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West County Wastewater District  
and  
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August 20, 2012

Charles R. Hoppin, Chairman and Members  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814

c/o Jeanine Townsend, Clerk to the Board  
[commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**Subject: Comment Letter - Policy for Toxicity Assessment and Control**

Dear Chairman Hoppin and Members:

The West County Agency (WCA) appreciates the opportunity to comment on the State Water Resource Control Board's (State Water Board) Draft Policy for Toxicity Assessment and Control (Policy). WCA is a Joint Powers Agency whose members are West County Wastewater District (WCWD), the City of Richmond, and Richmond Municipal Sewer District No. 1 (RMSD).

WCA operates a deepwater outfall in Central San Francisco Bay that discharges disinfected, dechlorinated secondary effluent from the WCWD and the City of Richmond Water Pollution Control Plants (WPCPs). The WCWD WPCP serves a population of about 90,000 covering parts of Richmond, the City of San Pablo, and surrounding communities. The WCWD plant has dry weather design flow rate of 12.5 million gallons per day (MGD) and a hydraulic capacity of 21 MGD. The City of Richmond WPCP serves a population of about 68,000 covering most of the incorporated area of Richmond. The Richmond plant has a dry weather design flow rate of 16 MGD and a hydraulic capacity of 20 MGD. Toxicity is measured in the combined effluent prior to discharge to the San Francisco Bay.

WCA appreciates the efforts put forth by State Water Board staff to develop state-wide consistency in toxicity monitoring and enforcement. However, if adopted in its current form, this Policy will have significant impacts on WCA operations. WCA supports the letter submitted by the Bay Area Clean Water Agencies (BACWA), which comments on region-wide impacts of the Policy, and the letter submitted by the California Association of Sanitation Agencies (CASA) which comments on statewide impacts. In addition to those comments, WCA is sharing its concerns about the specific burdens that will fall on our agency pertaining to increased costs and increased violations.

**Violations based on a single test result.** The current draft policy contains 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, WCA believes that 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 toxicity testing methods note the variability and occasional anomalous results inherent in biological testing. In fact, the Test of Significant Toxicity method (TST) required by the Policy 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, WCA strongly advocates for narrative acute and chronic toxicity objectives, which are fully protective and allow the Regional Water Boards flexibility in regulating different categories of discharges. However, if the Policy must include numeric effluent limits, WCA recommends inclusion of average, median, or other percentile limits that require more than one test result to assess a permit violation.

**Increased costs of routine testing.** WCA is currently required to undertake routine chronic toxicity testing on a quarterly basis. With Policy implementation, monthly testing will be conducted. The change in frequency will cost approximately \$24,500 in additional laboratory costs over the 5-year permit cycle. The cost increase includes collection and assessment of multiple samples during a calendar month (three times in 5-years) to address the 5% false toxicity rate which is built into the TST method. WCA staff time will also increase to collect, store, and transfer samples for laboratory analysis.

While the Policy only requires testing at a single concentration, performing additional test replications can help WCA avoid violations. If WCA determines that sample replicates are needed to eliminate a falsely determined violation, an additional \$63,900 in laboratory costs could be incurred over the 5-year permit cycle. Costs for a reference toxicant tests to assure data quality were not included in the State Water Board's Staff Report. However, reference toxicant testing is an additional cost, on top of the cost increase estimate provided above.

Cost savings that may result from termination of acute toxicity testing requirements are not assured by the Policy. The Economic Impacts Analysis in Appendix H of the Staff Report bases a large part of the estimated cost saving on the assumption that acute toxicity will no longer be required. However, since this decision is ultimately left to the discretion of the Regional Water Boards, WCA is not expecting to have this requirement removed from its permit. Furthermore, WCA has already invested significant resources into developing acute toxicity testing capability in-house, so even if the acute toxicity testing is not required, the savings described in the Staff Report will not be realized.

**Inconclusive TREs/TIEs.** WCA believes the Policy fails to differentiate real, persistent toxicity from episodic low-level toxic events and the false determinations of toxicity that are built into the

TST method. Most toxic events are episodic and the TRE/TIE investigations typically commence after the episode has concluded. As a result, the implementation of TREs/TIEs usually result in wasted expense and frustration. WCWD and the City of Richmond implement successful Pretreatment Programs and Pollution Prevention Programs in their service areas to limit the discharge of toxic substances to the WPCPs, maintain high effluent quality, and avoid effluent toxicity. Further implementation of source control programs is a much more effective measure than conducting TREs/TIEs for fleeting episodic toxic events.

**Increased costs due to violations.** The cost of increased violations was not considered in the Economic Impacts Analysis in the Staff Report. A major difference between this Policy and how toxicity is currently managed is that exceedences of acute and chronic toxicity limits are California Water Code and Clean Water Act violations. As a result, the violations will be subject to State and Federal penalties that are assessed per day and per gallon discharged. The Policy does 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 defined as 6 months under the Policy. In addition, the violations will be subject to third party lawsuits and attorney fee liability, particularly if regulators do not take enforcement actions. The rate of false determination of toxicity that is built in to the TST process may also lead to increased costs (i.e., fines, lawsuits) that are not related to actual toxicity.

WCA thanks the State Water Resources Control Board for taking these comments under serious consideration. The additional costs for Policy implementation and the possible impacts to permit compliance are burdensome during these challenging economic times.

Sincerely,



E.J. Shalaby  
Agency Manager

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