Central Valley Clean Water Association
Representing Over Sixty Wastewater Agencies

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Submitted Via Electronic Mail to DCMessina@waterboards.ca.gov

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Central Valley Region
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Re: Comments on July 2010 Revised Tentative Order for Placer County Department of Facility Services, Placer County Sewer Maintenance District 1 Wastewater Treatment Plant

Dear Ms. Messina:

The Central Valley Clean Water Association (CVCWA) submits these comments on the July 2010 revised tentative waste discharge requirements for the Placer County Department of Facility Services (County), Placer County Sewer Maintenance District 1 Wastewater Treatment Plant (Tentative Order). CVCWA is a non-profit organization that represents its members in regulatory matters that affect surface water discharge and land application with a perspective to balance environmental and economic interests consistent with applicable law. In this spirit, we provide the following comments and request that the Regional Water Quality Control Board (Regional Water Board) adopt Alternative No. 3 to the Tentative Order related to the application of aluminum criteria to the County's discharge.

To implement the basin plan's narrative toxicity objective, the Tentative Order continues to propose final effluent limitations for aluminum of 68 micrograms per liter (μg/L) as an average monthly limitation and 151 μg/L as a maximum daily limitation. (Tentative Order at p. 12.) The basis for these effluent limitations is the United States Environmental Protection Agency's (USEPA) recommended 4-day average chronic criterion of 87 μg/L for the protection of freshwater aquatic life. (*Id*. at pp. F-36 to F-37.) Alternative No. 3 of the Tentative Order applies the acute aluminum criterion of 750 μg/L and Department of Public Health's Secondary Maximum Contaminant Level (MCL) of 200 μg/L instead of the chronic criterion. (Alternative No. 3 at p. 1.) Because the aluminum concentrations in the effluent do not exceed the aluminum criterion of

750 μg/L or Secondary MCL, application of Alternative No. 3 would result in a finding of no reasonable potential for aluminum. (*Id.* at p. 4.) We respectfully urge the Regional Water Board to adopt Alternative No. 3 for the reasons provided below.

A. Alternative No. 3 Relies Upon Aluminum Criteria That Are Appropriate for the Receiving Water Conditions

The aluminum criteria applied under Alternative No. 3 are appropriate for the receiving water conditions. As explained in our April 15, 2010 comment letter on the previous version of the Tentative Order, USEPA considers the chronic criterion of 87 μg/L necessary to protect receiving waters that concurrently experience low hardness (10-12 milligrams per liter (mg/L) as $CaCO_3$) and pH (6.5-6.6). For receiving waters that do not experience such conditions, USEPA indicates that the aluminum criterion of 750 μg/L is protective of aquatic life. The 750 μg/L criterion should apply to the receiving water at and downstream of the County's discharge. The lowest measured upstream receiving water hardness is 20 mg/L as $CaCO_3$ and lowest measured effluent hardness is 141 mg/L as $CaCO_3$. (Tentative Order at p. F-36.) Therefore, the downstream receiving water hardness would always be above 20 mg/L as $CaCO_3$ and substantially greater than the 10-12 mg/L $CaCO_3$ hardness range if the 87 μg/L chronic criterion applies. Under conditions where the downstream receiving water flow is dominated by the discharge and thus aluminum levels are predominantly affected by the discharge, downstream total hardness would be on the order of 80 mg/L as $CaCO_3$ or greater.

B. The Determination of What Aluminum Criteria Are Appropriate to Apply Involves Consideration of the Hardness of the Effluent Currently Produced

The Regional Water Board should determine what USEPA recommended criteria apply based on the hardness of the effluent that the treatment plant *currently* produces. Alternative No. 3's use of only the acute aluminum criterion of 750 μg/L is consistent with this approach. (Alternative No. 3 at pp. 3-4.) In contrast, the Tentative Order's use of the 87 μg/L chronic criterion is based on future modifications to the treatment plant "that may reduce the effluent hardness, and, consequently, the downstream receiving water hardness to levels supportive of the applicability of the [] chronic criteria for aluminum." (Tentative Order at p. F-37.) The Tentative Order requires the County to monitor hardness monthly and includes a reopener provision allowing for a permit modification when new information becomes available to justify different permit conditions. (*Id.* at pp. 21, E-5, E-10.) Monitoring data that demonstrate a reduction in effluent hardness as a result of treatment plant upgrades would constitute new information. Accordingly, if and when it becomes appropriate to modify the permit based on different criteria, the Regional Water Board may do so. Until then, the Regional Water Board should implement Alternative No. 3.

C. Application of Alternative No. 3 Is Consistent With Anti-Degradation and Anti-Backsliding Requirements

As the Fact Sheet of Alternative No. 3 explains, application of the acute aluminum criterion of 750 μg/L and Secondary MCL of 200 μg/L is consistent with anti-degradation and anti-backsliding requirements. (Alternative No. 3 at p. 6.) Monitoring data and information not available at the time the Regional Water Board issued the current waste discharge permit support application of Alternative No. 3 consistent with these requirements. For example, the County's comment letter on the prior tentative permit attaches a June 10, 2010 letter from

Charles Delos, Environmental Scientist for USEPA at its headquarters, making clear that use of the 750 μg/L criterion is appropriate in this case and would not degrade water quality or impact aquatic life beneficial uses:

> The hardness of the SMD No. 1 effluent is high, and the upstream hardness of Rock Creek and Dry Creek is generally moderate. With respect to the aluminum discharged in the effluent, the critical condition for protection of aquatic life is the low dilution condition. *For SMD No. 1 a criterion of 750 μg/L is appropriate.* Because the effluent aluminum would be diluted simultaneously with any dilution of effluent hardness, *there is no basis for anticipating that the effluent aluminum would pose a toxicity problem during periods of higher dilution flow, when it allows attainment of the 750 μg/L criterion in low-dilution situations*. (Letter to D. Messina, Senior Engineer, Regional Water Board, from W. Dickinson, Deputy Director, Placer County (June 14, 2010, Attachment 2), emphasis added.)

Because the 87 μg/L criterion is inappropriate for the County's discharge, the next most stringent criterion is the Secondary MCL of 200 μg/L. The aluminum levels in the County's discharge do not exceed 200 μg/L, and therefore will not affect the level of water quality necessary to maintain and protect the municipal beneficial uses of the Tier 1 receiving waters. Further, the state's anti-degradation policy does not apply because the receiving waters are not "high quality" with regard to aluminum. (See State Water Resources Control Board Resolution No. 68-16 at p. 1.)

For these reasons, CVCWA respectfully requests that the Regional Water Board adopt Alternative No. 3 to the Tentative Order. If you have any questions or if we can be of further assistance, please contact me at (530) 268-1338.

Sincerely,

Debbie Webster

Debbie Webster
Executive Officer

cc: Will Dickenson, Dave Atkinson—Placer County
Pamela Creedon—Central Valley Regional Water Quality Control Board