



COACHELLA VALLEY WATER DISTRICT

Established in 1918 as a public agency

Public Comment
Toxicity Provisions
Deadline: 12/21/18 by 12 noon

GENERAL MANAGER
Jim Barrett

ASSISTANT GENERAL MANAGER
Robert Cheng

December 21, 2018

Via email: commentletters@waterboards.ca.gov

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



Dear Ms. Townsend:

Subject: Comment Letter – Toxicity Provisions

The Coachella Valley Water District (CVWD) appreciates the opportunity to comment on the State Water Resource Control Board's (State Water Board) Toxicity Provisions. CVWD provides domestic water, wastewater, recycled water, irrigation/drainage, regional stormwater protection and ground management services to a population of about 300,000 throughout the Coachella Valley.

As CVWD indicated in its comments submitted to your office on August 20, 2012, regarding the then-proposed Draft Policy for Toxicity Assessment and Control, CVWD appreciates the State Water Board's goal of state-wide consistency in toxicity monitoring and enforcement, as well as the efforts that have gone into these provisions. Seeing that the proposed provisions continue to include many of the same components as the draft policy, our concerns remain the same about the specific burdens that will fall on our agency pertaining to increased costs and increased violations.

Violations based on a single test result. Permit violations impose significant costs on public agencies such as ours: financially, legally, and in public trust. The current draft provisions contain a Maximum Daily Effluent Limit that would assess a permit violation as a result of a single test result. Even though the MDEL involves a higher effect level, our agency believes that the use of a single toxicity test result to assess a permit violation is inappropriate.

The result of a single bioassay is not a conclusive demonstration that a sample is toxic, since there are numerous sources of uncertainty in toxicity testing. EPA guidance and approved methods note the variability and occasional anomalous results inherent in biological testing, and the TST method itself has a built-in allowance for a 5% false positive rate. Analysis of past EPA inter-laboratory data by the TST method indicates that the false positive rate may be even higher for some test species.

Therefore, our agency strongly recommends that if the toxicity provisions must include numeric effluent limits, that the provisions include average, median, or other percentile limits that require more than one test result to assess a permit violation.

Increased costs of routine testing. We understand that the provisions will result in required monthly chronic toxicity testing, which will increase our frequency from quarterly. This alone will cost an additional \$85,000 in laboratory costs over our 5-year permit cycle. These costs assume additional monthly monitoring 3 times per 5-year permit cycle due to the minimal false determination of toxicity rate of 5%, which is built into the TST method.

Inconclusive TREs/TIEs We are concerned that the provisions fail to differentiate real, persistent toxicity from episodic low-level toxic events and the false determinations of toxicity that are built in to the TST method. Costs associated with conducting Toxicity Reduction Evaluations (TREs) and Toxicity Identification Evaluations (TIEs) can be high and long lasting, as can be the cost associated with unnecessary treatment upgrades in response to false determinations of toxicity.

CVWD has recently spent over \$31,000 during this year on a TRE/TIE that so far, has shown inconclusive results..

As in past TRE/TIE's, despite considerable time and expense, CVWD has not been able to conclusively identify the cause(s) of the intermittent chronic toxicity observed during these periods. In short, CVWD has taken all available steps to identify the cause(s) and source(s) of the observed chronic toxicity, but no definitive pollutant(s) or source(s) have ever been identified. CVWD continues to aggressively implement its source control program that has been in place since the early 1980's and no significant industrial dischargers exist within our sanitary collection system serving resort communities in the Coachella Valley.

Our aggressive monitoring efforts and TRE/TIE source identification activities would not have differed if numeric toxicity effluent limits had been in place. The only difference would have been that we would have been subject to additional penalties for violations over which we had no control.

Increased costs due to violations. The cost of increased violations were not considered in the Economic Impacts Analysis in the Staff Report. A major difference between these provisions and how toxicity is currently managed is that exceedences of acute and chronic toxicity limits are Clean Water Act violations subject to State penalties of up to \$10,000 per day or \$10.00 per gallon, and federal penalties of up to \$37,500 per day per violation. These provisions do not dictate over what time period these penalties are assessed. For example, in a worst-case scenario, the penalty could be assessed over the time period of accelerated monitoring and TRE/TIE investigations, which is 6 months under the provisions. In addition, our agency would still be subject to third party lawsuit and attorney fee liability, particularly if regulators decide to take no enforcement actions.

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
December 21, 2018
Page 3

Even though we have had excellent compliance with acute and chronic toxicity testing requirements since this testing was first added to CVWD permits, we are concerned that the rate of false determination of toxicity associated with the TST method, combined with a single test result violation approach that fails to account for the known variability using bioassay tests, will lead to violations at CVWD's facility that are not related to actual toxicity.

As in 2012, CVWD hopes that the State Water Resources Control Board will take these comments under serious consideration. The additional costs due to the provisions will be burdensome for our agency. Even in the absence of these cost increases, we are concerned that these new provisions will result in unwarranted violations from inaccurate toxicity results that do not reflect actual water quality impairments and will only act to damage the public confidence in the sanitation services CVWD provides.

Enclosed are additional comments on the Draft Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California and Draft Staff Report.

Please contact me if you have any questions.

Sincerely,



Steve Bigley
Director of Environmental Services

Enclosure/1/as

WG: ms\Env Srvs\WQ2018\Dec\Toxicity Provisiion.doc
File: 0567.1

CVWD Comments

Draft Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California

1. Sections IV.B.2.a.i-iii - Species Sensitivity Screening (page 12): CVWD does not believe that species sensitivity screening should be required for facilities enrolled in the statewide NPDES permit for drinking water discharges (Order WQ 2014-0194-DWQ). Potable water that meets Title 22 drinking water requirements should not be subject to toxicity testing. “All non-storm water NPDES dischargers” should be replaced with “All non-storm water NPDES dischargers that conduct toxicity testing” to clarify which dischargers these two sections apply to. This change is needed throughout document where “Non-Storm Water NPDES dischargers” is used.
2. Section IV.B.2.a.iii - Species Sensitivity Screening (page 12): This section proposes that species sensitivity screening be performed using 4 sets of testing conducted within a year’s time. Currently, CVWD performs chronic/acute toxicity species screening during years 1 and 4 of a 5 year permit cycle for one of its waste discharge facilities. CVWD’s cost to perform this screening is about \$5,300 per round or \$10,600 over a 5 year permit cycle. This proposed change increases that cost to \$21,200 with no apparent benefit. CVWD believes two sets during a 5 year cycle is adequate to determine the most sensitive species.
3. Section IV.B.2.b - Reasonable Potential (page 14): Same comment as item 1 above. CVWD does not believe this analysis should be required for facilities enrolled in the statewide NPDES permit for drinking water discharges (Order WQ 2014-0194-DWQ).
4. Section IV.B.2.c.i - Routine Monitoring for Chronic Toxicity (page 16): This section proposes a monthly frequency for routine monitoring for non-storm water dischargers that discharge equal to or greater than 5.0 MGD for chronic toxicity. CVWD currently monitors for chronic toxicity on a quarterly basis. Switching to monthly frequency will drive costs up to about \$120,000 during a 5 year permit cycle versus the \$40,000 cost for quarterly monitoring. In addition, this section indicates that the monthly routine sample shall be collected early enough in the month to allow for the collection of 2 follow up MMEL compliance samples within the same month if needed. Switching to monthly monitoring and restricting the sampling to earlier in the month will cause challenges to schedule testing with specialized toxicity labs. The current quarterly frequency provides flexibility in scheduling with the labs and is cost-effective. Two follow up samples could be required within the same quarter instead of the same month to allow for more flexibility. CVWD appreciates the ability to reduce monitoring frequency to quarterly or annual if prior data shows no exceedances. CVWD

recommends that this determination be based on one year's worth of data instead of five years.

5. Section IV.B.2.c.ii- Routine Monitoring for Acute Toxicity (page 18): This section proposes a routine monitoring frequency of at least once per calendar year for acute toxicity if reasonable potential is demonstrated. As with the chronic toxicity section above, this section indicates that the routine sample shall be collected early enough in the month to allow for the collection of 2 follow up MMEL compliance samples within the same month if needed. The same loss of flexibility occurs with scheduling samples earlier in the month. It is more reasonable to require 2 follow up compliance samples be collected within the same quarter as opposed to same month.
6. Section IV.B.2.i- Violation Reporting (page 24): CVWD recommends revising the last sentence of this section to read, " Non-storm water NPDES dischargers shall notify the permitting authority of a violation of a toxicity MDEL or MMEL as soon as the discharger receives the monitoring results but no later than 24 hours of receiving the results."
7. Section IV.B.4 - Implementation for Nonpoint Source and Other Non-NPDES Discharges (page 25): Agricultural wastewater discharges and discharges of waste from drain operation and maintenance activities originating within the Coachella Valley are regulated by a Conditional Waiver of Waste Discharge Requirements (Order R7-2014-0046). This conditional waiver includes management practices that the agricultural industry and CVWD utilize in the Coachella Valley to successfully minimize water quality impacts. These management practices reduce the amount of waste discharged and minimize runoff. As such, CVWD opposes the text in this section since any implementation of toxicity monitoring requirements for these nonpoint sources would need to be justified and not merely implemented at the discretion of the permitting authority.
8. Appendix A – Glossary – Insignificant Discharges (page 28): This definition for NPDES discharges that are determined to be a very low threat to water quality by the permitting authority should include as an example drinking water discharges covered by statewide NPDES permit (Order WQ 2014-0194-DWQ).

Draft Staff Report, Including Substitute Environmental Documentation

1. Appendix E, Superseded Portions of the Regional Water Board Basin Plans, Colorado River, Region 7 (page 308): CVWD does not agree with striking out narrative language that indicates survival of aquatic life in surface waters subjected to a waste discharge shall not be less than that for the same water body in areas unaffected by the waste discharge. CVWD believes that this narrative language is reasonable and CVWD should not have to meet more stringent effluent limitations if it is shown that the effluent discharge does not negatively affect the survival of aquatic life in the receiving water.