified in the WET test methods)***, the TST approach can be used to analyze valid WET test results to assess whether the effluent discharge is toxic." [Emphasis added] (page xi)

> "This document presents TST as a useful alternative data analysis approach for **valid** WET test data that may be used in addition to the approaches currently recommended in EPA's Technical Support Document (USEPA 1991) and EPA's WET test method manuals." (page 7)

> "The TST approach is an alternative statistical approach for analyzing and interpreting valid WET data; it is not an alternative approach to developing NPDES permit WET limitations. Using the TST approach does not result in any changes to EPA's WET test methods." (page 60)

> "Step 1: Conduct WET test following procedures in the appropriate EPA WET test method manual. This includes following all test requirements specified in the method (USEPA 1995 for chronic West Coast marine methods, USEPA 2002a for chronic freshwater WET methods, USEPA 2002b for chronic East Coast marine WET methods, and USEPA 2002c for acute freshwater and marine methods)." (Appendix B, page B-3)

In addition, USEPA made changes to approved WET test methods as recently as 2012 in the *Promulgated Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act: Analysis and Sampling Procedures:* Final Rule, 77 Fed. Reg. 29758-29846 (May 18, 2012), but did *not* incorporate an option for a two concentration test design with no concentration-response evaluation. If a two concentration test design without a concentration-response evaluation was USEPA's intent in 2010 when the guidance was released, such a change should have been made in 2012 (*See U.S. v. Riverside Bayview Homes* , 474 U.S. 121, 137 (U.S.S.C. 1985)(An action not to include modifications of which the entity was aware can be read as a presumption that the modifications were not intended to be included).)

b) USEPA's March 17, 2014 Alternative Test Procedure approval was unlawful.

In March 2014, USEPA issued an Alternative Test Procedure (ATP) letter approving statewide use of a two-concentration toxicity test evaluated using the TST (Letter from Eugenia McNaughton, US EPA Region 9 Quality Assurance Office Manager to Renee Spears, State Water Board Quality Assurance Officer, untitled, dated March 17, 2014) (ATP Approval Letter) [Exhibit 10]. This letter ignores the previous USEPA's requirements and recommendations described above. Even with the ATP approval, it would be difficult to see how USEPA could legally object to any permittee continuing to use the standard

prescribed 2002 test methods (NOEC or IC25)[7] if these standard methods and the ATP produce "acceptably equivalent" results as claimed in the ATP letter.

In its ATP Approval Letter, USEPA ostensibly granted the State a "Limited Use Alternative Test Procedure" under Part 136 (40 CFR 136.5(a)). However, it is not clear that a State can be the requestor since rules contemplate that the request must first be sent *to* the State. (*Id.* at subd. (b).) For this and other reasons, the validity of the ATP is currently being litigated in federal court (*see SCAP and CVCWA v. USEPA,* Case No. 2:14-cv-01513 MCE-DAD, U.S. District Court, Eastern District (hearing scheduled for March 5, 2015)). [Exhibit 11]

The legality of the ATP approval is suspect as this alternative was not submitted by a discharger or a laboratory, but by the State Water Board, after receiving the two-concentration method using the TST *from USEPA*. This self-dealing to avoid a full-blown regulatory process thwarts the law and notions of good public policy. The ATP process was designed to "encourage organizations *external to EPA* to develop and submit for approval new analytical methods." *See Guide to Method Flexibility and Approval of EPA Water Methods*, EPA Office of Water (Dec. 1996) at pg. 77 (emphasis added) [Exhibit 12]. All but a single lab, single discharger ATP (i.e., Tier 1) must go through rulemaking. For Tier 2 and 3 new methods (multi-lab), "EPA will begin the rulemaking process." *Id.* at pgs. 80-82. Furthermore, USEPA acknowledges that it currently has no approved protocols for reviewing or approving a WET ATP. *Id.* at 93 ("EPA is developing a protocol for approval of new and modified (alternate) WET methods...."; *see also* http://water.epa.gov/scitech/methods/cwa/atp/questions.cfm (last accessed 5/30/2014)(stating "Note: The EPA does not have a protocol for toxicity testing [ATP] under EPA's Whole Effluent Toxicity (WET) program.").

Finally, authorizing an ATP for WET is contrary to federal regulations. "Method Modifications" are explicitly *prohibited* for "Method-Defined Analytes" by 40 CFR 136.6(b)(3), which states (with emphasis added): "(3) Restrictions. An analyst may not modify an approved Clean Water Act analytical method for a method-defined analyte." USEPA has previously declared that WET is a Method-Defined Analyte. *See* 67 Fed. Reg. 69965 ("toxicity is inherently defined by the measurement system (a 'method-defined analyte') and toxicity cannot be independently measured apart from a toxicity test."); *see also* Brief of Respondents USEPA, *et al.*, in *Edison Electric Institute, et al.,v. USEPA*, Case No. No. 96-1062 (D.C.Cir. 2004) at 44-45 and 78 *citing* Response to Comments at 219-20, J.A. XX; 67 Fed. Reg. 69,965. ("Because toxicity is defined and measured by its effect on living organisms, whole effluent toxicity is considered a method-defined analyte (i.e., it cannot be measured independently from a toxicity test). Thus, WET test results cannot be independently confirmed by comparing the results to a known concentration of toxicity."). Therefore, WET methods cannot be modified without formally amending 40 CFR Part 136.

For these reasons, and the others provided herein, the Sanitation Districts respectfully request that the Tentative Permit be amended to explicitly and clearly specify use of a multi-concentration test design with concentration-response evaluation.

c) Use of an ATP Cannot Be Mandated over Promulgated Methods.

Even assuming *arguendo* that the USEPA's ATP approval was proper, it is not clear that the Sanitation Districts can be *required* to use the ATP since the ATP Approval Letter states that the TST is an acceptable equivalent to the NOEC-LOEC. USEPA Region 9, in the ATP approval letter, attempted to *mandate* use of a two-concentration test design with the TST by stating that this ATP "will apply to all

[7] *See* 67 Fed. Reg. 69955 (2002)("these methods, including the modifications in today's rule, are applicable for use in NPDES permits.").

new or revised NPDES permits issued by the State Water Board and Regional Water Quality Control Boards and any EPA-issued California permits that include whole effluent toxicity provisions." *See* ATP Approval Letter (emphasis added). However, neither USEPA nor the Regional Board has the authority to impose the TST *until* either the Sanitation Districts request to use the ATP, or that method has been formally promulgated by USEPA as an approved method under 40 CFR Part 136. Analytical results obtained by using a non-promulgated method cannot be used for NPDES compliance determination purposes until that method has been incorporated into 40 CFR Part 136. *See accord* Permit at pg. F-60, in reference to CECs ("Analysis under this section is for monitoring purposes only. Analytical results obtained for this study will not be used for compliance determination purposes, since the methods have not been incorporated into 40 CFR part 136.") Similarly, the particular number of dilutions in a dilution series cannot be mandated. 67 Fed. Reg. 69956 ("no one particular dilution series is required.") Thus, the two-concentration TST method should not be prescribed in the Whittier Narrows WRP permit.

This attempt to impose a mandate would also contradict a June 18, 2010 USEPA Headquarters memo accompanying the TST Implementation Document, from James Hanlon, then Director of the EPA Office of Wastewater Management, which stated: "The TST approach does not preclude the use of existing recommendations for assessing WET data provided in EPA's 1991 Water Quality-based Technical Support Document (TSD) which remain valid for use by EPA Regions and the States." [Exhibit 13] Thus, all the TST can be used for is additional information, similar to the CEC monitoring (cited above) where samples are required using a non-promulgated method – however, the difference is - for CECs, that extra data is not being used for compliance determination processes whereas the chronic toxicity data under the TST will be used for that purpose.

USEPA has since clarified its position, and expressly stated that its ATP Approval Letter does not constitute a mandate. In its opposition brief filed in the litigation challenging the ATP Approval Letter, the USEPA argued that "EPA's March 2014 Letter was not a mandate and the State's decision not to use the alternate test would not be a basis for objection, much less a 'veto,' by EPA." In addition, USEPA's brief stated that "EPA's approval of a limited use alternate test does not impose any obligation on the California Water Boards that issue NPDES permits, or on permit holders. By approving the limited use of this alternate test, the EPA did not 'mandate' the exclusive use of the two-concentration test, and it cannot require the California Water Boards to include this alternate test in NPDES permits issued by the State. The EPA simply approved the use in California of the two-concentration test as an alternate test to the five-concentration test. Ultimately, it is up to the California Water Boards that issue NPDES permits to decide which test(s) to require permit holders to use in reporting, not the EPA. After the EPA's March 2014 letter, the California Water Boards could still issue permits that require permit holders to use the five-concentration test, or that provide permit holders with a choice of which test to use." *See* EPA's Opposition to Plaintiffs' Ex Parte Application for Temporary Restraining Order and Order to Show Cause Re: Motion for Preliminary Injunction in case of SCAP and CVCWA v. United States EPA, Federal District Court for the Eastern District of California, Case No. 2:14-cv-01513 MCE-DAD (filed June 30, 2014)(citations excluded).

Since USEPA has stated, as quoted above, that use of the ATP is not required, the Sanitation Districts request that the Tentative Permit be amended to make it clear that use of the ATP is optional.

d) EPA Guidance cannot Overrule Promulgated Regulations.

Page F-51 of the Tentative Permit references two USEPA guidance documents to justify the inclusion of toxicity provisions based on the TST:

- *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010) (2010 TST guidance document), and

- *EPA Regions 8, 9 and 10 Toxicity Training Tool* (January 2010) (Training Tool), http://cfpub.epa.gov/npdes/wqbasedpermitting/wet.cfm.

These documents cannot be used to justify the Tentative Permit's requirements because these guidance documents do not mandate use of the TST, particularly the use of a two-concentration TST test design, or require the inclusion of any numeric effluent limitation for toxicity. Appendix D of the 2010 TST guidance document includes example permit language for either a trigger *or* an effluent limitation. The Training Tool also discusses both permit triggers and effluent limitations for toxicity. In the Training Tool, as in the federal regulations, effluent limitations are only needed in cases where there is reasonable potential and even if there is reasonable potential, effluent limitations for toxicity are not needed if chemical specific effluent limitations are included for the pollutants identified as causing the toxicity (Section 2.5, page 31).[8] As discussed elsewhere in this document, nowhere in the law are numeric effluent limitations for chronic toxicity required.

As a result, the Regional Board can point to nothing in either of the guidance documents cited that *mandates* the use of numeric effluent limitations for toxicity. Additionally, the 2010 TST guidance document is merely *guidance* that may be changed at any time as policies and directions change. Importantly, the disclaimer in that guidance document specifically notes that the document is not "a permit or a regulation itself." The TST guidance document clearly states that:

> "The document does not and cannot impose any legally binding requirements on EPA, states, NPDES permittees, or laboratories conducting or using WET testing for permittees (or for states in evaluating ambient water quality). EPA could revise this document without public notice to reflect changes in EPA policy and guidance."[9]

The other document cited is merely part of a training tool that is not even published guidance.

Although USEPA often tries to regulate by guidance, federal courts have frowned upon this practice as aptly described in *Appalachian Power Co. v. EPA*, 208 F.3d. 1015, 1020 (D.C. Cir. 2000).

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[8] If State water quality standards contain only narrative water quality criteria for WET and the permit (i.e., fact sheet or statement of basis) documents that chemical specific water quality-based effluent limitations ("WQBELs") are sufficient to attain and maintain the narrative water quality criteria, then WQBELs for WET are not necessary. 40 C.F.R. §122.44(d)(1)(v). Arguably, under the terms of the Toxicity objective, effluent limits are only authorized pursuant to the terms of the State Implementation Policy (SIP), or for the causative toxicant. *See accord* Los Angeles Basin Plan at pg. 3-17; *see also City of Los Angeles et al v. USEPA, et al,* Central District Court, Case No. CV 00-08919 R(RZx)(Dec. 18, 2001)(holding "EPA improperly failed to ensure that the LA-RWQCB adopted a translator procedure to translate its narrative criteria did not satisfy 33 U.S.C. §1313(c)(2)(B). In addition, in reviewing the LA-RWQCB's narrative criteria relating to toxic pollutants, EPA improperly failed to ensure that the LA-RWQCB set forth sufficient "information identifying the method by which the State intends to regulate the point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria." 40 C.F.R. §131.11(a)(2).) On February 15, 2002, on remand from the federal court, USEPA issued a new approval document related to the Basin Plan's Toxicity objective finding that the adoption of the CTR made the need to use the Toxicity objective less necessary and, in instances where necessary, strongly relied upon the chronic toxicity control provisions in the SIP and the direction to the Regional Board to "establish effluent limitations for specific toxicants which have been identified with the TIE procedures." Thus, in order to comply with the Basin Plan, the Regional Board must comply with the SIP and statewide orders interpreting those requirements, including Order No. WQO 2003-0013. Just because the proposed permit on page F-15 states "Requirements of this Order implement the SIP" does not mean this statement is accurate.

[9] USEPA, National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA 833-R-10-004, June 2010.

The district court in the *Appalachian Power* case found fault in USEPA's regulating by setting aside the guidance in its entirety. (*Id.* at p. 1028.) "If an agency acts as if a document issued at headquarters is controlling in the field, if it treats the document in the same manner as it treats a legislative rule, if it bases enforcement actions on the policies or interpretations formulated in the document, if it leads private parties or State permitting authorities to believe that it will declare permits invalid unless they comply with the terms of the document, then the agency's document is for all practical purposes 'binding.'" (*Id.* at p. 1021 [*citations omitted*].)

More recent cases have reached the same conclusion in other instances when USEPA tried to impose its will through interpretive rules, such as the 2010 TST guidance. One case related to invalidating EPA guidance setting forth air quality attainment alternatives. (*NRDC v. U.S. EPA*, 643 F.3d 311 (D.C.Cir. 2011).) Another related to "requirements" contained in letters related to water quality permitting prohibitions related to blending and mixing zones. In this case, the court found that EPA not only lacked the statutory authority to impose the guidance regulations on blending, but also violated the Administrative Procedures Act (APA), 5 U.S.C. § 500 et seq., by implementing the guidance on both issues without first proceeding through the notice and comment procedures for agency rulemaking. (*Iowa League of Cities v. U.S. EPA*, 711 F.3d 844, 878 (8th Cir. 2013).) The case law is clear that USEPA must regulate through rules and not through informal guidance. Similar rules apply to the Regional Board, which also cannot regulate by guidance, particularly where that guidance is contrary to statewide precedential orders (e.g., State Water Board Order No. WQO 2003-0013) and described in more detail above.

Comment A-3. A maximum daily effluent limit for chronic toxicity is impracticable, unlawful, and inappropriate.

Assuming, for the sake of argument, that any chronic toxicity limit beside that prescribed in Order No. WQO 2003-0013 is justified, federal law only authorizes monthly and weekly average effluent limitations for publicly owned treatment works (POTWs) without a demonstration that these effluent limitations are "impracticable." (See 40 CFR Part 122.45(d)(2)("For continuous discharges all permit effluent limitations, standards and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as: (2) Average weekly and average monthly limitations for POTWs").) As described above, the Tentative Permit includes a MDEL for chronic toxicity, which is more stringent than required by federal law and has not been adequately justified. Therefore, this limitation is contrary to law.[10]

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[10] California courts have already held that daily limits are not allowed unless demonstrated with adequate supporting evidence to be impracticable and these decisions are binding on the Water Boards since not appealed. (*See City of Burbank v. State Water Resources Control Board,* 35 Cal. 4th 613, 623, n.6 (2005) (The Supreme Court held: "Unchallenged on appeal and thus not affected by our decision are the trial court's rulings that… (2) the administrative record failed to support the specific effluent limitations; (3) the permits improperly imposed daily maximum limits rather than weekly or monthly averages;…)(emphasis added).) Another recent decision upheld the need for weekly, as opposed to daily limits, because the guidance cited by the Regional Board (similar to that set forth in the proposed permit on page F-48 "As stated by USEPA in its long standing guidance") cannot be used to overrule the express terms of the regulations. *See California Sportfishing Protection Alliance (CSPA) v. Cal. Regional Water Quality Control Board, Central Valley Region,* Sacramento Superior Court, Case No. 34-2013-80001358-CU-WM-GDS, Ruling on Submitted Matter: Petition for Peremptory Writ of Mandate (Aug. 18, 2014)(Holding "To the extent that the applicable law does not represent a reasonable approach to establishing effluent limitations, the law may need to be changed. Until it is changed, however, that law unequivocally requires the establishment of a weekly limitation. Respondent [Regional] Board was obligated to do what the law required…") Thus, reliance on USEPA's Technical Support Document guidance was overturned, and the permit was remanded.

USEPA's analysis on this topic was inaccurate in its Formal Objection Letter (Letter from Jane Diamond, Director, USEPA Region 9 Water Division to Samuel Unger, Executive Office, Regional Board, dated September 4, 2014, titled, "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)). In this letter, USEPA stated, "...the permits do not include the necessary daily and monthly WQBELs [water quality-based effluent limits] for chronic WET. Therefore, the permits do not meet 40 CFR 122.45(d) or 40 CFR 122.44(d)(i)." The State Water Board has already determined that numeric limits are not feasible or appropriate (e.g., are impracticable) and, therefore, weekly and monthly limits are not required and that remains the rule until the State Water Board determines otherwise in a precedential order or formal rulemaking. The State Water Board requires a narrative effluent limitation to be imposed instead, stating that "there shall be no chronic toxicity in the effluent discharge." Thus, this limit complies with 40 CFR 122.45(d) and, for the reasons provided above, 40 CFR 122.44(d).

In addition, a daily maximum limit for chronic toxicity is unnecessary to protect aquatic life because chronic toxicity, by definition, is neither "highly toxic" nor "short-term."[11] Chronic toxicity testing is meant to assess *long-term* impacts to biological communities of organisms in the ambient receiving waters, not the impact of a single day's or week's discharge. (*See* proposed permit at pg. F-50 "chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth." (emphasis added); *see also* pg. F-64, para. C.)

Furthermore, use of a daily maximum chronic toxicity limit to protect against a single discharge event capable of exceeding the objective makes no sense when a single chronic test itself typically consists of three or more discrete samples collected over an exposure period of up to nine days. (*See* 67 Fed. Reg. 69953 (2002 Final WET Rule)("short term methods for estimating chronic toxicity [ ] use longer durations of exposure (*up to nine days*) to ascertain the adverse effects of an effluent or receiving water on survival, growth and/or reproduction of the organisms." (emphasis added).) Therefore, the use of a short term average or daily maximum limit for chronic WET is itself impracticable and a chronic toxicity limit (as is recognized for other long-term chronic objectives, such as to protect human health) should be expressed only in narrative form "There shall be no chronic toxicity in the effluent discharge," interpreted as a monthly average, or a median monthly if the monthly average is demonstrated to be impracticable. (*See accord In the Matter of the Own Motion Review of City of Woodland*, Order WQO 2004-0010, 2004 WL 1444973, *10 (June 17, 2004) ("Implementing the limits as instantaneous maxima appears to be incorrect because the criteria guidance value, as previously stated, is intended to protect against chronic effects." The limits were to be applied as monthly averages instead.); SWRCB Order No. 2003-0012 and EPA Letter to Los Angeles Regional Board on Long Beach/Los Coyotes Permits at pg.4 (May 31, 2007)("At minimum, the permits need to specify the WQBEL: 'There shall be no chronic toxicity in the effluent discharge.'"). [Exhibit 14])

Additionally, the preamble to the 2002 WET Rule says "EPA policy states that 'EPA does not recommend that the initial response to a single exceedance of a WET limit, causing no known harm, be a formal enforcement action with a civil penalty.'" 67 Fed. Reg. 69968 *citing* EPA memo entitled *National Policy Regarding Whole Effluent Toxicity Enforcement* (1995a) (emphasis added). The appropriate response to a chronic toxicity test indicating the presence of toxicity is *not* to declare a violation, but to investigate the cause, starting with follow-up testing to confirm the initial result. (*See accord* 67 Fed. Reg. 69968 (USEPA policy suggests additional testing is an appropriate initial response to a single WET

[11] While these terms may apply to *acute* toxicity, they do not describe chronic toxicity. The Tentative Permit has determined that no reasonable potential exists for acute toxicity and the acute toxicity limit was removed. (*See* Tentative Permit at pg. F-51 ("All acute toxicity testing results from the same period did not exceed any acute toxicity requirements.").)

exceedance); Basin Plan at 3-17 (recommending TIE to identify cause of toxicity prior to imposing effluent limitation to implement the narrative Toxicity objective); *see accord* California Ocean Plan at pg. 45 (triggering TRE Process); SIP at pgs. 30-31(requires TRE, and the failure to conduct required toxicity tests or a TRE results in establishment of chronic toxicity limits in the permit).) The Whittier Narrows WRP permit was initially set up to appropriately include this investigation process and should be revised back to the original proposal mirroring the requirements in the permit since 2003.

For all of these reasons, if the Regional Board decides to ignore State Water Board precedent and impose numeric chronic toxicity WET limitations, the Sanitation Districts at a minimum request the removal of the daily maximum effluent limitation for chronic toxicity because this limit is impracticable, unlawful, and inappropriate. Alternatively, the Regional Board could order that the daily limit for chronic toxicity be transformed into a weekly average limitation in order to comply with 40 CFR 122.45(d)(2) and the recent ruling in the 2014 *CSPA* case discussed above.

Comment A-4. USEPA's objections were misplaced and should have been ignored.

a) The pre-public notice draft permit contained a valid and enforceable chronic toxicity effluent limitation.

In its Formal Objection Letter, USEPA expressed concern on page 1 that "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 is unfounded because the trigger is not the effluent limit.[12] The permits, as recognized in USEPA's letter, contain narrative effluent limitations for chronic toxicity, which state: "There shall be no chronic toxicity in the effluent discharge." Narrative limits meet the statutory requirements for being an "effluent limit" as it is a restriction on the discharge from a point source.[13]

The Formal Objection Letter also states that the triggers and required additional actions in the NPDES permits do not meet the definition of "effluent limitation" under the Clean Water Act (CWA) because they do not establish a "restriction" on the "quantity, rate, or concentration" of pollutants in the effluent. In WQO 2003-0012 at p. 10, the State Water Board cited a letter from USEPA, dated June 25, 2003. This letter described the conditions under which EPA would consider a narrative effluent limit valid, described in WQO 2003-0012 as "US EPA has also stated that if a narrative effluent limitation is used, the permits must also contain (1) numeric benchmarks for triggering accelerated monitoring, (2) rigorous toxicity reduction evaluation (TRE)/toxicity investigation evaluation (TIE) conditions, and (3) a reopener to establish numeric effluent limitations for either chronic toxicity or the chemical(s) causing toxicity." Because all of these elements were present in the pre-notice draft permits, USEPA should have found the permits to be acceptable. Regarding the question as to whether TRE/TIE requirements are "rigorous" and establish a restriction on concentration, the Whittier Narrows WRP pre-notice draft permit required preparation and approval of an initial TRE Workplan at the time of permit issuance. Furthermore, if the results of the implementation of this initial TRE workplan indicated a need to continue

[12] In addition, EPA guidance acknowledges the use of triggers for additional monitoring to confirm the presence of toxicity. "EPA recommends that regulatory authorities evaluate the merits of a step-wise approach to address toxicity. This approach can determine the magnitude and frequency of toxicity and appropriate follow-up actions for test results that indicate exceedances of a monitoring trigger or permit limit." *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the NPDES System*, EPA 833-R-00-003 at p. 7-4 (June 2000) [Exhibit 15]; 65 Fed. Reg. 44528-9 (July 18, 2000) ("EPA recommends that NPDES permitting authorities implement the statistical approach as described in the TSD to evaluate effluent and to derived WET limits or monitoring triggers.")

[13] 33 U.S.C. §1362(11). However, it is not clear whether this definition actually applies to toxicity, since it is not a constituent or pollutant, but instead an effect.

the TRE/TIE, the Sanitation Districts would have had 15 days to submit a detailed TRE workplan to the Regional Board including "a. Future actions to investigate and identify the cause of toxicity; b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and c. A schedule for these actions."

Furthermore, the State Water Board has held that the "addition of an enforceable narrative effluent limitation for chronic toxicity, along with the existing TRE/TIE requirements and the reopener for a numeric effluent limitation for chronic toxicity, if necessary, will ensure that the requirements to perform a TRE/TIE and to implement it to eliminate toxicity are clear and enforceable. We also expect that where the TRE/TIE indicates a pollutant is causing the toxicity, the Regional Board will reopen the permit to include numeric effluent limitations for that constituent." WQO 2003-0012 at p. 10. This narrative limit is consistent with State Water Board precedent that has been in place for over 11 years without objection from EPA. Nothing has changed in the law to warrant an objection at this time.

Finally, USEPA itself blessed this approach for the Sanitation Districts' permits in 2007, stating:

> "We are pleased that the proposed language, in part, contains the following elements to successful implementation of WET testing in NPDES permits: (1) effluent limits, if reasonable potential for WET is demonstrated; (2) protective numeric benchmarks for triggering immediate accelerated monitoring when elevated levels of toxicity are reported; and (3) toxicity reduction evaluation/toxicity identification conditions which direct the permittee to identify and correct the cause of toxicity when elevated levels of toxicity are repeatedly reported. This approach is consistent with regulations governing reasonable potential for toxicity objectives for WET at 40 C.F.R. 122.44(d)(1); Section 4 of the SIP; EPA's national guidance for water quality-based permitting in the TSD; and regional EPA guidance for implementing WET in *Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs* (Denton and Narvaez, 1996)."

(USEPA Region 9 Letter to Deborah Smith, Interim Executive Officer, Regional Board re: Long Beach WRP and Los Coyotes WRP (May 31, 2007) at pgs. 3-4. [Exhibit 14]) Why the narrative effluent limit/numeric monitoring trigger approach previously authorized and stated to be compliant with law, regulations, and guidance now no longer complies is unclear. No substantive changes have occurred in the law.

b) <u>The proposed narrative effluent limits and supplemental numeric triggers are consistent with binding State Water Board precedent</u>.

As discussed above, the State Water Board has held that the use of final numeric effluent limitations in permits for POTWs that discharge to inland surface waters was an issue of statewide importance that should be addressed in the SIP. In addition, the State Board replaced the numeric chronic toxicity effluent limitations with narrative chronic toxicity limitations until the SIP is modified. Thus, the numeric limits were deleted and replaced with: "There shall be no chronic toxicity in the effluent discharge." This was consistent with the language in the Sanitation Districts' last NPDES permit for the Whittier Narrows WRP, as well as the pre-public notice draft permit for the Whittier Narrows WRP, and has been in all POTW permits for inland dischargers statewide for over eleven years without objection by USEPA until now. As previously stated, since the federal rules have not changed to justify this objection, USEPA's initial objection to this draft permit was not appropriate.

Moreover, because the SIP has not yet been modified, the 2003 precedential orders[14] are still in effect. As such, the inclusion of new numeric ("Pass/Fail") chronic toxicity effluent limitations without authority to do so would violate State Board precedent and represent an abuse of discretion. Most all other recent permits referenced in the USEPA's Final Objection Letter or discussed in the Fact Sheet have all been appealed to the State Water Board for reasons similar to those raised here.[15] These appeals will likely be successful because the State Water Board has already confirmed the continuing validity of the 2003 precedential orders in at least two other more recent cases. *See* State Water Board Order No. WQ 2012-0001 (City of Lodi); Order No. WQ 2008-0008 (City of Davis). Thus, there are at least four precedential State Water Board orders mandating a narrative chronic toxicity limit, all of which are being violated by the proposed change to numeric chronic toxicity limits.

The Sanitation Districts believe one approach to making the permits more clear in this respect would be to move the language stating that "There shall be no chronic toxicity in the effluent discharge" from the section on "Chronic Toxicity Trigger and Requirements," to the "Effluent Limitations" section. Then the trigger language could be made a part of the "Compliance Determination" steps needed to confirm compliance with the narrative effluent limitation. This would be consistent with State Water Board WQ 2008-0008 at pages 6-7, which stated:

> "In Order WQO 2003-012, we stated that, pending adoption of a policy, it was not appropriate to include final numeric effluent limitations for chronic toxicity in NPDES permits for publicly owned treatment works, but that permits must contain the following:
>
> 1. A narrative limit such as: "There shall be no chronic toxicity in the effluent discharge;"
> 2. Numeric benchmarks for triggering accelerated monitoring;
> 3. Rigorous toxicity reduction evaluation/toxicity investigation evaluation conditions; and
> 4. A reopener to establish numeric effluent limitations for either chronic toxicity or the chemical(s) causing toxicity."

Since the Sanitation Districts' pre-public notice draft permit contained these four items, USEPA had no valid basis to object since this has been the State's policy and procedure for such limits since 2003. The Regional Board should correct the permit to bring it back to the originally proposed language.

c) USEPA's statements regarding the need for numeric limits are mistaken.

USEPA claims that "[e]ven 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." (USEPA Formal Objection Letter at pg. 4, section B.) The toxicity objective for chronic toxicity, as stated above is: "[t]here shall be no chronic toxicity <u>in ambient waters, outside mixing zones</u>." (Basin Plan at pg. 3-17 (emphasis added.) The narrative effluent limit stating "[t]here shall be no chronic toxicity <u>in the effluent discharge</u>"

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[14] State Water Board Order Nos. WQO 2003-0012 and WQO 2003-0013, in response to petitions filed by the Sanitation Districts for the Los Coyotes and Long Beach WRP NPDES permits [SWRCB/OCC File Nos. A-1496 and A-1496(a)] and the Whittier Narrows WRP NPDES permit [SWRCB/OCC File Nos. A-1509 and A-1509(a).].

[15] USEPA also referenced permits issued in Arizona, which are not precedential for California as state rules and policies differ between the states. EPA further references permits for POTWs not governed by WQO 2003-0012 in which toxicity limits are expressed numerically. These permits are apparently those for POTWs with ocean outfalls, which are covered under the California Ocean Plan. The California Ocean Plan specifically requires numeric toxicity effluent limitations when there is reasonable potential. Due to the high dilution factors applied to ocean discharges, along with use of different species to conduct the toxicity testing, the issues relating to toxicity control are fundamentally different that for discharges to inland waters.

(emphasis added) is ***more stringent*** than the objective, because it applies to the discharge itself and, therefore, will be protective of the ambient water even within any mixing zone. Thus, USEPA's allegations that the narrative limit will not meet the objective or "is not as stringent as necessary for the discharge" are incorrect.

Further, the inclusion of numeric limits does not necessarily mean that water quality standards will be achieved in the receiving waters given other inputs to those waters; numeric limits just generally make for an easier comparison to a numeric objective. In this case, where no chronic toxicity is allowed in the receiving waters or in the effluent discharge, that comparison is just as simple.

To the extent USEPA was stating in its objection that numeric limits are required, case law and other binding precedent hold exactly the opposite is true. Courts in California have resoundingly rejected any suggestion that effluent limitations are required to be numeric. The definition of "effluent limitation" in the Clean Water Act refers to "any restriction," and may include a "schedule of compliance" (33 U.S.C. § 1362(11); 40 CFR 122.2.) The term "schedule of compliance" means a "schedule of remedial measures," including an enforceable sequence of interim requirements leading to compliance with an effluent limitation or standard (33 U.S.C. § 1362(17); 40 CFR 122.2.). *See accord* Statement of Decision Granting Writ of Mandate, *City of Tracy v. SWRCB,* Sacramento Superior Court Case No. 34-2009-80000392 (2010) at p. 41 (case is binding on the Water Boards since not appealed). Thus, an effluent limitation could consist entirely of remedial measures, such as triggers to additional monitoring and a TIE/TRE and the addition of chemical-specific effluent limitations, as set forth in the current permit construct under WQO 2003-0012 and WQ 2008-0008.

In addition, in the *Communities fora Better Environment* case, the First Appellate District Court of Appeal specifically rejected the argument that the federal regulations mandate numeric WQBELs. Instead, the Court found that Congress intended a "flexible approach" including alternative effluent control strategies. *Communities for a Better Environment ("CBE") v State Water Resources Control Bd.* (2003) 109 Cal. App 4th 1089, 1105; *Communities for a Better Environment v State Water Resources Control Bd.* (2005) 132 Cal. App 4th 1313, 1318; *see also Divers' Environmental Conservation Organization v SWRCB* (2006) 145 Cal.App.4th 246, 262 (following *Communities for a Better Environment.*) Thus, numeric effluent limitations are not necessary to meet the requirements of the federal Clean Water Act. *CBE, supra*, 109 Cal.App.4th at p. 1093. Indeed, federal regulations expressly permit non-numeric effluent limitations - such as narrative limitations, source control and other best management practices. 40 C.F.R. §122.44(d)(1)(i) and (v)(discussing "Limitations" and "effluent limits for whole effluent toxicity" without using the word "numeric")[16]; 40 C.F.R. §122.44(k)(3); *see also* State Board Order WQ 2006-0012, p. 16 ("programs of prohibitions, source control measures, and BMPs [Best Management Practices] constitute effluent limitations and can be written to achieve compliance with water quality standards.")

These decisions overrule any justification made by USEPA or the Regional Board for numeric effluent limitations for WET. As these cases proclaim, numeric effluent limitations are not required by any law or regulation for any constituent. Moreover, numeric limits are particularly inappropriate for WET because of the inherent inaccuracies of biological testing and the likelihood of inaccurate test results that puts the permittee in compliance jeopardy for false failures, creating a violation when the effluent is not truly "toxic."

d) Binding case law goes against USEPA's interpretations.

[16] In fact, section 122.44(d) references "any requirements... necessary to (1) Achieve water quality standards...," and does not limit these requirements to "effluent limitations."

USEPA's Final Objection Letter at page 4 and 5 states that "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 numeric WQBELs.... absent a demonstration that numeric WQBELs are infeasible to calculate, the narrative WQBELs in these permits are inconsistent with regulatory requirements at 40 CFR 122.44(k)(3)." Besides the fact that this statement appears to belated challenge to an eleven year old order, there are many other problems with this statement, as follows:

i) Section 122.44(k)(3) does not apply where the permit contains WQBELs.

USEPA regulations at 40 CFR 122.44(k)(3) relate to the use of BMPs *in lieu of* numeric effluent limitations. This section is not discussing or authorizing narrative effluent limitations; it is authorizing BMPs. In this case, as discussed above, the permits contain valid narrative effluent limitations for chronic toxicity so 40 CFR 122.44(k)(3) is not applicable.

ii). If Section 122.44(k) applies, there is no requirement that numeric effluent limitations be infeasible **to calculate**.

USEPA states in its Final Objection Letter at page 5 that "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." (emphasis added.) USEPA is using the language of 40 CFR 122.44(k)(3), which allows BMPs in lieu of effluent limitations when "numeric effluent limitations are infeasible." However, the words "to calculate" are not included in this regulation. Nevertheless, USEPA apparently believes that feasibility turns on the ability and propriety of *calculating* or establishing numeric effluent limitations, rather than on the ability of a discharger to comply.

USEPA's argument is unfounded and is not supported by case law or any other authority. "It will nearly always be possible to [calculate or] establish numeric effluent limitations, but there will be many instances in which it will not be feasible for dischargers to comply with such limitations. In those instances, states have the authority to adopt non-numeric effluent limitations." (emphasis added) *See City of Tracy* Statement of Decision at page 42. The *Communities for a Better Environment* case made clear that one factor a board may consider in determining whether a numerical effluent limitation is "feasible" is the "ability of the discharger to comply." *See CBE, supra*, 109 Cal.App 4th at 1100. The court expressly approved the regional board's consideration of this factor in upholding the determination that numeric effluent limits were not "appropriate" for the refinery at issue in that case. *Id.* at 1105 (approving determination that numeric WQBEL was not feasible "for the reasons discussed above," which included inability of discharger to comply).

In *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369 (D.C.Cir.1977), the D.C. Circuit stressed that when numerical effluent limitations are infeasible to comply with, USEPA may issue permits with conditions designed to reduce the level of effluent discharges to acceptable levels. This may well mean opting for a gross reduction in pollutant discharge rather than the fine-tuning suggested by numerical limitations. *Id.* at 1380, and at n. 21 (noting the proposition that Congress did not regard numeric effluent limitations as the only permissible limitation was supported by section 302(a) of the Act, 33 U.S.C. § 1312(a)).

Accordingly, Courts have rejected the argument that in determining the "feasibility" or "propriety" of numeric effluent limitations, the Regional Board may not consider the ability (or inability) of the discharger to comply with such limitations.[17] The ability to comply is a critical factor in

[17] The State Board recognized the following in the June 10, 2003 draft of Long Beach/Los Coyotes Order No. 2003-0012 at page 10 (emphasis added):

determining the "feasibility" or "propriety" of numerical limitations. *City of Tracy v. SWRCB,* Statement of Decision at pg. 42. The feasibility of calculating a limit is not.

Regarding the ability to comply with numeric effluent limitations, the inherent variability of biological testing and the likelihood of false positive test results needs to be carefully handled or compliance will not be feasible. False positive results put the permittee in compliance jeopardy when the effluent is not really "toxic." Any numeric effluent toxicity limitations must be carefully crafted, to recognize this inherent variability and potential for false positives. That is one reason the State Water Board has repeatedly, in four precedential orders with the most recent in 2012, indicated its preference for establishing the method of setting any numeric chronic toxicity effluent limits for inland dischargers through a statewide process. Without adequate consideration of false positives, it should be considered infeasible to set numeric limitations for toxicity.

iii) The State Water Board has held that numeric limits for chronic toxicity are not feasible or appropriate.

The State Water Board's order, WQO 2003-0012 held the following, which was referred to by USEPA:

> "While numeric effluent limitations are generally preferred, NPDES permits can legally contain "best management practices" in lieu of numeric limitations where the permitting authority determines that numeric effluent limitations are not "feasible." "

Order No. WQO 2003-0012 at p. 9 and fn. 25, *citing* 40 C.F.R. § 122.44(k); *Communities for a Better Environment v. Tesoro* (2003) 109 Cal.App.4th 1089; *Natural Resources Defense Council v. Costle* (D.C. Cir. 1977) 568 F.2d 1369; Order No WQ 91-03 (*Citizens for a Better Environment*). Under state law, "infeasible" is defined as "not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Cal. Water Code §8307(c)(4); *see also* SIP at Appendix 1-3.

According to the State Water Board, when making its determination as to whether "numeric effluent limitations are infeasible," the State Water Board stated: "The issue we will explore is whether the use of numeric effluent limitations for chronic toxicity is appropriate." See WQO 2003-0012 at 9, fn 26, *citing* Tesoro, *supra*, slip opn., p. 18. The State Water Board has repeatedly found that the imposition of numeric limitations for chronic toxicity is not appropriate. *See* State Water Board Order Nos. WQO 2003-0012, WQO 2003-0013, WQ 2008-0008, and WQ 2012-0001. In WQ 2008-0008 (City of Davis), adopted on September 2, 2008, the Board concluded that a numeric effluent limitation for chronic toxicity was not appropriate in the permit under review, but that the permit had to include a *narrative* effluent limitation for chronic toxicity. The previous Whittier Narrows WRP NPDES permit and the pre-public notice draft of the Tentative Permit were consistent with that binding precedent.

e) USEPA ignores the existence of 40 CFR 122.44(k)(4).

> Because the influent can consist largely of domestic wastewater over which the District has little or no control, we find that a numeric effluent limitation should not have been used … for chronic toxicity. It is not feasible, at least initially, to impose numeric effluent limitations since it will result in a permit violation whenever there is toxicity in the effluent, even if the cause were from the domestic influent, the District had no basis for knowing the cause, and the District was pursuing the cause and its elimination through vigorous compliance with stringent TRE requirements.

40 CFR 122.44(k)(3), regarding infeasibility of numeric limits, is not the only exemption available. Subdivision (k)(4) authorizes BMPs where "the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA." (40 CFR 122.44(k)(4)). Here, the trigger approach confirming toxicity and then, where toxicity is confirmed, performing a TIE and TRE, represents BMPs that are reasonably necessary to determine the underlying source of toxicity to remedy that issue. Having numeric limits that merely result in the imposition of penalties for a random and unconfirmed "violation" does not remedy any potential water quality issue, it just penalizes sampling results. Thus, the BMP trigger approach is authorized under 40 CFR 122.44(k)(4).

Comment A-5. Numeric effluent limitations for chronic toxicity remain inappropriate.

Numeric effluent limits for chronic toxicity are not appropriate because of the inherent inaccuracies of biological testing and the likelihood of false positive test results that puts the permittee in compliance jeopardy when the effluent is not really "toxic."

The legal validity of numeric chronic toxicity limits is also questionable. USEPA recognizes that "the precision of freshwater chronic toxicity tests is discussed in the representative methods sections in the methods manual (EPA/600/4-91/002). NOEC ... is generally in the range of 30-60% [coefficient of variation]." *See* 60 Fed. Reg. 53533-4 (Oct. 16, 1995). This variation is similar to a range of non-detect to 2.2 TU_c for any particular clean (method blank) sample, or using a non-technical analogy, is similar to a radar detector registering a stopped car at any speed from zero to more than 60 miles per hour.

In addition, chronic toxicity tests have been designed to have 5% failures and have been shown to have up to 40% false failures (failing when there is no actual toxicity), further placing their regulatory usefulness in question and raising constitutional due process issues in the context of strict liability for permit violations. Even USEPA itself has determined that "the accuracy of toxicity tests cannot be determined." *See Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*; EPA/600/4-91/002 at 139, 193, and 225 (July 1994) [Exhibit 16]. Even if there is only a 5% false failure level (as was statistically set for the TST but never verified through an actual study of known, non-toxic samples), this suggests the likelihood of at least one numeric effluent limit "violation" in the five year permit term where monthly sampling is required, even though there is no actual toxicity for those incidents. This could constitute a violation that is subject to citizen suit enforcement.[18] No reason exists to put permittees in such compliance jeopardy unnecessarily when the existence of actual, lingering chronic toxicity is not confirmed.

Because of the unreliability and inaccuracy of these biological test methods, numeric effluent limits for chronic toxicity are inappropriate, infeasible to comply with, and should not be imposed.

Comment A-6. Numeric limits based on a two-concentration TST are highly problematic.

Reanalysis of actual WET test data, from a wide variety of real-world samples, demonstrates that the TST technique consistently "detects" the existence of toxicity more frequently than the NOEC method, especially for tests with relatively small effect levels. *See* State Board, *Effluent, Stormwater and Ambient Toxicity Test Drive Analysis of the Test of Significant Toxicity (TST)* (Dec., 2011) (*see e.g.,* Chronic Freshwater results in Table E-1) [Exhibit 17]. However, one should not assume that greater statistical *sensitivity* equates with improved *accuracy* in WET testing.

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[18] Such a violation could also be subject to discretionary enforcement, although it would not be subject to Mandatory Minimum Penalties (MMPs, Water Code section 13385(i)(1)(D)) if there are other toxic pollutant limits in the permit.

Reanalysis of data from USEPA's inter-laboratory WET variability study indicates that the TST technique also "detects" toxicity in clean blank samples at a rate up to three times higher than the NOEC. (USEPA. *Final Report: Interlaboratory Variability Study of EPA Short-term Chronic and Acute Whole Effluent Toxicity Test Methods*, Vol. 1; EPA-821-B-01-004 (Sept., 2001). [Exhibit 18]) Blank samples are comprised solely of laboratory dilution water that is known to be non-toxic before the test begins. Such inaccuracies demonstrate that the TST does not provide performance "acceptably equivalent" to that of the standard WET methods that were promulgated in Part 136 in 2002.

Because of the unreliability and inaccuracy of these biological test methods, strictly construed numeric ("pass/fail" or "% Effect") effluent limits for toxicity are inappropriate, infeasible to comply with, and should not have been proposed.

In conclusion, for all the reasons cited in herein, the effluent limits for chronic toxicity in Table 4 of the Tentative Permit should be changed back to the narrative effluent limitation contained in the last permit and pre-public notice draft with a numeric trigger for additional investigations (e.g., TIE/TRE). No authority exists for mandating numeric chronic toxicity effluent limitations and particularly not limits of "Pass", or "% effect <50" using a non-Part 136 promulgated method. Furthermore, as stated above, the inclusion of numeric chronic toxicity effluent limitations violates the current binding precedent from State Board Order No. WQ 2003-0013, applicable to this Whittier Narrows WRP. Finally, since the TST test with a two concentration test design is not an approved Part 136 methodology (or a valid ATP), this method should not be utilized for compliance purposes unless promulgated as a formal rule by EPA.

Attachment B

Specific Citations from USEPA's Promulgated Freshwater Chronic Method Manual (EPA-821-R-02-013)

"Use of pass/fail tests consisting of a single effluent concentration (e.g., the receiving water concentration or RWC) and a control is not recommended"[7]

"The tests recommended for use in determining discharge permit compliance in the NPDES program are multi-concentration, or definitive, tests which provide (1) a point estimate of effluent toxicity in terms of an IC25, IC50, or LC50, or (2) a no-observed-effect-concentration (NOEC) defined in terms of mortality, growth, reproduction, and/or teratogenicity and obtained by hypothesis testing"[8]

"The concentration-response relationship generated for each multi-concentration test must be reviewed to ensure that calculated test results are interpreted appropriately"[9]

Tables 1, 3, and 4 (labeled as 3) - SUMMARY OF TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA WITH EFFLUENTS AND RECEIVING WATERS (TEST METHODS 1000.0, 1002.0, AND 1003.0):

Test concentrations:	Effluents:	5 and a control (required minimum)
	Receiving Water:	100% receiving water (or minimum of 5) and a control (recommended)[10]

[7] Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Ed., EPA-821-R-02-013. October 2002. Section 2.2.3.

[8] Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Ed., EPA-821-R-02-013. October 2002. Section 8.10.1.

[9] Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Ed., EPA-821-R-02-013. October 2002. Section 10.2.6.2.

[10] Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Ed., EPA-821-R-02-013. October 2002. Tables 1, 3, and 4 (labeled as 3) on pages 76, 165, and 211.

Attachment C

Specific Citations from USEPA's
TST Guidance Document (EPA-833-R-10-004)

"The TST approach does not result in changes to EPA's WET test methods promulgated at Title 40 of the Code of Federal Regulations Part 136."[11]

"Once the WET test has been conducted ***(using multiple effluent concentrations and other requirements as specified in the WET test methods)***, the TST approach can be used to analyze valid WET test results to assess whether the effluent discharge is toxic."[12] [Emphasis added]

"This document presents TST as a useful alternative data analysis approach for **valid** WET test data that may be used in addition to the approaches currently recommended in EPA's Technical Support Document (USEPA 1991) and EPA's WET test method manuals."[13]

"The TST approach is an alternative statistical approach for analyzing and interpreting valid WET data; it is not an alternative approach to developing NPDES permit WET limitations. Using the TST approach does not result in any changes to EPA's WET test methods."[14]

"Step 1: Conduct WET test following procedures in the appropriate EPA WET test method manual. This includes following all test requirements specified in the method (USEPA 1995 for chronic West Coast marine methods, USEPA 2002a for chronic freshwater WET methods, USEPA 2002b for chronic East Coast marine WET methods, and USEPA 2002c for acute freshwater and marine methods)."[15]

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[11] U.S. EPA. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA-833-R-10-004 (June, 2010) pg. ii on the Disclaimer.
[12] U.S. EPA. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA-833-R-10-004 (June, 2010) pg. xi.
[13] U.S. EPA. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA-833-R-10-004 (June, 2010) pg. 7.
[14] U.S. EPA. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA-833-R-10-004 (June, 2010) pg. 60.
[15] U.S. EPA. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA-833-R-10-004 (June, 2010) Appendix B, pg. B-3.

Attachment D

General Technical Comments on the Whittier Narrows WRP Tentative Permit

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Page No.	Section	Draft Statement	LACSD Comment
6	Table 4. Lead limits for Discharge 001 (San Gabriel River)	"Lead (wet-weather) µg/L, 5.3, --, 10.6 lbs/day, 0.7, --, 1.3"	Per page F-46 of the Fact Sheet, lead concentrations did not exceed water quality criteria. Therefore, lead limits for Discharge 001 should be based solely on the San Gabriel River (SGR) Metals TMDL. This TMDL specifies a wet weather WLA of 166 ug/L, per San Gabriel River Metals TMDL Table 6-2 on pg. 38. Using SIP procedures, the daily maximum limit for lead should be set at 166 ug/L. Also, the monthly average limit for lead should be deleted because per Section 7.2 (pg. 46) of the TMDL "*...Wet-weather WLAs will not be used to determine monthly permit limits but will only be used in a determination of a daily limit.* "
6	Table 4, Footnote 2, as well as page E-5, Table E-1; page E-19, Section VIII.C.1; page F-45, Section IV.C.4.b; and page F-49, Table F-9, Footnote 5.	"USGS gauging station 1108500"	The SGR Metals TMDL states: "*In San Gabriel River Reach 2, wet-weather TMDLs apply when the maximum daily flow in the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam* ". However, USGS station 11085000 is actually located below Santa Fe Dam in Baldwin Park. The USGS flow gauging station above Whittier Narrows Dam in Reach 3 is 11087020. All references to this USGS gauging station (RSW-008) should use USGS station number 11087020.
8	Table 5. Lead limits for Discharge 002, 003, and 004 (Rio Hondo)	"Lead (wet-weather) µg/L, 6.3, --, 12.4 lbs/day, 0.79, --, 1.6"	Per page F-46 of the Fact Sheet, lead concentrations did not exceed water quality criteria. Therefore, lead limits for Discharges 002, 003, and 004 should be based solely on the LA River Metals TMDL. This TMDL specifies a wet weather WLA of 62 ug/L. SIP procedures should be used to calculate effluent limits from this WLA.
11	Section V.B.1	"The discharge shall not cause the underlying groundwater to be degraded, exeed WQOs, unreasonable affect benficial uses, or cause a condition of pollution or nuisance."	State laws do not prevent any degradation of groundwater but rather only prevent degradation that is inconsistent with State Board Resolution No. 68-16. The language needs to be changed to reflect this. The suggested change is: "The discharge shall not cause the underlying groundwater to be degraded except as consistent with State Board Resolution No. 68-18, exceed WQOs, ..."
12	VI.A.2.l	"Oil or oily material, chemicals, refuse, or other polluting materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately."	Delete this sub-section in its entirety because this requirement is already covered by the general permit for storm water discharges associated with industrial activities, where the Whittier Narrows WRP is enrolled under WDID No. 4 19I007151.

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Page No.	Section	Draft Statement	LACSD Comment
15	VI.C.1	Reopener provisions	The Whittier Narrows WRP discharges to receiving waters that have a GWR beneficial use, to protect the quality of underlying groundwater. Although the tentative permit does not contain Title 22-based effluent limitations as a result of the GWR use, future permits may contain such limits. If so, it would be appropriate to consider attenuation and dilution in setting the end-of-pipe limits. State Board precedential order WQO 2003-0009 addressed this issue, stating that "Since groundwater recharge and use are long-term activities, the Regional Board could reasonably consider dilution and attenuation ... in developing effluent limits to protect the GWR use." We would like to ensure that the option of submitting studies to obtain credit for attenuation and dilution is appropriately preserved for the future. Therefore, we request that the following reopener be added to the permit: "Upon the request of the Discharger, the Regional Water Board will evaluate future studies conducted to evaluate the appropriateness of utilizing dilution credits and/or attenuation factors demonstrated to be appropriate and protective of the GWR beneficial use, on a pollutant-by-pollutant basis. Following this evaluation, this Order may be reopened to modify final effluent limitations, if at the conclusion of necessary studies conducted by the Discharger, the Regional Water Board determines that dilution credits, attenuation factors, or metal translators are warranted."
21-22	Section VI.C.6.a.ii, Section VI.C.6.a.iii, and Section VI.C.6.c.i	References to California Emergency Management Agency (Cal EMA)	On July 1, 2013, Cal EMA changed its name to the California Office of Emergency Services (OES). References to Cal EMA should be changed to references to OES.
21	Section VI.C.6.a.iii, (f)	"A certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge."	This language requiring a certification statement should be removed. Such a certification was required within 24 hours under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDR) amendments Order No. WQ 2008-002-EXEC, but was removed from the SSS WDR when it was updated and streamlined in 2013 per Order No. WQ 2013-0058-EXEC. No justification has been provided for inclusion of the certification requirement, and it is not clear how the Regional Board would use the information. Additionally, it is not clear under which circumstances such a certification would be required, since OES is not required to be notified of certain smaller spills, and since Regional Board notification is not required when the health department and OES have been notified. It is also not clear when the certification would have to be submitted. The SSS WDR required the notification within 24 hours, but no time frame is specified in the permit. Unnecessary notification requirements complicate spill response and should not be included in the permit.
22	Spill Reporting Requirements, Section VI.C.6.b.i (Monitoring)	"The Permittee shall analyze the samples for total coliform, fecal coliform, E. coli (if fecal coliform test shows positive), enterococcus, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible, and safe)."	Analyses are shown as being required for total coliform, fecal coliform, AND E.coli (if fecal coliform is positive), enterococcus and relevant pollutants of concern. The current permit language says fecal coliform OR E.coli. Because fecal coliform is typically present in all receiving waters at detectable concentrations, this change would require us to run E. coli on all spills. Running both fecal coliform and E. coli tests would be redundant and would not provide any additional information. We therefore request that the Regional Board change the language back to the language in the previous permit, allowing analysis for fecal coliform OR E. coli.

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Page No.	Section	Draft Statement	LACSD Comment
E-4	Table E-1, EFF-001	"The effluent sampling station shall be located downstream of any in-plant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. However, if the recycled water demand is high and there is no effluent water available for sampling after the dechlorination process, then the effluent sample may be collected after the chlorination process, but before the dechlorination step."	Plant modifications (planned to take place in 2015) are anticipated to allow NPDES effluent to be separated from reuse flow immediately downstream of the final disinfection process. After UV disinfection, NPDES effluent will be directed to river discharge while reuse flow will be stored in effluent storage tanks (tanks that were previously used as chlorine contact tanks and which now serve as a water storage reservoir for the reuse pump station) until reuse demand activates the pump station and stored effluent is pumped for distribution to reuse customers. To avoid any potential impact caused by reuse water storage and to obtain NPDES effluent samples representative of effluent bacterial quality, monitoring for E. coli, fecal coliform and total coliform should be conducted immediately downstream of the UV disinfection and upstream of the effluent storage tanks. Demand for reuse flow at the Whittier Narrows WRP is at levels such that reuse pumping is intermittent and there is always effluent water available for sampling after the dechlorination process. The following change is requested: "The effluent sampling station shall be located downstream of any in-plant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. ~~However, if the recycled water demand is high and there is no effluent water available for sampling after the dechlorination process, then the effluent sample may be collected after the chlorination process, but before the dechlorination step.~~ E. coli, fecal coliform and total coliform sampling shall be conducted immediately downstream of the UV disinfection process. All other effluent sampling shall be conducted downstream of the dechlorination process and inside the plant."
E-5	Table E-1	TMDL Wet-Weather Flow Monitoring Station descriptions	We request that a statement be added to the RSW-007 and RSW-008 descriptions saying, "This gaging station is operated and maintained by the USGS." The purpose of this statement is to clarify that the Sanitation Districts are not responsible for the operation or maintenance of these stations.
E-7	Table E-2, Remaining USEPA priority pollutants	For the parameter titled "Remaining USEPA priority pollutants[3] excluding asbestos", this table specifies sample type as "24-hour composite/grab for VOCs, Cyanide, and Chromium VI".	Chromium VI is not a USEPA priority pollutant. The USEPA priority pollutant list only includes "Chromium", which refers to total chromium. The reference to sample type for chromium VI should be deleted from this part of the table, as follows: "24-hour composite/grab for VOCs~~,~~ and Cyanide~~, and Chromium VI~~"
E-7	Footnote 3, also page E-11, Footnote 15 and page E-18, Footnote 23	"...and PCB as congeners shall be analyzed using method EPA 1668c."	This footnote refers to the "remaining USEPA priority pollutants", but lists test methods to be used for both PCBs as arochlors and PCBs as congeners. The USEPA priority pollutant list includes seven specific PCB arochlors, but it does not include PCB congeners. PCB arochlors are specific chemical mixtures of various PCBs congeners. EPA priority pollutant monitoring in the past has always been based on arochlors, to be consistent with the promulgated priority pollutant list. Therefore, PCB congener monitoring should not be required as part of the priority pollutant monitoring. Additionally, no justification has been provided for the increased monitoring costs that would be incurred by PCB congener monitoring. There are no PCB water quality impairments in the receiving waters downstream of the WRP. The cost for PCB congener sampling is $875 per test; adding semiannual sampling for the influent, effluent, and six receiving water stations would impose an additional cost of $14,000 per year for the Whittier Narrows WRP, with no water quality benefit. Reference to testing PCBs as congeners should be deleted from these footnotes.
E-8	IV.A.1, Table E-3, in row "Total waste flow" and in Footnote 4	"Total waste flow"	Please change as follows: "Total ~~waste~~ effluent flow"

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Page No.	Section	Draft Statement	LACSD Comment
E-9	Table E-3, Footnote without number	"E. coli testing shall be conducted only if fecal coliform testing is positive. If the fecal coliform analysis results in no detection, a result of less than (<) the reporting limit for fecal coliform will be reported for E. coli."	This text needs to be identified as a continuation of Footnote 8 on page E-8
E-9	Table E-3, Footnote 9	"If the result of the weekly BOD analysis yields a value greater than the *30-day average limit,* the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the *7-day* and *30-day average BOD limits* is demonstrated; after which the frequency shall revert to weekly."	This footnote needs to be updated as BOD limits are AMEL and AWEL now instead of 30-day and 7-day limits. The recommended language change is: "If the result of the weekly BOD analysis yields a value greater than the ~~30-day average limit~~ AMEL, the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the ~~7-day and 30-day average BOD limits~~ BOD AWEL and AMEL are ~~is~~ demonstrated; after which the frequency shall revert to weekly."
E-18-19	Section VIII.B.2	Ammonia Receiving Water Monitoring requirements;	Most of the monitoring required in this section is duplicative with monitoring required in Table E-5. A note should be added to clarify that this is not a duplicative requirement in relation to the required monthly sampling in Table E-5.
E-20	IX.A.3.a	"a. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate and algal assemblages and physical habitat assessment at monitoring stations RSW-001 through RSW-006."	Algal assemblages should not be analyzed as part of this monitoring program. There are no validated methods available for interpretation of algal taxonomy results. The Southern California Algal IBI is a water quality index and does not effectively correspond to biotic integrity at this time. In addition, the Southern California reference sites are primarily based on mountain streams. An index using such a reference site would be expected to greatly underestimate the biotic integrity in lower elevation streams (which are the types of streams within the Sanitation Districts' bioassessment program). Moreover, there are site-specific issues such as the frequent scraping of the concrete lined channels, non-wadable stream reaches, lack of access to stream length, and lack of sampling sites bracketing Sanitation Districts' discharge outfalls. These site specific concerns all lead to an inadequate characterization of the biomass and algal assemblages for each specific site. Furthermore, there are only three algal taxonomy laboratories in the nation that are proficient in following SWAMP Quality Assurance and Quality Control standards. The labor costs are equal to $170/sample and the identification cost for each sample is $1094 making the total cost per sample $1264. This would increase the cost of the Districts' bioassessment program for the Pomona WRP by an additional $3,791 annually. This represents a cost increase with no apparent benefit. Algal identification is a tool which is better suited for regional monitoring programs in which random locations are sampled. The Sanitation Districts are currently contributing approximately $430,000 per year to a regional monitoring program for the SGR; this program includes receiving water algal sampling. Note that when the regional monitoring program was established, one of the key changes was to move algal monitoring from the NPDES permits to the regional program. The following change is requested: *"a. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate ~~and algal assemblages~~ and physical habitat assessment at monitoring stations RSW-001D, RSW-002D, and RSW-003D."*

Attachment D
General Technical Comments on the Whittier Narrows WRP Tentative NPDES Permit

Page No.	Section	Draft Statement	LACSD Comment
E-21	Reporting Requirements, A.5	"Each monthly monitoring report shall include a determination of compliance with receiving water ammonia water quality objectives at RSW-002, RSW-003, and RSW-005. Any exceedances of an ammonia water quality objective shall be noted in the "Summary of Non-Compliance" section of the monitoring report."	This language should be changed as follows, to reflect current practices: "Each monthly monitoring report shall include a determination of compliance with receiving water ammonia water quality objectives at either RSW-002, RSW-003, or ~~and~~ RSW-005, depending on which station is downstream of the plant discharge at the time of sampling."
E-23	Discharge Monitoring Reports (DMRs) X.C.1 to X.C.3.	Requirements relating to submittal of hard copy DMRs.	Electronic submittal of DMRs took effect October 1, 2014. Therefore, hard copy DMRs will no longer be submitted.
E-24	Other Reports X.D.1	..."acute and chronic toxicity testing, "	Typo: remove "acute and", as there is no acute toxicity testing requirements in the permit.
F-4	Facility Description, Section II.A.1.	Local Limits Evaluation Requirement: "However, a re-evaluation will be required following this NPDES permit renewal."	Page 20 of the tentative order Section VI.C.5.b.vi states that the local limits evaluation is to be submitted "based upon the schedule specified in the NPDES Permit issued to the JWPCP." Such report was submitted on 8/22/2012, and it included an analysis of whether local limits associated with the Whittier Narrows WRP needed to be changed. Due to the interconnectedness of the JOS, it is not practical to evaluate the need to revise local limits for individual treatment plants, rather such an evalution is only appropriate on a systemwide basis. We therefore request that the language relating to local limits be amended as follows: "However, a re-evaluation will be required following ~~this NPDES permit renewal~~ the renewal of the NPDES permit issued to the Joint Water Pollution Control Plant (JWPCP)."
F-4	Facility Description, Section II.A.2.	"Treatment at the Whittier Narrows WRP consists of primary sedimentation, activated sludge biological treatment with nitrification and denitrification, secondary sedimentation, inert media filtration, chlorination, and dechlorination. Treated wastewater discharged to San Gabriel River and Rio Hondo is dechlorinated."	This description needs to be updated to more fully reflect UV disinfection treatment that has been added to the facility. Please change as follows: "Treatment at the Whittier Narrows WRP consists of primary sedimentation, activated sludge biological treatment with nitrification and denitrification, secondary sedimentation, inert media filtration, ~~chlorination, and dechlorination~~ and UV disinfection. The UV disinfection system has been incorporated into a dual barrier disinfection system which includes application of chlorine as free chlorine at a very low dosage upstream of the UV disinfection to inactivate any virus that is not readily susceptible to UV, followed by UV disinfection to inactivate any other pathogens that are more susceptible to UV. Since effluent that has been disinfected using the UV process does not carry residual chlorine, a minimal amount of chlorine is added to the UV-disinfected effluent to provide minimal residual chlorine to reclaimed water supplied for direct reuse. Treated wastewater that is not conveyed to direct reuse is dechlorinated prior to discharge in order to remove any chlorine residual.
F-5	Facility Description, Section II.A.3.	"Sodium hypochlorite is used as a disinfectant in the Whittier Narrows WRP. The disinfecting agent is added to the treated effluent prior to the filters to destroy bacteria, pathogens and viruses, and to minimize algal growth in the filters. Additional disinfectant may be dosed prior to the serpentine chlorine contact chamber. Prior to discharge, sodium bisulfite is added to the treated effluent to remove residual chlorine."	This description needs to be updated to more fully reflect UV disinfection treatment that has been added to the facility. Please change as follows: "Under normal operation conditions, sodium hypochlorite is used only in small dosages to supplement the UV disinfection, as part of the dual barrier disinfection process described under Item 2 above. Sodium hypochlorite may be ~~The disinfecting agent is~~ added to the treated effluent prior to the filters to destroy bacteria, pathogens and viruses, ~~and~~ to minimize algal growth in the filters, or may be added to provide minimal residual chlorine to reclaimed water supplied for direct reuse. In the event of bypass or UV system failure, the Whittier Narrows WRP may revert to using sodium hypochlorite for disinfection whereby ~~Additional~~ disinfectant may be dosed prior to the serpentine chlorine contact ~~chamber~~ tanks. Prior to discharge, sodium bisulfite is added to the treated effluent to remove residual chlorine."

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General Technical Comments on the Whittier Narrows WRP Tentative NPDES Permit

Page No.	Section	Draft Statement	LACSD Comment
F-5	Facility Description, Section II.A.6.	"The Permittee has installed an ultraviolet (UV) disinfection system as a primary disinfection process. To further improve the disinfection process treatment scheme, and achieve an objective of no detectible virus in the plant effluent, the Permittee incorporated the UV disinfection system into a dual barrier disinfection system. The dual barrier approach is considered to result in optimum system effectiveness and achieves a high level of disinfection of the recycled water for indirect potable use."	This item can be deleted if the requested changes in items A.2 and A.3 are incorporated.
F-11	Compliance Summary	"On June 6, 2014, the Regional Water Board issued the Joint Outfall System a Notice of Violation for failure to report a valid toxicity test result in September 2011 (effluent), April 2012 (effluent), February 2012 (ambient receiving water), and March 2013 (effluent). The Permittee also failed to accurately report data from toxicity tests that should have resulted in its effluent being declared toxic, and/or failed to collect a new effluent sample, conduct a toxicity test on the new effluent sample, and analyze as specified in the permit."	The summary of the NOV is incorrect. First, one of the dates is wrong in the summary. Second, the section of the NOV addressing failure to accurately report potentially toxic results (i.e., the language stating, "The Permittee also failed to accurately report data from toxicity tests that should have resulted in its effluent being declared toxic, and/or failed to collect a new effluent sample, conduct a toxicity test on the new effluent sample, and analyze as specified in the permit.") does not apply to the Whittier Narrows WRP. There were no instances of these failures occurring in relation to toxicity testing at the Whittier Narrows WRP. Therefore, the sentence adressing this portion of the NOV needs to be deleted. We therefore request the following language change to the compliance summary: "On June 6, 2014, the Regional Water Board issued the Joint Outfall System a Notice of Violation for failure to report a valid toxicity test result in September 2011 (effluent), April 2012 (effluent), ~~February~~ August 2012 (ambient receiving water), and March 2013 (effluent). ~~The Permittee also failed to accurately report data from toxicity tests that should have resulted in its effluent being declared toxic, and/or failed to collect a new effluent sample, conduct a toxicity test on the new effluent sample, and analyze as specified in the permit.~~
F-20	Section III.E.6, Watershed Management	"The accompanying Order fosters the implementation of this approach by protecting beneficial uses in the watershed and requiring the Discharger to participate with the Los Angeles and San Gabriel River Watershed Council, and other stakeholders, in the development and implementation of a watershed-wide monitoring program. The Monitoring and Reporting Program (Attachment E) requires the Discharger to undertake the responsibilities delineated under an approved watershed-wide monitoring plan in the implementation of the Watershed-wide Monitoring Program for the San Gabriel River, which was approved by the Regional Water Board on September 25, 2006."	The Los Angeles & San Gabriel Rivers Watershed Council is no longer conducting a watershed-wide monitoring program. Therefore, this language needs to be updated, as follows: "The accompanying Order fosters the implementation of this approach by protecting beneficial uses in the watershed and requiring the Discharger to participate with ~~the Los Angeles and San Gabriel River Watershed Council, and~~ other stakeholders, in the development and implementation of a watershed-wide monitoring program.

Attachment D
General Technical Comments on the Whittier Narrows WRP Tentative NPDES Permit

Page No.	Section	Draft Statement	LACSD Comment
F-20	Section III.E.6, Watershed Management	"The Los Angeles & San Gabriel Rivers Watershed Council is a nonprofit organization which is tracking activities throughout the Los Angeles and San Gabriel River watersheds. Its goal is to help facilitate a process to preserve, restore, and enhance all aspects of both watersheds."	The Los Angeles & San Gabriel Rivers Watershed Council is no longer conducting the watershed-wide monitoring program. Therefore, this language needs to be deleted.
F-25	Section IV.C.2, Applicable Beneficial Uses and Water Quality Criteria and Objectives	Numbering of Subsections e. and f.	Typo: Subsections should be renumbered as a. and b.
F-41	Table F-8, Copper	Under the column titled "Reason", on the row for "Copper", it says "TMDL WLA"	The copper limits are not based on the TMDL but rather on the basin plan objectives. Delete "TMDL WLA" and replace with "Tier 2, B>C, and detected in the effluent."
F-53	Table F-11. Summary of Chronic Toxicity Exceedances	Table F-11. Summary of Chronic Toxicity Exceedance	Recommend changing Title to "Table F-11. Summary of Chronic Toxicity Data" since no actual examples of exceedances are provided in the table. In each case, the monthly median TUc of 1.0 was clearly met.
F-53	Table F-11. Summary of Chronic Toxicity Exceedances	Table F-11. Incorrect test dates given.	Test date 1/17/14 is incorrect; it should read 1/18/14. Test date 1/22/14 is incorrect; it should read 1/23/14.
F-54	Section IV.D.1	"The effluent limitations for lead and zinc have been relaxed based on the San Gabriel River watershed metals TMDLs … and the Los Angeles Rivers Metals TMDL…"	The effluent limitations for lead were relaxed based on the lack of reasonable potential for exceedances of basin plan criteria for lead. The wording in this paragraph needs to be updated accordingly.
F-54	Section IV.D.1	Anti-backsliding Requirements	Typo. Delete the word "pollutant" at the end of the Anti-backsliding Requirements section.
F-58	Table F-14	Copper	The basis for the copper limit should be changed from "TMDL to "Basin Plan".
H-3	Section B	"B. LOCAL LIMITS EVALUATION 1. In accordance with 40 CFR part 122.44(j)(2)(ii), the POTW shall provide a written technical evaluation of the need to revise local limits under 40 CFR part 403.5(c)(1) within 180 days of issuance or reissuance of the NPDES permit."	Page 20 of the tentative order Section VI.C.5.b.vi states that the local limits evaluation is to be submitted "based upon the schedule specified in the NPDES Permit issued to the JWPCP." Such report was submitted on 8/22/2012, and it included an analysis of whether local limits associated with the Whittier Narrows WRP needed to be changed. Due to the interconnectedness of the JOS, it is not practical to evaluate the need to revise local limits for individual treatment plants, rather such an evaluation is only appropriate on a systemwide basis. We therefore request that the Local Limits Evaluation section in Attachment H be amended as follows: "In accordance with 40 CFR part 122.44(j)(2)(ii), the POTW shall provide a written technical evaluation of the need to revise local limits under 40 CFR part 403.5(c)(1) within 180 days of issuance or reissuance of the JWPCP NPDES permit."

LIST OF EXHIBITS

Tentative Permit for the Whittier Narrows Water Reclamation Plant

Exhibit 1.	Casarett and Doull's Toxicology The Basic Science of Poisons, Sixth Edition
Exhibit 2.	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002
Exhibit 3.	National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, EPA 833-R-10-003, June 2010
Exhibit 4.	Draft Toxicity Amendment to the Water Quality Control Plan for Enclosed Bays and Estuaries of California, State Water Resources Control Board, Fact Sheet.
Exhibit 5.	Policy for Toxicity Assessment and Control – State Water Resources Control Board Public Review Draft. June 2012
Exhibit 6.	Waste Discharge Requirements for the Joint Outfall System, Whittier Narrows Water Reclamation Plant. Order No. R4-2009-0077. NPDES No. CA0053716
Exhibit 7.	Pre-Notice Draft of the Waste Discharge Requirements for the Joint Outfall System, Whittier Narrows Water Reclamation Plant. ORDER R4-2014-XXXX. NPDES NO. CA0053619
Exhibit 8.	EPA Initial Objection Letter – NPDES Permits for the Joint Outfall System's Whittier Narrows Water Reclamation Plant and Pomona Water Reclamation Plant. July 31, 2014
Exhibit 9.	EPA Formal Objection Letter – NPDES Permits for the Joint Outfall System's Whittier Narrows Water Reclamation Plant and Pomona Water Reclamation Plant. September 4, 2014
Exhibit 10.	USEPA Region IX Alternative Test Procedure Approval Memo. March 17, 2014.
Exhibit 11.	Southern California Alliance of Publicly Owned Treatment Works and Central Valley Clean Water Association Complaint. Case No. 2:14-00815.
Exhibit 12.	EPA Guide to Method Flexibility and Approval of EPA Water Methods. December 1996
Exhibit 13.	Final National Pollutant Discharge Test of Significant Toxicity(TST) Memo. James Hanlon, USEPA Office of Wastewater Management. June 18, 2010

LIST OF EXHIBITS (continued)

Tentative Permit for the Whittier Narrows Water Reclamation Plant

Exhibit 14. Long Beach Water Reclamation Plant and Los Coyotes Water Reclamation Plant Letter from USEPA Region IX to the California Regional Water Quality Control Board. May 31, 2007.

Exhibit 15. Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program. June 30, 2000.

Exhibit 16. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Third Edition. EPA/600/4-91/002. July 1994.

Exhibit 17. Whole Effluent Toxicity Test Drive Analysis of the Test of Significant Toxicity (TST). USEPA. July 2011.

Exhibit 18. Final Report: Interlaboratory Variability Study of EPA Short-term Chronic and Acute Whole Effluent Toxicity Test Methods. EPA 821-B-01-004. September 2001