



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

March 20, 2015

Mr. David Hung
California Regional Water Quality Control Board
Los Angeles Region
320 4th Street, Suite 200
Los Angeles, CA 90013

Re: U.S. EPA comments on draft NPDES permit for Santa Clarita Valley Sanitation District of Los Angeles County's Saugus Water Reclamation Plant (NPDES No. CA0054313)

Dear Mr. Hung:

Thank you for the opportunity to review and comment on the public notice draft NPDES permit for discharges from Saugus Water Reclamation Plant. We generally support adoption of this permit, once the chronic toxicity provisions and fact sheet are updated to be consistent with the March 4, 2015 revised draft NPDES permit for the Joint Outfall System's San Jose Creek Water Reclamation Plant. Although, we have not yet submitted formal comments on the draft permit for Valencia Water Reclamation Plant (NPDES No. CA0054216), we expect to testify before your Board in support of the toxicity requirements of both POTW permits once they are updated to be consistent with the San Jose Creek permit and fact sheet referenced above. However, as we testified at your March 12th Board meeting, we do not support a change that would include a decision in a permit to exercise the Board's enforcement discretion not to enforce against chronic toxicity violations that accrue during the period in which the permittee is conducting accelerated monitoring and associated investigations related to toxicity. We do not believe it is a good idea or good policy for an NPDES permitting authority to cede its enforcement discretion in a permitting action.

EPA is pleased that the subject draft permit incorporates WQBELs implementing applicable TMDLs critical for protecting water quality standards for the Santa Clara River. We are also pleased that the draft permit plainly requires effluent limits on chronic whole effluent toxicity (WET), where there is reasonable potential. EPA agrees with the Regional Water Board's decision to use numeric chronic WET WQBELs for this POTW permit, which are feasible to calculate for the discharge. As a result, the permit comports with the Clean Water Act and NPDES regulations. CWA sections 301(b)(1)(C) and 502(11), 40 CFR 122.44(d)(1)(i) and (v) and 40 CFR 122.45(d). Moreover, EPA supports the inclusion of both monthly and daily WQBELs for chronic toxicity, as the Regional Water Board has determined that such limits are necessary to protect against highly toxic short-term peaks of acute or chronic toxicity that exceed the applicable toxicity water quality standard. The draft permit is consistent with the six POTW permits the Board adopted last year, which express both monthly and daily chronic toxicity WQBELs numerically.

It is critical that permitting authorities explicitly choose and identify the statistical approach that will be used to protect the narrative toxicity water quality standard and interpret toxicity test results required by NPDES permits. Your Board has chosen to measure chronic toxicity for compliance reporting with the Test of Significant Toxicity (TST) bioequivalence statistical t-test approach used to determine if two sets of observations—made for the effluent’s instream waste concentration (IWC) and the control concentration—are different. This approach is more rigorous than classical NOEC/LOEC hypothesis testing because it: (1) more correctly assigns non-toxic and toxic results in answer to the question, “What’s going on at the permitted IWC?”; and (2) minimizes inconsistent judgments by laboratories reviewing results after a chronic toxicity test is conducted. Furthermore, for the small number of toxicity laboratories that will need to, the TST provides both the opportunity and the incentive for laboratories to take steps beforehand to reduce variability by improving toxicity test execution. Consequently, this permit contains transparent, clearly expressed, enforceable requirements for chronic WET.

It is within this context that we strongly support updating Order section VII.J to be consistent with the March 4th revised draft San Jose Creek permit and fact sheet. This provision specifies compliance evaluation and reporting requirements for chronic toxicity data expressed in terms of the TST. The March 4th revision assures permit compliance with the multi-concentration test design requirement for NPDES effluents found in EPA’s 2002 toxicity test methods. Also, this revision assures that—following EPA’s 2002 toxicity test methods—the concentration-response pattern will be reviewed, as appropriate. On this point, we note that the National Organization of Clean Water Agencies (NACWA) has submitted comments critical of some of the POTW permits you are in the process of reissuing. Bearing this in mind, we wish to draw your attention to a January 2006 white paper by NACWA, page 10, which states: “The [toxicity] methods do not specifically state that a permittee may invalidate a [toxicity] test purely on the basis of the concentration-response relationship. However, NACWA believes that, in the context of a full Data Quality Objectives program, the testing laboratory and the clean water agency should consider a test invalid if an adequate relationship is not present.” This position places NACWA and its member agencies holding this position squarely at odds with EPA’s 2002 toxicity test methods rule and preamble regarding the proper role of concentration-response pattern reviews. After statistical analysis of the biological data, concentration-response pattern review specified by EPA plays a role limited to specific instructions for determining that particular statistical endpoints—NOECs, LC50s, and IC25s—are interpreted appropriately.

It remains EPA’s position that the determination of toxicity is not based on achieving a specified concentration-response pattern. As a result, we concur with the March 4th revised fact sheet for San Jose Creek, which correctly states that the appropriate interpretation of effluent (or receiving water) sample measurement results from the TST statistical approach is, by design, independent from the concentration-response patterns of the toxicity tests for those samples. When using the TST, we agree that the application of EPA’s 2000 concentration-response pattern review guidance will not improve the appropriate interpretation of a TST result, as long as your permits require use of EPA’s toxicity test methods by which good QA/QC is demonstrated through ongoing evaluation and tracking of reference toxicant testing and measures (i.e., mean, standard deviation, and coefficient of variation) of control concentration performance.

Also, the updated provision VII.J takes steps to effectively address our concern that a laboratory's Standard Operating Procedures for chronic toxicity test data analysis and review can be used to improperly disqualify a test result. It is our position that applying EPA's 2000 concentration-response pattern review guidance and/or inapplicable NOEC/LOEC variability criteria (i.e., PMSDs) to the TST—an unrelated statistical approach—prior to reporting compliance will undercut the transparency of the reported toxicity result, shroud a potentially non-compliant result prior to reporting, and diminish the reliability and enforceability of the permit and its toxicity limits. The March 4th revised draft San Jose Creek permit took a large step toward addressing our ongoing observation that providing too much WET method flexibility on specific procedures has been a way for some NPDES permit holders to improperly disqualify test results. We continue to support the inclusion of a permit condition that takes steps to ensure such practices will not be used.

If you have questions regarding these comments, please call me at (415) 972-3463, or Robyn Stuber at (415) 972-3524.

Sincerely,

A handwritten signature in black ink, appearing to read 'David W. Smith', written in a cursive style.

David W. Smith, Manager
NPDES Permits Office (WTR-2-3)