

Response to Comments

Santa Clarita Valley Sanitation District of Los Angeles County Saugus Water Reclamation Plant Tentative NPDES Permit

This Table describes all significant comments received from interested persons with regard to the above-mentioned tentative permit. Each comment has a corresponding response and action taken.

Commenter	#	Comment	Response	Action Taken
Comments received from the Santa Clarita Valley Sanitation District (SCVSD) formerly County Sanitation Districts of Los Angeles County) on March 20, 2015				
SCVSD	1	<p>On March 11, 2015 the Sanitation District Board directed SCVSD staff to withdraw the proposed site location from consideration and evaluate alternative site locations. As a result, Task 4aii and Task 4aiii in Resolution R4-2014-010 as currently written, are no longer applicable as originally intended. The Sanitation District respectfully requests that the descriptions of several milestones in Task 4 “Implementation of Compliance Measures by SCVSD” of the tentative Saugus WRP NPDES permit (shown in various locations in the tentative permit) be revised as follows:</p> <ul style="list-style-type: none"> Task 4a Deep Well Injection Test Well <u>or Alternate Brine Disposal Locations</u> Task 4ai. Complete design for deep well test well <u>Submit work plan and schedule to implement the work plan</u> Task 4aii. Award contract for deep well injection test well <u>Complete Alternatives Screening Analysis</u> Task 4aiii. Construction and testing of test well <u>Certify CEQA for Alternate Brine Disposal Locations</u> Task 4d Final Deep Well Injection Production Wells <u>or Alternate Brine Disposal Locations</u> Task 4di. Complete design for the final deep well injection production wells <u>or alternate</u> Task 4diii. Start-up of the deep well injection production wells <u>or alternate brine disposal</u> 	<p>The Regional Water Board cannot make modifications to any provision of a TMDL in a NPDES permit. The TMDL needs to undergo revision through a separate public process. The milestone tasks and associated deadlines specified in the Upper Santa Clara River Chloride TMDL, adopted by this Regional Board in October 2014, were incorporated into this NPDES permit. If the TMDL undergoes another revision, this NPDES permit may be subsequently reopened at a future date to make the necessary conforming changes.</p> <p>The Regional Water Board has included a footnote to Task 4 that acknowledges the current situation and states that the Regional Board will consider making modifications to the TMDL and, subsequently, the NPDES permit upon request from the Sanitation District.</p>	Revisions were made to the permit.

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		We believe that these minor revisions in the wording of the milestone descriptions do not impact any other milestones or the final compliance date. The Sanitation District is committed to and will continue to diligently work on project facilities required to achieve compliance by the July 1, 2019 deadline.		
SCVSD	2	<p>Implementation of final effluent limits should not be based in whole, or in part, on non-peer reviewed documents.</p> <p>a) <u>Reference to the use of a USEPA Regional Training Tool to implement final effluent toxicity limits should be removed from Footnote 9.</u></p>	Consistent with the NPDES permit for the Pomona WRP, that was adopted by this Regional Water Board on November 2014, the Saugus WRP permit references the document titled, “ <i>EPA Regions 8, 9 and 10 Toxicity Training Tool</i> .” This document, which was prepared by USEPA in January 2010, provides interpretation on the permit limit expression for chronic toxicity and was designed to assist permit writers in the interpretation of the existing EPA guidelines, regulations and methodology. Since it was utilized by staff in the preparation of the Saugus WRP tentative NPDES permit, it is referenced in the Order. There is no reason to remove reference to it in the permit.	None necessary.
SCVSD	3	<p>Use of the two-concentration test design should not be a requirement of the permit.</p> <p>a) <u>Use of the two-concentration test design is inconsistent with the promulgated method.</u></p> <p>On February 11, 2015, USEPA Region IX withdrew its Alternative Test Procedure (ATP) approval originally issued on March 2014 allowing for regional use of a two-concentration test design¹. As a result, any NPDES final effluent test conducted using such a test design would not meet the minimum requirements as specified in promulgated methods.</p>	The Order has been revised to be consistent with the letter dated February 11, 2015, from USEPA to the State Water Resources Control Board withdrawing approval of the alternate test procedure using a two-concentration test design. As revised, the Order requires the test methods described in <i>Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms</i> (October 2002) (EPA-821-R-02-013), including review of the concentration-response pattern.	Order updated for consistency with February 11, 2015 EPA letter withdrawing approval of the ATP for TST. In addition, clarifying language was added to section VII.J of the WDR and section V.A.5.a of the MRP.

¹ USEPA Region IX, Letter from Eugenia McNaughton, Manager of the Quality Assurance Office to Renee Spears, QA Officer, State Water Resources Control Board, February 11, 2015. [Exhibit 1]

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	4	<p><u>b) Use of the two-concentration test design is inconsistent with the promulgated method.</u></p> <p>The first and last paragraphs in Section VII.J (page 29) of the Tentative Permit mandate the use of a two-concentration test design (control and Instream Waste Concentration or IWC) and prohibit application of a concentration-response² evaluation and other data review steps incorporated as part of the concentration-response evaluation. This restriction is inconsistent with mandatory requirements contained in 40 Code of Federal Regulations (CFR) Part 136 promulgated method, Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, EPA-821-R-02-013, October 2002 (Promulgated Method). The Promulgated Method requires a minimum of a five-concentration test design for NPDES final effluent testing and evaluation of the concentration response relationship.</p>	See Response to Comment 3.	None necessary.
SCVSD	5	<p><u>c) The mandated use of the two-concentration test design is inconsistent with the provisions in USEPA's TST Guidance Document.</u></p>	See Response to Comment 3.	See Response to Comment 3.
SCVSD	6	<p><u>d) The mandated use of the two concentration test design is inconsistent with NPDES permits issued by USEPA Region IX that also utilize the TST.</u></p> <p>This USEPA-issued general permit for oil and gas exploration required the use of the TST statistical method to analyze <i>multi-concentration</i> WET test results, stating, "This permit is subject to a determination of Pass or Fail from a <i>multiple-effluent concentration chronic toxicity test</i> at the IWC (for statistical flowchart and procedures, see National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A, Figure A-1)". [Emphasis added.]</p> <p>In addition, USEPA Region IX specifically required the use of a multi-concentration test design with consideration of concentration-response before running the TST statistic, stating, "Following Paragraph 10.2.6.2 of the freshwater EPA</p>	<p>See Response to Comment 3.</p> <p>USEPA neither recommends nor requires review of the concentration-response pattern for a multi-concentration test <i>prior</i> to running the TST statistical analysis. The TST statistical analysis must be conducted regardless of the concentration-response pattern. Review of the concentration- response pattern should be conducted as a component of a broader quality assurance and data review and reporting process.</p> <p>See also Response A-6 for additional information about the benefits of the TST statistical approach.</p>	None necessary.

² For the purposes of this comment letter, the terms "concentration-response" and "dose-response" have equivalent meanings and can be used interchangeably.

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		<p>WET test methods manual, <u><i>all chronic toxicity test results from the multi-concentration tests required by this permit shall be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships</i></u> in Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136) (EPA/821/B-00-004, 2000)³ [Emphasis added.]</p> <p>The Sanitation Districts request that a similar provision be incorporated into the Tentative Permit to allow for the use of a five-concentration test design and the evaluation of the concentration-response relationship. Such a provision would allow the Districts to conduct chronic toxicity tests in a manner consistent with the toxicity testing provisions contained in recent NPDES permits issued by USEPA Region IX, the requirements contained in the promulgated method, and in a manner consistent with the conditions specified in USEPA's TST Guidance Document.</p>		
SCVSD	7	<p>e) Conditions in the Tentative Permit prohibiting the use of a multiple concentration test design and an evaluation of the concentration-response relationship will result in a less accurate estimate of toxicity.</p>	<p>The Order has been revised to be consistent with the letter dated February 11, 2015, from USEPA to the State Water Resources Control Board withdrawing approval of the alternate test procedure using a two-concentration test design. As revised, the Order requires the test methods described in <i>Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms</i> (October 2002) (EPA-821-R-02-013), including a multi-concentration test design, when required, and review of the concentration-response pattern.</p> <p>The State permitting authority, here, the Regional Board, has the discretion to select the statistical approach for analyzing WET test data that is most appropriate for use in a particular permit. (See Section 9.4.1.2 of <i>Short-term Methods</i>, October 2002, EPA-821-R-02-013 (“[T]he statistical methods recommended in the manual are not the only possible methods of statistical analysis.”)) The Regional Board has selected the TST statistical approach for use in</p>	Revisions were made to the permit.

³ General Permit No. CAG280000. Authorization to Discharge Under the National Pollutant Discharge Elimination System for FACILITIES Oil and Gas Exploration, Development, and Production Facilities. Signed December 20, 2013. [Exhibit 3] Page 15, Section II.B.2.d.2.

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			<p>this Order.</p> <p>The Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136), July 2000, identifies common patterns of WET test data and provides guidance on using the concentration-response relationship to review WET test results. Some of these response patterns were identified as requiring further review if a toxic result is obtained depending on the statistical approach used. Since the statistical approach is based on assumptions concerning the data set, if the concentration response pattern of the data set does not comply with those assumptions, then the calculated NOEC/LOEC endpoints may not be valid. But these anomalous results would not occur with the TST statistical approach because the results of the instream waste concentration are compared directly to the control, and do not rely upon the same statistical assumptions as the NOEC-LOEC hypothesis testing and point estimation approaches. The TST statistical approach will produce reliable results in these circumstances.</p> <p>The remaining concentration-response patterns identified in the guidance as warranting further review suggested evaluation of factors such as test acceptance criteria, test conditions, and reference toxicant testing. These factors can and should be evaluated and are accounted for in the draft permit. Evaluation of these factors and application of the TST approach, which accounts for the inherent variability in WET test data, will produce reliable test outcomes for purposes of permit compliance.</p> <p>USEPA's Variability Study referenced by the commenter appropriately applied the concentration-response relationship guidance to data analyzed with the NOEC-LOEC hypothesis testing and point estimation approaches to reduce the false positive error rate. Consideration of the concentration-response relationship is not necessary when analyzing WET test data using the TST approach, and would not be expected to reduce the error rate. Instead, evaluation of test acceptance criteria, test conditions, and reference toxicant testing are appropriate to identify anomalous data prior to analysis using the TST approach.</p> <p>The TST statistical approach for use in the statistical analysis of WET test data has undergone an extensive external peer review</p>	

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			<p>process by both the USEPA and the State Water Board. The approach was published in <i>Environmental Toxicology and Chemistry</i> (Denton et al. 2011). Data from over 2,000 WET tests were used to develop and evaluate the TST approach. The TST was tested for nine different WET test methods with 12 biological endpoints (e.g., reproduction, growth, survival) representing most, if not all of the different types of WET test designs currently in use. Over one million computer simulations were also used to select error rates meeting EPA's RMDs (Regulatory Management Decisions) for the TST approach.</p> <p>The TST statistical approach has been shown to perform as well or better than the NOEC-LOEC statistical analysis of multi-concentration data. The results of TST statistical analysis was compared to analysis using the NOEC-LOEC approach in a "Test Drive Analysis" conducted in California. The results of the test drive are provided in a report dated December, 2011 and published in <i>Environmental Toxicology and Chemistry</i> (Diamond et al. 2013). The findings of the peer-reviewed journal article by Diamond et al, 2013, found that the TST statistical analysis improves understanding of the discharge condition by correctly identifying toxic and non-toxic samples more often than when using the NOEC-LOEC statistical approach.</p> <p>Additional discussion is provided in the response to comment A-6.</p>	
SCVSD	8	Regarding the technical merit of evaluating concentration-response when running the TST, in its Response to Comments on tentative NPDES permits for the Whittier Narrows and Pomona WRP, which contain chronic toxicity provisions essentially identical to those in this Tentative Permit, the Regional Board indicated that multiple concentration testing and concentration-response evaluations are only conducted to interpret the NOEC or a point estimate, stating, "the concentration-response relationship...is solely a test review step for when the statistical approach uses either a No Observable Effect Concentration (NOEC)/Lowest Observed Effect Concentration (LOEC) or a point estimate (EC25). This permit is not requiring either of these independent approaches." ⁴ Furthermore, during the adoption hearing for the	<p>See Responses to Comments 3 and 6.</p> <p>USEPA's Method Guidance addressing concentration-response evaluations, states that an "evaluation of the concentration-response relationship generated for each sample is an important part of the data review process that should not be overlooked." This guidance was promulgated in 2002, well before development of the TST statistical approach. The guidance assumes that either NOEC-LOEC hypothesis testing or a point estimation analysis will be used to evaluate multi-concentration WET test data. In that circumstance, evaluation of the concentration-response relationship is important to determine whether the assumptions underlying these statistical approaches are reflected in the data. As previously discussed, these same assumptions are not relied upon by the TST statistical</p>	Revisions were made to the permit.

⁴ Regional Board, Response to Comments, Joint Outfall System, Whittier Narrows Water Reclamation Plant, Tentative NPDES Permit, October 24, 2014. [Exhibit 6] Page 1.

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		Whittier Narrows and Pomona WRP NPDES permits, Regional Board and EPA Region IX staff indicated that multiple concentration testing and concentration-response evaluations are not appropriate to use for the TST, and such use would have no statistical or technical merit. However, at page 4-3 of USEPA's own guidance on the WET testing methods ⁵ (Method Guidance), which addresses concentration-response evaluations, states that an "evaluation of the concentration-response relationship generated for each sample is an important part of the data review process that should not be overlooked." The same page of this reference further concludes that "reviewing concentration-response relationships should be viewed as a component of a broader quality assurance and data review and reporting process." This process includes data review, evaluation of test acceptability, evaluation of reference toxicant testing results, organism health evaluations, and test variability evaluation.	<p>approach. A WET test is validated by reviewing the test acceptability criteria and quality assurance/ quality control (QA/QC) measures, such as:</p> <ul style="list-style-type: none"> Performing and evaluating reference toxicant tests; Evaluating various test condition components, such as water quality measurements (temperature, pH, DO, light intensity, etc.) to ensure that they are within the typically accepted range; Examining effluent sampling and handling, and Plotting control charts to track the lab's control performance and reference toxicant performance over time. 	
SCVSD	9	Finally, some have incorrectly contended that a 2011 State Water Resources Control Board (State Water Board) "Test Drive" analysis ⁶ (Test Drive) definitively demonstrated that the accuracy of the two-concentration test design using the TST was the same or better than the five-concentration test design using the NOEC. This analysis ultimately determined that the TST identified a similar number of final effluent and receiving water toxicity tests as "toxic" as the NOEC (for most endpoints; this was not the case for the fathead minnow endpoints). However, this analysis did not compare or evaluate the impact of reducing the minimum number concentrations from five and a control to one and a control. All of the final effluent data used in the analysis were selected among valid WET tests submitted to the regulatory authorities for NPDES compliance determination. Therefore, all of the final effluent tests used to compare the NOEC and TST were obtained from tests using a minimum of five concentrations and a control that would have incorporated all protocol-required QA/QC and	<p>See Responses to SCVSD Comments 7 and 8 above.</p> <p>Subsequent to the November 16, 2010 workshop on the State Water Resources Control Board's (State Water Board) draft Toxicity Policy, the State Water Board recommended conducting a "test drive" to compare results obtained using the Test of Significant Toxicity (TST) statistical approach developed by the U.S. Environmental Protection Agency for analyzing whole effluent (WET) and ambient toxicity data with results obtained using the standard WET No Observed Effect Concentration (NOEC) statistical approach. The "test drive" had two specific objectives: 1) evaluate and compare resulting interpretations of WET data analyzed using TST and NOEC statistical approaches; and 2) determine how many (if any) additional within-test replicates for the control and instream waste concentration (IWC) would be needed to declare samples non-toxic that were initially identified as toxic using TST with a mean effect less than the TST regulatory management decision. The TST Regulatory Management Decision (RMD) was</p>	None necessary.

⁵ USEPA. Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing. EPA-821-B-00-004. [Exhibit 7]

⁶ Effluent, Stormwater, and Ambient Toxicity Test Drive Analysis of the Test of Significant Toxicity (TST). California State Water Resources Control Board. December 2011. [Exhibit 8]

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		<p>data validation procedures, including evaluation of the concentration-response relationship. Additionally, the “test drive” also included a sizeable number of ambient/receiving water toxicity test results. All of these ambient/receiving water toxicity tests were conducted using a single concentration and control test design, and the number of tests identified as “toxic” with the TST and NOEC were also found to be similar (again, with the exception of certain endpoints). However, this study did not and could not evaluate and compare results from final effluent tests conducted using a five concentration and control NOEC design to those on the same effluent samples obtained using a single concentration and control TST test design. The Test Drive simply compared the TST and NOEC statistical procedures.</p> <p>Furthermore, the “test drive” mischaracterized these findings in claiming that the TST identified more “truly toxic” or “truly nontoxic” tests correctly than the NOEC. All of the tests were conducted on actual final effluent and receiving water/ambient samples. Therefore, the “true” or “actual” toxicity of any sample is unknown. The “test drive” erroneously inferred that if a sample exhibited a 25% effect or greater that it was “truly toxic” or if a sample exhibited an effect of 10% or less it was “truly nontoxic”. As the USEPA found in its 2001 inter-laboratory validation study using “true” nontoxic blank samples, effects as high as 80% can be observed by some laboratories when analyzing a sample that is completely nontoxic. The inter-laboratory validation study determined that laboratories finding completely nontoxic blank samples “toxic” was not a rare event; before consideration of concentration-response relationships 15% of Ceriodaphnia reproduction tests on blank samples were incorrectly determined to be toxic and 13% of fathead minnow growth tests on blank samples were incorrectly determined to be toxic. This well documented finding would refute any conclusion that a test that exhibited a 25% effect or greater was “truly toxic”. Likewise, although not empirically quantified, it can also be assumed that actual “toxic” samples will, on some occasions, exhibit effects less than 10%.</p>	<p>defined for the “test drive” as follows: 1) the sample is declared toxic if there is greater than or equal to a 25% effect in chronic tests or is greater than or equal to 20% effect in acute tests at the permitted instream waste concentration (referred to as the toxic RMD); and 2) the sample is declared non-toxic if there is less than or equal to 10% effect at the IWC in acute or chronic tests (referred to as the non-toxic RMD). The terms “truly toxic” and “truly non-toxic” used in the test drive final report refer to the Regulatory Management Decisions as defined above, not to the “true” or “actual” toxicity of the sample, as suggested by the commenter. The RMD definition is appropriate for the purposes of the test drive, since it represents the regulatory standard used to identify toxic and non-toxic samples for compliance and other purposes.</p> <p>The “test drive” demonstrated that the TST and NOEC statistical approaches yielded the same answer as to whether the sample is toxic or not approximately 90% of the time, both for effluent samples and receiving water samples. The “test drive” also showed that the TST and NOEC approaches had similar false positive rates (i.e., erroneously designating a non-toxic RMD as a toxic RMD), which appeared to be less than 5% overall. However, the “test drive” demonstrated that the TST approach was superior to the NOEC approach by nearly eliminating false negatives (i.e., erroneously designating a toxic RMD as a non-toxic RMD). The TST approach thus benefits regulators by almost never missing toxicity when it is present (as defined by the RMD), compared to the NOEC approach which appeared to miss toxicity approximately 10% of the time overall.</p> <p>In addition, the “test drive” showed that in the few cases where the TST approach designated toxicity at effects less than 25% in chronic tests, this was due to high variability between replicates in the controls and/or IWC treatments. Addition of a minimal number of replicates to these tests usually resulted in the sample being declared non-toxic using the TST procedure.</p>	

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		<p>It should also be noted that, although the Test Drive determined that frequency of identifying toxic and non-toxic samples as a whole across all species and endpoints were comparable between the NOEC and TST, an examination of species-specific results indicated that a significantly higher frequency of toxicity detection was observed in the freshwater chronic toxicity tests (specifically for the fathead minnow and <i>Ceriodaphnia</i>). Of particular concern were the Test Drive results for the fathead minnow chronic survival endpoint. The Test Drive reported 52 tests as being “toxic” for this endpoint using the NOEC as compared to 142 tests identified as “toxic” using the TST.⁷ This means that almost three times as many chronic fathead minnow survival tests will be reported as being toxic using the TST than with the NOEC. Although less dramatic, the Test Drive results for the <i>Ceriodaphnia dubia</i> reproduction endpoint also showed significantly more “toxic” determination than did the NOEC. The Test Drive identified 216 tests as “toxic” using the NOEC and 233 tests as “toxic” using the TST⁸. This represents a nearly 8% increase in the number of tests identified as “toxic” using the TST compared to the NOEC. Overall, the Test Drive actually demonstrated that use of the TST will significantly increase the frequency of identifying sample results as “toxic” for the freshwater species used in this Tentative Permit.</p> <p>While some contend that the State Board Test Drive adequately demonstrated that the false positive error rate for the TST statistical test is comparable to the NOEC statistical test, such a conclusion is unfounded. The Test Drive was not able to estimate the false positive error rate of either the NOEC or the TST because the analysis was not conducted on known non-toxic blank samples. Tests used in the Test Drive evaluation were performed on effluents, receiving waters, and ambient waters whose actual or true “toxicity” was not known</p>	<p>The results from 2001 blank studies cited by the commenter do not invalidate the conclusions of the “test drive”. They simply illustrate problems that some laboratories encountered in running toxicity tests at that time. For the “test drive”, valid WET data from over 25 dischargers were compiled and analyzed. Some of the compiled test data did not meet test method acceptability and therefore were not used. In addition, some tests could not be used because the test data did not include a concentration at or near the facilities’ IWC. In the end, 775 valid, usable WET tests were analyzed in the “test drive” (out of 837 tests originally compiled). If control samples, such as blanks, showed high the rates of toxic effects mentioned by the commenter, those test results would not have been accepted as valid for the “test drive”.</p>	

⁷ Effluent, Stormwater, and Ambient Toxicity Test Drive Analysis of the Test of Significant Toxicity (TST). California State Water Resources Control Board. December 2011. Page 28.

⁸ Effluent, Stormwater, and Ambient Toxicity Test Drive Analysis of the Test of Significant Toxicity (TST). California State Water Resources Control Board. December 2011. Page 28.

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		Some of the tests that exhibited relatively high measured effects may have actually had low actual effects and been “non-toxic” while others that exhibited relatively small measured effects may have been truly “toxic.” Additionally, as discussed above, this analysis failed to examine the impact of eliminating the concentration-response evaluation on false positive error rates as the five-concentration effluent test data all was subjected to concentration-response QA/QC evaluation. In the absence of any actual studies on the error rate of the two-concentration TST method, based on inference from the Variability Study referenced above, the single test false positive error rate for the two-concentration TST method, as it lack concentration-response analysis, is estimated to be approximately 14%. Assuming a similar 14% single test false positive error rate for the two-concentration TST method, a Permittee can expect to observe, on average, a monthly median exceedance (failing two out of three tests conducted in a calendar month) twice during the five-year permit cycled at each WRP even if the final effluent was completely non-toxic		
	10	<p>It is for these reasons detailed above that the 40 CFR Part 136 promulgated chronic toxicity testing protocols concluded that test review, including evaluation of the concentration-response relationship, is necessary for ensuring that all test results are reported accurately⁹. In addition to being necessary for accurate result interpretation, the Promulgated Method also directly requires that multiple concentration testing be conducted for all NPDES effluent compliance determination tests. It further requires that an evaluation of the concentration-response relationship be conducted and strongly recommends <u>against</u> the use of two-concentration (control and IWC) test designs for NPDES. Furthermore, the TST Guidance Document 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.</p> <p>While the Districts agree that evaluation of toxicology</p>	See Responses to SCVSD Comments 3, 4, 5, 6, 7, 8, and 9, above.	None necessary.

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. Page 49.

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		can be complex and the evaluation of the concentration-response requires specialized expertise, the process and procedures that an Environmental Laboratory Accreditation Program (ELAP) certified laboratory follows to conduct such an evaluation are stringently evaluated every two years. This evaluation includes a site visit and comprehensive audit of all standard operating procedures, training, staff qualifications, documentation, and record keeping every two years by an ELAP auditor.		
SCVSD	11	<p>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 include the ability conduct multiple concentration tests and an appropriate dose response relationship evaluation.</p> <p><u>Page 29, Section VII.J (first paragraph):</u></p> <p>“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 $\leq 0.75 \times$ 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” at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.”</p>	See Response to Comments 3 and 4.	Revisions were made to the permit.
SCVSD	12	<p>We request the following changes:</p> <p><u>Page 30, Section VII.J (last paragraph):</u></p> <p>“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</p>	See Response to Comments 3, 4, 7, 8, 9, and 10.	None necessary.

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		<p>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) <u>test is not tested using a multi-concentration statistical 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 +</u> The Permittee can opt to monitor the chronic toxicity of the effluent using five or more effluent dilutions (including 100% effluent and negative control) <u>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.</u> <u>Only results generated using the TST statistical procedure on bioassay data meeting 40 CFR Part 136 QA/QC requirements result</u> will be considered for compliance purposes. The Board may consider results of any TIE/TRE studies in an enforcement action.”</p>		
SCVSD	13	<p>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.</p> <p>The 2009 NPDES permit for the Saugus Creek WRP required accelerated testing following an exceedance of its monthly median chronic toxicity trigger. The purpose of the accelerated testing was to confirm that toxicity was indeed present, not simply the result of false positive test results or an ephemeral toxicity event, and to ensure that any toxicity was persistent enough to identify the source of the toxicity. If accelerated testing confirmed the toxicity, the 2009 permit required a Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE) to identify the specific cause or causes of the observed toxicity. The accelerated testing and TRE process represents essentially a confirmation and diagnosis process, as toxicity cannot be addressed until the</p>	<p>The intent of the TIE/TRE is to identify the source/cause of toxicity and to reduce it, not to suspend compliance requirements. Additionally, the public has a right to know if the effluent that is being discharged continues to be toxic, particularly as most of our inland waters are primarily comprised of POTW effluents, subjecting aquatic life to whatever level of toxicity is being discharged. These tests should not be suspended while accelerated monitoring and TIE/TREs are underway. Also, it is inappropriate to suspend final effluent limitations without a compliance schedule or time schedule order, as water quality standards must be maintained throughout the permit term. As illustrated in the example below, the current trigger/accelerated testing regime used in the 2009 NPDES permit has not been adequate to reduce toxicity in the effluent and protect water quality.</p> <p>Toxicity is pollution that is caused by toxic pollutants (or toxicants). TIE/TREs may be the best approach to identify the particular</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
		<p>cause of the toxicity is known.</p> <p>The Tentative Permit does not allow time for this confirmation and diagnosis process to occur, but instead continues to require monthly chronic toxicity compliance determinations to be made during the accelerated testing and TIE/TRE process. This subjects the Sanitation Districts to additional liability for violations during this critical confirmation and diagnosis process, which is unnecessarily punitive. The Sanitation Districts will be penalized even when all appropriate steps are being timely and diligently taken to resolve the issue. The apparent justification for this requirement is to incentivize the Sanitation Districts to move quickly during this TIE/TRE process, but the Permits themselves contain tight timelines for required actions, so no need exists to impose additional violations during this process so long as the process is being diligently undertaken.</p> <p>In addition to being unnecessarily punitive, assessing compliance during accelerated testing would be challenging because 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. During accelerated testing, a single TST exceedance is used as a TRE trigger. Under this bifurcated approach, 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. Additionally, 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 could end the TRE or would be forced to continue TRE implementation even while currently in compliance with the applicable effluent limit.</p> <p>Overall, it seems to be of very little use to require accelerated testing or the initiation of a TRE while the Permittee is actually demonstrating compliance with the</p>	<p>toxicant causing toxic effects, but as a matter of practice, TIE/TREs are often not implemented successfully by permittees to identify and reduce toxicity in the effluent. None of the chronic toxicity tests, accelerated monitoring schedules, or TIE/TREs conducted by the Permittee successfully identified the causative toxicant. This permit reflects a shift in regulatory approach away from the previous oversight-driven model for reducing toxicity, to holding dischargers directly accountable for meeting and maintaining effluent limitations to protect the water quality standard.</p> <p>The Regional Board has no basis to anticipate the substance of the yet to be developed statewide toxicity policy. A revised draft policy has not yet been released to the public or circulated to Regional Board staff. Furthermore, it is inappropriate for the Regional Board to base permitting decisions on draft policy terms.</p> <p>The individual TST test result for routine compliance monitoring is indistinguishable from the control and the 100% sample testing of the accelerated chronic toxicity testing. Although the regulatory compliance of the TST is based on the Monthly Median Effluent Limit (MMEL) and can include up to 3 tests, the procedure for the accelerated testing includes four tests over an eight week period. If any one of the accelerated tests results in a “Fail”, the TIE/TRE process is triggered. As noted in the permit, if the monthly median result is a “Fail”, the effluent has exceeded the chronic numeric limit and is out of compliance for that month. Multi-concentration testing is required during the accelerated testing to provide information about the magnitude of the toxic event (reported using the EC25) to prepare for the TIE/TRE process that would follow if one of the four accelerated test results was a “Fail”. The purpose of the accelerated testing is to determine if the toxicity is persistent in the effluent. Only after establishing that it is persistent would the TIE/TRE need to be initiated. The Permittee has the option of conducting the tests independently. In the hypothetical situation posed by the permittee where an exceedance of the toxicity MMEL would occur in a month that follows the initiation of accelerated testing, the Discharger would not be required to initiate a parallel separate set of accelerated testing. The Discharger would stay the course, complete the set of accelerated testing that was already initiated, and if triggered, then proceed with a TIE/TRE.</p>	

Commenter	#	Comment	Response	Action Taken
		<p>applicable limits. By requiring continued compliance monitoring during accelerated testing and TRE initiation, such confounding scenarios are likely to be observed. The only reasonable solution to these multiple conflicts, which are not addressed in any way in the Permits, is to discontinue compliance monitoring during the accelerated monitoring/TIE/TRE process. A less satisfactory, partial solution to some of the conflicts would be to allow the District to discontinue accelerated testing and/or TRE plan implementation if compliance with the applicable limits is demonstrated during a calendar month.</p> <p>Additionally, 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 Board staff. As a result, State Board staff has made its intentions known that, after an initial WET limit 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. Under staff's proposal, 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 to 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, this suggested approach should have been applied in the Permits.</p> <p>It is our understanding that the USEPA has approved this approach in other recent NPDES permits. This approach was included in the California Regional Water Quality Control Board, San Diego Region's (San Diego Regional Board's) NPDES permit for the San Diego Naval Complex on August</p>		

Commenter	#	Comment	Response	Action Taken
		14, 2013, which stated that there would be an initial violation imposed for exceeding the applicable limit, but: “...Any exceedances occurring during a required accelerated monitoring period and, if appropriate, a TRE period shall not constitute additional violations provided that: (1) the Discharger proceeds with the accelerated monitoring and TRE (if required) in a timely manner; and (2) the accelerated monitoring and TRE are completed within one year of the initial exceedance. The San Diego Water Board has the discretion to impose additional violations and initiate an enforcement action for toxicity tests that result in a "fail" after one year from the initial violation. Additionally, a discharger's failure to initiate an accelerated monitoring schedule or conduct a TRE, as required by this Order will result in all exceedances being considered violations of the MDEL or MMEL and may result in the initiation of an enforcement action.” ¹⁰ Prior to adoption of this permit, USEPA sent a comment letter on the Naval Complex permit and in that letter stated that, “EPA has worked closely with the State and Regional Water Boards to ensure effluent limitations and testing are conducted consistent with federal and state requirements.” ¹¹		
SCVSD	14	<u>Page E-16, MRP Section V.A.7. (last sentence of the last paragraph):</u> “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. ”	Refer to Response to SCVSD Comment 13.	None necessary.
SCVSD	15	<u>Page E-16, MRP Section V.A.8:</u> “ During the TRE Process, monthly effluent monitoring shall resume and TST results (“Pass” or “Fail”, “Percent Effect”) for chronic toxicity tests	Refer to Response to SCVSD Comment 13.	None necessary.

¹⁰ San Diego Regional Board Order No. R9-2013-0064, NPDES No. CA0109169, Waste Discharge Requirements for the United States Department of the Navy, Naval Base San Diego Complex, San Diego County., MRP pg. 21, Para. F. [Exhibit 9]

¹¹ USEPA Region IX, Letter from David Smith, Manager of the NPDES Permits Office to David Barker, Supervising Water Resource Engineer, San Diego Water Board, July 8, 2013. [Exhibit 10]

Commenter	#	Comment	Response	Action Taken
		shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL and MMEL.”		
SCVSD	16	<p><u>Page E-17, MRP Section V.A.8.d:</u></p> <p>“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.”</p>	Refer to Response to SCVSD Comment 13.	None necessary.
SCVSD	17	<p><i>The Permittee should not be responsible for conducting or funding watershed-wide random bioassessment data collection without sufficient and cost equivalent reductions in existing monitoring requirements.</i></p> <p>The tentative NPDES permit for the Saugus WRP requires the Permittee to conduct instream bioassessment monitoring the random monitoring stations designated by the Santa Clara River Watershed Monitoring Program (Section IX.A.3. on page E-22). This represents a significant increase in existing monitoring efforts with these efforts being expended into reaches and areas of the Santa Clara River not influenced by the Permittee’s discharge. For this reason, the following change is requested: <u>Page E-22, MRP Section IX.A.3. (last sentence of the last paragraph):</u></p> <p>“In coordination with interested stakeholders in the Santa Clara River Watershed, the Discharger shall conduct instream bioassessment monitoring once a year, during the spring/summer period (unless an alternate sampling period is approved by the Executive Officer) and include an analysis of the community structure of the instream macroinvertebrate assemblages, the community structure of the instream algal assemblages (benthic diatoms and soft-bodied algae), chlorophyll a and biomass for instream algae, and physical habitat assessment at the random <u>receiving</u> monitoring stations designated <u>in this permit</u> by the Santa Clara River Watershed Monitoring Program. <u>The Executive Officer of the Regional Water Board may reduce these and/or other</u></p>	Since a similar approach has been used in other watersheds within the Los Angeles Region, the requested changes have been made to the MRP regarding the watershed-wide monitoring effort.	MRP page E-2 was modified.

Commenter	#	Comment	Response	Action Taken
		<u>monitoring requirements in this permit to provide resources to be used fulfill components of the watershed-wide monitoring program that includes collection of biological data at randomly selected locations within the watershed.</u> Over time, bioassessment monitoring will provide a measure of the physical condition of the waterbody and the integrity of its biological communities.”		
SCVSD	A-1	<i>The chronic toxicity limits are premature until the State Water Board adopts its promised statewide toxicity policy.</i>	<p>The Saugus Water Reclamation Plant (WRP) tentative National Pollutant Discharge Elimination system (NPDES) permit is written consistent with the direction provided by USEPA’s Formal Objection Letter regarding the Pomona and Whittier Narrows WRP permits, dated September 4, 2014. The Regional Water Board has concluded that the numeric effluent limitations for chronic toxicity in these permits are required by the Clean Water Act and federal regulations; are feasible, appropriate and necessary to maintain the water quality standard in the receiving water; and that existing State Water Board precedent does not restrict the Board’s authority to impose numeric effluent limitations where the Regional Water Board has determined that numeric limits are feasible and appropriate based on current circumstances and information.</p> <p>The narrative effluent limits with accelerated monitoring and toxicity reduction evaluation triggers that have been used in NPDES permits in this Region have not adequately addressed toxicity. The narrative approach is an oversight-driven model that essentially requires the Regional Water Board to manage dischargers’ efforts to reduce and control toxicity and lack incentives for permittees to address the toxicity in a timely manner.</p> <p>The State Water Board has declined to make a determination regarding the propriety (and feasibility) of numeric effluent limitations for chronic toxicity. (See WQ Orders 2003-0012 and 2003-0013). The State Water Board declared in the 2003 Orders that the issue would be better addressed through a modification to the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The State Water Board replaced the numeric effluent limits for toxicity in the permits at issue with narrative effluent limits (i.e., a series of actions performed by the permittee intended to address effluent toxicity), with the expectation that the SIP would soon be modified. More than ten years and two</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
			<p>NPDES permit cycles have since passed, and no such modification has been made. (See draft Policy for Toxicity Assessment and Control, SWRCB, October 2012). Concerns about the application of mandatory minimum penalties for violations of a numeric toxicity effluent limitation have also been statutorily corrected. (See Water Code § 13385(h)(2)(i)(1)(D)). This Regional Water Board must therefore exercise its own discretion to determine whether numeric effluent limitations for chronic toxicity are feasible and appropriate at this time.</p> <p>Today, numeric limits for chronic toxicity are endorsed by USEPA. The TST statistical approach simplifies the interpretation of toxicity test results and increases confidence in the results as compared to the statistical approaches, such as NOEC-LOEC. Because of the availability of toxicity testing methods, and the need to include effluent limits that will achieve and maintain compliance with water quality standards, the Regional Board finds that numeric effluent limits for toxicity are both feasible and appropriate to protect water quality standards. The majority of the other states already utilize numeric effluent limitations for chronic (or acute) toxicity, and have done so for some time. This permit is not the first in the state to adopt a numeric effluent limitation for chronic toxicity, or to utilize the TST. (See, e.g., R9-20013-0026 (General NPDES Order for discharges from boatyards); R8-2012-0035 (NPDES Order for Orange County Sanitation District)). The State's Ocean Plan also sets numeric limits for chronic toxicity that have been incorporated into NPDES permits as numeric effluent limitations. This Regional Board has already endorsed the TST and has begun implementing it in the Los Angeles MS4 permit, wastewater permits, and individual industrial stormwater permits, to fully integrate chronic toxicity testing programs and their results across the Region. A numeric chronic toxicity effluent limitation utilizing the TST was also included in NPDES permit Order No. R4-2013-0172 (NPDES permit for the University of Southern California, adopted by the Regional Water Board on November 7, 2013) and NPDES permit Order No. R4. 2014-0033 (NPDES permit for the Calleguas Municipal Water District Regional Salinity Management Pipeline). And on May 8, 2014, this Regional Water Board adopted NPDES permits for Simi Valley Water Quality Control Plant Order No. R4-2014-0066, Camarillo Water Reclamation Plant Order No. R4-2014-0062, and Hill Canyon</p>	

Commenter	#	Comment	Response	Action Taken
			<p>Wastewater Treatment Plant Order No. R4-2014-0064 that included numeric chronic toxicity effluent limitations using the TST method.” Similarly, on November 6, 2014, this Regional Board adopted NPDES permits for Pomona and Whittier Narrows WRPs that include numeric chronic toxicity effluent limitations based on the TST statistical approach.</p> <p>Also, the commenter cites two State Water Board orders in addition to 2003-0012 (Los Coyotes) for the proposition that State Water Board orders mandate a narrative toxicity limit for discharges from POTWs to inland surface waters (the commenter also cites 2003-0013, which was not a precedential order). WQ 2008-08 (City of Davis) and WQ 2012-001 (City of Lodi) do not control the Regional Water Board’s decision to include numeric toxicity limits in this permit. Although the State Water Board did not order the Central Valley Regional Water Board to include numeric effluent limitations in the two orders referenced above, in both cases, the Central Valley Regional Water Board had first concluded that numeric effluent limitations for chronic toxicity were not appropriate. The State Water Board merely upheld the decision of the regional board to not include numeric limits. In contrast, here, the regional board has determined that numeric limitations are both appropriate and feasible. Furthermore, the permits at issue in City of Davis and City of Lodi included numeric acute toxicity effluent limitations. This permit does not include a separate effluent limitation for acute toxicity.</p>	
SCVSD	A-2 Part a	<p><i>The chronic toxicity requirements improperly require use of an unpromulgated test method.</i></p> <p>a) <u>The TST without inclusion of a concentration-response evaluation is not a promulgated Part 136 method.</u></p> <p>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:</p> <p>“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</p>	Refer to Responses to Comments3 through 12.	None necessary.

Commenter	#	Comment	Response	Action Taken
		<p>teratogenicity and obtained by hypothesis testing” (Section 8.10.1)</p> <p>“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)</p> <p>“Tables 1, 3, and 4 (labeled as 3)¹² - SUMMARY OF TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA WITH EFFLUENTS AND RECEIVING WATERS (TEST METHODS 1000.0, 1002.0, AND 1003.0):</p> <p>Test concentrations: Effluents: 5 and a control (required minimum) Receiving Water: 100% receiving water (or minimum of 5) and a control (recommended)”</p>		
SCVSD	A-2 Part b	<u>USEPA’s March 17, 2014 Alternative Test Procedure approval was unlawful.</u>	USEPA withdrew its approval of the two-concentration test design as an alternate test procedure on February 11, 2015. The Order has been revised accordingly.	Revisions were made to the permit.
SCVSD	A-2 Part c	<u>Use of an ATP Cannot Be Mandated over Promulgated Methods.</u>	USEPA withdrew its approval of the two-concentration test design as an alternate test procedure on February 11, 2015. The Order has been revised accordingly and complies with the USEPA methods (EPA-821-R-02-013).	Revisions were made to the permit.
SCVSD	A-2 Part d	<u>EPA Guidance cannot Overrule Promulgated Regulations.</u>	The commenter notes that USEPA’s 2010 publication regarding the TST statistical analysis is guidance and not regulation. Similarly, USEPA’s published materials on the point-estimate technique and NOEC-LOEC hypothesis testing methods are guidance and not required statistical approaches. The 2002 Chronic Toxicity Testing Method clarifies that the “statistical methods recommended in this manual are not the only possible methods of statistical analysis ... there are other reasonable and defensible methods of statistical analysis for this kind of toxicity data.” (Chronic WET Testing, October 2002, 9.4.1.2.) Contrary to the commenter’s allegation, the Regional Board does not consider itself bound by USEPA’s 2010	None necessary.

Commenter	#	Comment	Response	Action Taken
			publication. The permitting authority has the discretion in this circumstance to select the means of statistical analysis that is most appropriate for the particular permit to be required for compliance and reporting purposes. (See 40 CFR §§ 122.44(d) and 122.43.)	
SCVSD	A-3	<i>A maximum daily effluent limit for chronic toxicity is impracticable, unlawful, and inappropriate.</i>	<p>In January 2010, USEPA prepared a document titled, “EPA Regions 8, 9 and 10 Toxicity Training Tool,” which provides interpretation on the permit limit expression for chronic toxicity. This document was designed to assist permit writers in the interpretation of the existing EPA guidelines, regulations and methodology. The document acknowledges that NPDES regulations at 40 CFR 122.45(d) require that all permit limits be expressed, unless impracticable, as both a Maximum Daily Limitation (MDL) and an Average Monthly Limitation (AML) for all dischargers other than POTWs, and as an average weekly limit (AWL) and AML for POTWs. Following section 5.2.3 of the Technical Support Document (TSD), the use of an AWL is not typically appropriate for WET. In lieu of an AWL for POTWs, USEPA recommends establishing an MDL for toxic pollutants and pollutants in water quality permitting, including WET. This is appropriate for multiple reasons. The basis for the average weekly requirement for POTWs derives from secondary treatment regulations and is not related to the requirement to assure achievement of water quality standards. In this case, use of an AWL is impracticable to protect water quality standards. An average weekly requirement comprising up to seven daily samples could average out daily peak toxic concentrations for WET and therefore, the discharge’s potential for causing acute and chronic effects would be missed. Furthermore, the results of the TST approach are expressed as Pass/Fail and therefore are not subject to averaging. An average weekly limit is therefore impracticable.</p> <p>In addition, the acute toxicity limitation that existed in the 2009 NPDES Order to account for acute effects was not included in the 2014 tentative Order because the chronic toxicity limitation is more stringent. The maximum daily effluent limit is intended to protect the aquatic life beneficial uses from survival and sublethal effects that may not be detected by an average weekly limitation. If the chronic toxicity maximum daily effluent limit is removed from the tentative, then a final effluent limitation for acute toxicity would need to be added to the 2014 Revised Tentative Order to protect the</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
			<p>water quality standard as well as corresponding effluent and receiving water monitoring for acute toxicity. Additionally, this approach would not protect against high magnitude sublethal effects in a chronic test; meaning it would not be protective of both acute and chronic effects.</p> <p>Compliance with the Monthly Median Effluent Limitation considers up to three samples. To be out of compliance with the MMEL, at least two of three samples must have resulted in a "Fail." The Maximum Daily Effluent Limitation is based on an initial sample event with samples collected days later for renewal. The renewal is required due to the biological testing and the length of time of the test. To prevent an erroneous toxic classification based on this "single" event, the maximum biological effect allowed under the MDEL is 50%, or double the otherwise applied regulatory threshold of a 25% effect. Mandatory Minimum Penalties do not apply to violations of either of these limits, so any penalty is within the discretion of the Board.</p>	
SCVSD	A-4	<p><i>Comment A-4. USEPA's objections were misplaced and should have been ignored.</i></p> <ul style="list-style-type: none"> a) The Whittier Narrows and Pomona WRP pre-public notice draft permits contained a valid and enforceable chronic toxicity effluent limitation. b) The proposed narrative effluent limits and supplemental numeric triggers in the pre-notice draft Pomona and Whittier Narrows WRP NPDES permits, as well as the 2009 Saugus Creek WRP NPDES permit, were consistent with binding State Water Board precedent. c) USEPA's statements regarding the need for numeric limits are mistaken. d) Binding case law goes against USEPA's interpretations. i) Section 122.44(k)(3) does not apply where the permit contains WQBELs. ii). If Section 122.44(k) applies, there is no requirement that numeric effluent limitations be infeasible to calculate. iii) The State Water Board has held that numeric limits for 	<p>The Pomona and Whittier Narrows pre-public notice draft permits did not contain a valid chronic toxicity effluent limitation as required by the Clean Water Act.</p> <p>Whole effluent toxicity (whether chronic or acute) is the aggregate toxic effect of an effluent measured directly by an aquatic toxicity test. Because it is both measured and <i>defined</i> by the WET test, it is a method-defined analyte. (<i>Edison Elec. Institute v. USEPA</i>, 391 F.3d 1267, 1270 (D.C. Cir. 2004); 40 CFR § 136.6(a)(5))</p> <p>An effluent limitation for whole effluent toxicity must be stated in terms of the results of a whole effluent toxicity test, by definition. The Clean Water Act defines "effluent limitation" broadly, as "any restriction ... on the quantities, rates and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters ... including schedules of compliance." (CWA § 502(11).) But a narrative toxicity "limit" fails to answer the question of how "no chronic toxicity" is to be translated into particular test results. The narrative prohibition is not a valid effluent limitation under the Clean Water Act because it is inoperable and does not function as a restriction on the discharge. The narrative prohibition is insufficient to achieve and maintain the water quality standard in the receiving water because it is not a limit</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
		<p>chronic toxicity are not feasible or appropriate.</p> <p>e) USEPA ignores the existence of 40 CFR 122.44(k)(4).</p>	<p>that can be measured or enforced.</p> <p>The Clean Water Act and its implementing regulations also require that effluent limitations be expressed numerically unless a numeric limit is not feasible. Because numeric limits for whole effluent toxicity expressed in terms of the whole effluent toxicity test are feasible for the discharges from the Pomona and Whittier Narrows WTPs, numeric limits are required. Likewise, because numeric limits for whole effluent toxicity expressed in terms of the whole effluent toxicity test are feasible for the discharges from the Saugus Creek WRP, numeric limits are required and are included in the permit.</p> <p>Regulations implementing the Clean Water Act establish a strong presumption that effluent limitations will be numeric. For example, the regulations assume that effluent limitations will generally be capable of expression as averages or mass (see 40 C.F.R. § 122.45(d) (requiring all permit effluent limitations for continuous discharges from POTWs, “shall unless impracticable be stated as ... average weekly and average monthly discharge limitations); 40 C.F.R. § 122.45(f) (“All pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass ...).)</p> <p>40 C.F.R. § 122.44(k)(3) requires non-numeric effluent limitations in the form of best management practices (BMPs) if numeric effluent limitations are infeasible. The necessary implication from this provision is that numeric effluent limitations are always required, if feasible (in which case, best management practices are merely optional elements of the permit.) The only alternate reading of this provision would conclude that in cases where numeric limitations are feasible but not actually incorporated into a particular permit, BMPs are not necessary. This reading is illogical.</p> <p>Courts have recognized that the CWA allows non-numeric effluent limitations instead of numeric limits in those instances where numeric limits are infeasible. “When numerical effluent limitations are infeasible, EPA may issue permits with conditions designed to reduce the level of effluent discharges to acceptable levels.” (<i>NRDC v. Costle</i>, 568 F.2d 1369, 1380 (D.C. Cir. 1977); <i>see also</i>, <i>Citizens Coal Council v. EPA</i>, 447 F.3d 879, 895-96 (6th Cir. 2006) (upholding EPA's coal remaining effluent limitation guidelines that</p>	

Commenter	#	Comment	Response	Action Taken
			<p>incorporate BMPs where numeric effluent limitations are not feasible).) Stormwater discharges are the most common circumstance in which numeric limits are found to be infeasible, given the intermittent and variable nature of stormwater discharges and the lack of necessary data on which to base numeric limits. But the examples are few outside of the stormwater context, such as drainage from coal remaining and placer mining operations, and certain vessel discharges. [67 Fed. Reg. 3370-01; 61 Fed. Reg. 3403-02; 73 Fed. Reg. 34296-01.]</p> <p>This Regional Water Board has determined that numeric effluent limitations for chronic toxicity are feasible for discharges from Saugus WTP. See response to comment A-1 for information regarding other examples in which numeric effluent limitations for chronic toxicity have been found feasible and have been implemented.</p>	
SCVSD	A-5	<i>Numeric effluent limitations for chronic toxicity remain inappropriate.</i>	<p>The permit includes numeric chronic toxicity effluent limitations because the effluent data showed that there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of the water quality standard.</p> <p>The narrative toxicity effluent limits with prescriptive accelerated monitoring and toxicity reduction evaluation triggers that have been used in NPDES permits in this Region have not adequately addressed how to achieve and maintain compliance with the water quality standard for chronic toxicity in the San Gabriel River and its tributaries.</p> <p>Numeric toxicity effluent limitations are an efficient regulatory tool because the measurement of compliance is clearly defined. Because of the availability of toxicity testing methods and applicable USEPA guidance endorsing these methods, the Regional Water Board finds that numeric effluent limits for toxicity are both feasible and appropriate to protect water quality standards.</p> <p>The Regional Water Board agrees that an important step to achieving compliance with a Whole Effluent Toxicity (WET) water quality standard is a toxicity reduction evaluation to identify the constituents of concern. But a numeric effluent limit will prompt proactive efforts by permittees to comply with the limitation and address toxicity in advance of violations that may impact aquatic life. This Order also requires the discharger to conduct the Toxicity</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
			<p>Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE) process if the numeric effluent limit is exceeded.</p> <p>USEPA's decision to include the WET testing methods as approved test methods under 40 CFR Part 136 was upheld by the United States Court of Appeals for the D.C. Circuit in <i>Edison Electric Institute v. USEPA</i>, 391 F.3d 1267 (2004) (<i>Edison Electric</i>). The Court found that "[i]n designing and refining the WET test methods, EPA sought to minimize the effect of organic idiosyncrasy by taking experimental and statistical precautions... WET test methods exhibit a degree of precision compatible with numerous chemical-specific tests already in use." (<i>Id.</i> at 1269 & 1271.) With respect to the representativeness of WET test methods, that is, the ability of test results to predict instream effects accurately, the Court concluded that studies on the subject "support the representativeness of the WET test methods in general, and several [studies] demonstrate representativeness with regard to particular Western waters." (<i>Id.</i> at 1273.)</p> <p>The TST statistical approach for use in the statistical analysis of WET test data was peer reviewed by the State of California. Additionally, the TST approach was also published in <i>Environmental Toxicology and Chemistry</i> (Denton et al. 2011), undergoing review by anonymous reviewers. Data from over 2,000 WET tests were used to develop and evaluate the TST approach. The TST was tested for nine different WET test methods with 12 biological endpoints (e.g., reproduction, growth, survival) representing most, if not all of the different types of WET test designs currently in use. Over one million computer simulations were also used to select error rates meeting EPA's RMDs (Regulatory Management Decisions) for the TST approach. In addition, the State Water Resources Control Board conducted a test drive analysis of the TST as compared to the current NOEC approach, and reported the results in a report dated December, 2011 and published in <i>Environmental Toxicology and Chemistry</i> (Diamond et al. 2013), undergoing review by anonymous reviewers. Also, see Response to Comment A-4.</p>	
SCVSD	A-6	<i>Numeric limits based on a two-concentration TST are highly problematic.</i>	<p>See Response to SCVSD Comments 7 through 12</p> <p>The TST statistical approach is desirable over the status quo. In the</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
			<p>executive summary (at page vii, <i>Exhibit 3 page 426 of 1898</i>) of USEPA's <i>NPDES Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June 10)</i>, USEPA states that "The traditional hypothesis testing approach under EPA's TSD is still considered valid as applied; however, that approach can now be advanced through the TST approach by providing new incentives to permittees to provide valid, high quality WET data."</p> <p>Section 1.2 of USEPA's <i>NPDES Test of Significant Toxicity Implementation Document-June 2010</i> explains that "the current NPDES WET Program does not control for false negatives. Thus, the TST approach allows permitting authorities to minimize the occurrence of false negatives (i.e., declaring the IWC non-toxic when it is actually exhibiting unacceptable toxicity), while also minimizing the occurrence of false positives (i.e., declaring the IWC toxic when it is actually acceptable). The TST approach has the added advantage of providing permittees with a clear incentive to improve the precision of test results (e.g., decrease within-test variability and/or use more replicates within a WET test than the minimum required in the EPA WET test method) to reach a definitive conclusion as to whether unacceptable toxicity is observed in a test. Thus, using the TST approach, a permittee can in fact <i>prove a negative</i>, i.e., that their effluent is acceptable (non-toxic)."</p>	
Comments received (as Attachment B) from SCVSD on March 20, 2015				
SCVSD	B-1	<p>Footnote 10, Page 7</p> <p>Delete the reference to the EPA Toxicity Training Tool. This is just a training tool, not a guidance document. It is not clear why a discharger is being required to follow a training tool. A training tool used be used for the purpose of training, and any information in it needed to implement the final effluent limitation should be directly put into the NPDES permit by the permit writer. Inclusion of a requirement obligating the Permittee to implement this document means that the Permittee must read the full document and change SOPs to reflect the training tool. To our knowledge, this tool has not been peer reviewed and we have not had a chance to review it and provide any comments.</p>	<p>The reference to the USEPA guidance document will be retained. See Response to Comment 2.</p>	None necessary.

Commenter	#	Comment	Response	Action Taken
SCVSD	B-2	VI.C.6.f, WQ Order No. 2006-0003-DWQ; SSO WDR The SSO WDR was amended in August 2013 (Order No. WQ 2013-0058).	Staff added language indicating that the SSO WDR was amended.	Revisions were made to the permit.
SCVSD	B-3	Monitoring and Reporting Program (MRP) Table E-2, page E-7, Influent monitoring frequency for Total Trihalomethanes It is not clear why the sampling frequency for total trihalomethanes was increased from semiannual to monthly. Consider keeping the previous permit frequency or some justification should be provided.	The Saugus WRP exceeded the 80 µg/L limit for Ttotal trihalomethanes contained in the 2009 Order and it continues to have reasonable potential to cause or contribute to an exceedance of the Total trihalomethanes water quality objective. Therefore, a limit was included in the NPDES permit. Since the previous limit was exceeded, the frequency of monitoring in the 2015 Order was increased in comparison to the 2009 Order.	None necessary.
SCVSD	B-4	MRP Footnote 14, page E-9, typographical error Typo. Insert a space to read "coliform testing".	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-5	MRP Table E-3, Page E-11, Perchlorate and 1,4-Dioxane The sample type should be changed from from "grab" to "24-hour composite".	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-6	MRP Section V.A.7, page E-15 To make the intent of this statement clearer, the following changes are requested, " The summary result shall be used <u>When there is discharge more than one day in a calendar month, a monthly median summary result of "Fail" requires implementation of accelerated monitoring.</u> The single result shall be used <u>When there is discharge of on only one day in a calendar month, a maximum daily single result of "Fail" and "% Effect ≥ 50" requires implementation of accelerated monitoring.</u> "	Staff made similar changes.	Revisions were made to the permit.
SCVSD	B-7	MRP Section V.C. At the Saugus WRP, there is no reliable and representative sampling location for dechlorinated effluent for the bioassay	Staff agreed to the proposed changes.	Revisions were made to the permit.

Commenter	#	Comment	Response	Action Taken
		<p>sample after the final dechlorination process point . The only location available would be a drop structure downstream of the effluent weir. Effluent flow over the existing weir and into the drop structure prevents sample collection with a composite sampler because flow is highly turbulent and flow levels can fluctuate during filter backwash cycles. In addition, the sodium bisulfite dosing location is right before the weir, and the limited mixing in the drop structure prior to the conveyance pipe precludes thorough dechlorination and collection of a representative dechlorinated effluent sample. The final chlorine residual meter is located a distance away from the weir drop structure and assures proper verification of effluent dechlorination effluent prior to discharge, but the meter is located within the closed portion of the pipe. Because there is no guarantee that a representative dechlorinated effluent sample can be collected by the 24-hour composite sampler at the weir drop structure, please change the language to allow laboratory dechlorination of toxicity samples. Proposed language is as follows, "C. Chlorine Removal Except with prior approval from the Executive Office of the Regional Water Board, chlorine shall not be removed from bioassay samples. However, chlorine may be removed from the Saugus WRP effluent bioassay samples in the laboratory due to sampling restrictions at the weir drop structure that precludes collection of a representative dechlorinated effluent sample."</p>		
SCVSD	B-8	<p>MRP Table E-5a, page E-18, Hardness</p> <p>To be consistent with the previous permit, the total hardness frequency should be changed to quarterly. Quarterly sampling will yield 20 samples over the course of the permit cycle, which is more than adequate to characterize the receiving water.</p>	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-9	<p>MRP Footnote 34, page E-20, Emerging chemicals include 1,4-dioxane (USEPA 8260M test method)</p> <p>The correct test method for 1,4-dioxane is EPA 8270M, not 8260M</p>	Staff agreed to the proposed changes.	Revisions were made to the permit.

Commenter	#	Comment	Response	Action Taken
SCVSD	B-10	<p>MRP Section VIII.A.3, receiving water monitoring</p> <p>The proposed language isn't practical because of a lack of other upstream sampling locations with adequate flow. We therefore request that the downstream receiving water data be used in lieu of the upstream data in future reasonable potential analysis. Suggested language changes are as follows, "Since there is often no flow in the receiving water stations, the Permittee shall collect receiving water samples for all of the parameters listed in Table E-5a at the first instance in the year when there is water flowing in the stream and when conditions in MRP section VIII.A.2 have been met. If there is discharge from the outfall during the permit term, three samples are to be collected upstream of EFF-001 within the permit term. The results from these samples are necessary for background data in future RPA calculation. If an adequate number of samples cannot be collected from RSW-001U (R-A), data from the downstream receiving water station RSW-002D (RB) will be used for reasonable potential calculations. Permittee shall collect background information from another appropriate sampling location and identify this location in the subsequent annual report."</p>	Staff agreed to the proposed changes.	Revisions were made to the permit
SCVSD	B-11	<p>MRP Table E-5b, page E-21</p> <p>Typographical error. Change footnote 34 to 35 for MTBE, Perchlorate, 1,4-Dioxane, and 1,2,3-Trichloropropane.</p>	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-12	<p>MRP Table E-5b, page E-21 (renumbered as E-22)</p> <p>It is not clear why total organic carbon was added to the 2015 groundwater monitoring requirements. It should be removed or some justification should be provided.</p>	<p>Staff included justification and added the following Footnote 37 on page E-22:</p> <p>Total organic carbon (TOC) monitoring may serve as a surrogate for other pollutants. Determinations of TOC can provide valuable diagnostic evidence of the extent of groundwater contamination by organic compounds. (Michael J. Barcelona, <i>Groundwater</i>, v22, no.1. Jan-Feb 1984)</p>	Revisions were made to the permit.
SCVSD	B-13	<p>Fact Sheet Section II.D.1</p> <p>The number of tests and endpoints were not correctly captured in this sentence. Corrections should be made as follows,</p>	Staff agreed to the proposed changes.	Revisions were made to the permit

Commenter	#	Comment	Response	Action Taken
		"Although chronic toxicity testing showed that thirteen twelve single chronic toxicity effluent tests exhibited results greater than 1.0 TUC (with thirteen twelve results greater than 1.0 TUC for the reproduction endpoint and two three results greater than 1.0 TUC for the survival endpoint), the 1.0 TUC monthly median trigger was exceeded twice, as follows".		
SCVSD	B-14	Fact Sheet Section Typo. Change "Jun" to "June".	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-15	Fact Sheet Section III.D, pages F-18 to F-19 The reference to the hydrological unit codes (HUCs) should be "Watershed Boundary Dataset HUC" not "Calwater Watershed" and the HUCs are incorrect; they should be 18070102 not 18070103.	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-16	Fact Sheet Section IV.C.2.b.ix.(c) and IV.C.2.b.x Since the TMDL does not specify any mass-based WLA for nitrate plus nitrite as nitrogen, mass based limits are not included for NO ₂ -N + NO ₃ -N. This language should be moved from Section IV.C.b.x to Section IV.C.b.ix.(c), under the heading "(c). Mass-based limit".	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-17	Fact Sheet Table F-8, Page F-8 Typographical error. Change "MEC< C" to "MEC>C" for Benzo(a)anthracene.	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-18	Fact Sheet Table F-10 Footnote 15 (renumbered as Footnote 16), page F-50, Chloride TMDL Conditional WLA A reference to Footnote 15 should be added to the 230 mg/L daily maximum effluent chloride limitation based on the Chloride TMDL conditional WLA.	Staff agreed to the proposed changes.	Revisions were made to the permit.

Commenter	#	Comment	Response	Action Taken
SCVSD	B-19	Fact Sheet Table F-10 Footnote 16 (renumbered as Footnote 17), page F-50, Chloride TMDL Revised WLA A reference to Footnote 17 should be added to the 230 mg/L daily maximum effluent chloride limitation based on the revised Chloride TMDL WLA to supersede the previous WLA.	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-20	Fact Sheet Table F-10 Footnote 17 (renumbered as Footnote 18), page F-50, Chloride TMDL Revised WLA The footnote applies to both the 150 mg/L three-month rolling average effluent limitation and the 230 mg/L daily maximum effluent limitation. Please change the language as follows, "The following 150 mg/L three-monthly rolling average and the 230 mg/L daily maximum effluent limitation is derived..."	Staff agreed to the proposed changes.	Revisions were made to the permit.
SCVSD	B-21	Fact Sheet Section VI.B.5.c Water Quality Order 2006-0003-DWQ (SSO WDR) was amended in August 2013 (Order No. WQ 2013-0058).	Staff made the following changes: "The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (SSO WDR) on May 2, 2006. The Monitoring and Reporting Requirements for the SSO WDR were amended by Water Quality Order WQ 2008-0002-EXEC on February 20, 2008. <u>On August 6, 2013, WQ Order No. 2006-0003-DWQ was amended by the State Water Board with the adoption of Monitoring and Reporting Program Order No. WQ 2013-0058-EXEC. The amendment went into effect on September 9, 2013.</u> "	Revisions were made to the permit.
SCVSD	B-22	Fact Sheet Table F-12, page F-55, Barium 2015 monitoring frequency Change frequency from "annual" to "semiannual".	Staff agreed to the proposed changes.	Revisions were made to the permit.
Comments received from USEPA on March 20, 2015				
USEPA	E-1	USEPA commented that they generally support the permit once the chronic toxicity provisions and fact sheet are updated to be consistent with the San Jose Creek WRP revised tentative dated March 4, 2015. However, USEPA does not support a change to the permit that would include a decision for the	Regional Water Board staff updated the chronic toxicity requirements in the Saugus WRP tentative permit to be consistent with the San Jose Creek WRP revised tentative dated March 4, 2015. However, the Saugus WRP tentative does not include the language that had been proposed during the March 12, 2015 Board	Revisions were made to the permit.

Commenter	#	Comment	Response	Action Taken
		Board to not enforce against chronic toxicity violations that accrue during the period of time that the Permittee is conducting accelerated monitoring and associated investigations related to toxicity.	hearing to not enforce against chronic toxicity violations that accrue during the period of time that the Permittee is conducting accelerated monitoring and associated investigations related to toxicity.	
	E-2	USEPA also supports the water quality based effluent limits in the permit that implement applicable TMDLs.	Comment noted.	None necessary.
Comments received from Heal the Bay on March 19, 2015				
	H-1	<u>Heal</u> the Bay commented that they support the Regional Board's inclusion of numeric chronic toxicity effluent limits in the Permit as it is critical for NPDES permittees to ensure that their discharge does not have toxic impacts and Heal the Bay supports the inclusion of the Test of Significant Toxicity ("TST") approach in the Permit.	Comment noted.	None necessary.