

Central Valley Regional Water Quality Control Board
12/13 June 2008 Board Meeting

Response to Comments for the Dewatering and Other Low Threat Discharges to
Surface Waters
Tentative General Waste Discharge Requirements

The following are Regional Water Quality Control Board, Central Valley Region (Regional Water Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements (NPDES General Permit renewal) for the General Order for Dewatering and Other Low Threat Discharges to Surface Waters (Existing General Order). Public comments regarding the proposed Order were required to be submitted to the Regional Water Board by 5:00 p.m. on 1 May 2008 in order to receive full consideration.

The Regional Water Board received comments regarding the tentative General Permit renewal from the East Bay Municipal Utility District (a current Discharger). The comments were accepted into the record, and are summarized below, followed by staff responses.

EAST BAY MUNICIPAL UTILITY DISTRICT (EBMUD) COMMENTS

EBMUD Comment No. 1. Under the existing General Order, the Monitoring and Reporting Program (MRP) requires total residual chlorine (TRC) to be less than 0.02 mg/L at the discharge point to a drainage channel. The tentative General Order renewal proposed more stringent TRC effluent limitations of 0.011 mg/L as a 4-day average and 0.019 mg/L as a 1-hour average. These limitations are consistent with the Draft State Water Resources Control Board's *Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California*, (TRC/CPO), June 2006. Extensive comments and testimony were submitted from many dischargers, public agencies and instrumentation manufacturers during the development of this draft State Water Board policy regarding compliance with these standards due to technical limitations of chlorine residual measurements.

EBMUD supports the protection of beneficial uses and the State and Regional Water Boards' objective of reducing TRC discharges to as close to zero as practicable. Additionally, EBMUD concurs with the draft policy to regulate the potable water discharges through best management practices instead of numeric effluent limits, which are infeasible to regulate because potable water discharges may occur infrequently and at disperse locations in the field and field monitoring equipment does not currently achieve these effluent limits. EBMUD recommends that the Regional Water Board consider comments and testimony submitted during development of the draft State Water Board Policy concerning the limitations of available analytical methods, and re-evaluate the appropriateness and technical feasibility of the proposed numeric TRC effluent limitations based on the consideration of Comments Nos. 2 through 4 below.

RESPONSE: The Effluent Limits section contained the State Water Board draft TRC/CPO policy states that "*the State Water Board has determined that, at the*

present time, it is infeasible to use numeric effluent limitations for TRC and CPO to regulate potable water discharges that occur in the field due to the activities of drinking water utilities or agencies. These activities include, but are not limited to, dewatering pipelines and reservoirs, flushing distribution system piping, and flushing fire hydrants. Numeric effluent limits are infeasible because these discharges occur at disperse locations in the field, there are no stationary treatment facilities at these locations, and field monitoring equipment does not currently achieve the necessary level of performance. The permitting authority must regulate the discharge of TRC and CPO in these discharges through requirements for appropriate best management practices.”

The State Water Board draft TRC/CPO policy has not yet been adopted by the State Water Board. However, the Regional Water Board staff has taken into consideration the comments submitted for the draft policy. Regional Water Board staff also acknowledges the complications of achieving relatively low reporting levels in field locations. A footnote has been included for Tables E-2 and E-3 in the Monitoring and Reporting Program (MRP) of the proposed General Order allowing dischargers to use a handheld monitoring device.

EBMUD Comment No. 2. Analytical methods for measuring total residual chlorine (TRC) in the field cannot meet detection limits in the range of 0.011 mg/L to 0.019 mg/L for a typical drinking water matrix. In recognition of current analytical limitations, the San Francisco Regional Water Quality Control Board adopted a detection limit of 0.08 mg/L in its 2003 General Permit for surface water treatment facilities, as being practical and technically achievable. The Central Valley Regional Water Board should consider this limit in the Tentative General Order and to be more consistent with other Regional Boards statewide.

RESPONSE: The San Francisco Regional Water Quality Control Board adopted a reporting level of 0.08 mg/L to determine compliance with the effluent limitations contained in the General Order for Discharges from Surface Water Treatment Facilities for Potable Supply (Order No. R2-2003-0062, NPDES No. CAG382001). The reporting level of 0.08 mg/L represents a level that hand-held field meters are capable of achieving. Central Valley Regional Water Board staff concurs with the approach used by the San Francisco Regional Water Board. Therefore, a footnote has been added to Tables E-2 and E-3 in the MRP of the proposed General Order that requires dischargers to utilize a method capable of achieving a reporting level of 0.08 mg/L, until the State Water Board adopts a state-wide policy with a specified reporting level achievable in the field. A reopener has been included in the tentative General Order that will allow the Regional Water Board to reopen the Order if a state-wide policy for total residual chlorine is adopted during the term of the permit to include a revised reporting level consistent with the state-wide policy.

EBMUD Comment No. 3. 40 CFR Part 136 specifies Standard Method 4500-Cl for chlorine, with a method detection limit (MDL) of 0.010 mg/L. Appendix B of 40 CFR Part 136 provides the method for calculating the MDL under ideal laboratory conditions, when analysis is performed immediately upon collection or continuously monitored in-line. Many U.S. Environmental Protection Agency quality assurance guidance documents and other laboratory accreditation procedures allow the use of practical or quantitation reporting limits (RLs) that are two to ten times the Method Detection Level (MDL) when allowing for analytical accuracy and precision. EBMUD supports reporting the data qualifier “Detected, but Not Quantified” (DNQ) when concentrations are less than the RL, but greater than the MDL. Dischargers should be allowed to perform studies and validate laboratory specific MDLs and RLs. This indicates reliably measuring TRC in the field or in the laboratory between 0.011 mg/L and 0.019 mg/L is not practicable.

RESPONSE: Page 111 of USEPA’s *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001) or TSD suggests that, in situations where the expression of calculated limitations for specific chemicals where the concentration of the limitation is below the analytical detection level for the pollutant of concern, the permitting authority should include the appropriate permit limitation, regardless of the proximity of the limit to the analytical detection level. The TSD suggests that the compliance level be defined in the permit as the minimum level (ML). Additionally, section 2.4.5 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, 2005 (also referred to as the SIP) states, in part, that “*Dischargers shall be deemed out of compliance with an effluent limitation, if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.*” Although the SIP applies directly to the control of California Toxics Rule (CTR) priority pollutants, the State Water Board has upheld the Regional Water Board’s use of the SIP as guidance for water quality-based toxics control.¹ Therefore, compliance determination language for total residual chlorine has been clarified to specify that any quantifiable excursion above the 1-hour average or 4-day average total residual chlorine effluent limitations is a violation. “Quantifiable” means any excursion greater than or equal to a reporting level of 0.08 mg/L, or any more stringent reporting level included in a final statewide policy or standard for total residual chlorine.

EBMUD Comment No4. Due to technical limitations in monitoring for TRC, it is recommended that monitoring for dechlorination agent residual concentrations be included in the Tentative Order as being an acceptable alternative to monitoring for TRC limits and general permit limits to reduce potential impacts to the Maximum Extent Practicable (MEP).

¹ See Order WQO 2001-16 (Napa) and Order WQO 2004-0013 (Yuba City).

RESPONSE: The compliance determination language at section VIII.A of the tentative General Order has been revised to specify that, for dischargers that dechlorinate, field monitoring showing a positive dechlorination agent residual is sufficient to show compliance with the total residual chlorine effluent limitations, as long as the instruments are maintained and calibrated in accordance with the manufacturer's recommendations.