

ITEM: 7

SUBJECT: City of Auburn, Wastewater Treatment Plant, Placer County

BOARD ACTION: *Consideration of NPDES Permit Renewal and Cease and Desist Order*

BACKGROUND: The City of Auburn (Discharger) is the owner and operator of the City of Auburn Wastewater Treatment Plant (Facility). The Facility is designed to provide tertiary treatment for an average dry weather flow of 1.67 million gallons per day (MGD) of wastewater. The tertiary treated wastewater is discharged to Auburn Ravine, a tributary to East Side Canal, Natomas Cross Canal, and Sacramento River.

In addition to the tentative NPDES Permit and tentative Cease and Desist Order, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff is proposing two tentative alternatives for consideration by the Board. Alternative No. 1 (Effluent Limitations for Aluminum) proposes effluent limitations for aluminum based on the California Department of Public Health (DPH) Secondary Maximum Contaminant Level (MCL) of 200 µg/L and U.S. Environmental Protection Agency's (USEPA) National Ambient Water Quality Criteria (NAWQC) acute criterion of 750 µg/L for the protection of aquatic life, as opposed to the tentative NPDES Permit which proposes effluent limitations for aluminum based on the NAWQC chronic criterion of 87 µg/L and acute criteria of 750 ug/L for the protection of aquatic life, and the Secondary MCL of 200 ug/L for the protection of public health.

Alternative No. 2 (Chloroform Effluent Limitations) proposes two options for effluent limitations for chloroform: (1) Implementation of the Office of Environmental Health Hazard Assessment (OEHHA) Public Health Goal (PHG) of 1.1 µg/L, as implemented in the existing NPDES Permit (Order No. R5-2005-0030), and (2) Implementation of the Primary MCL for total trihalomethanes (sum of bromoform, dichlorobromomethane, chloroform and dibromochloromethane) of 80 µg/L and results in a determination of no reasonable potential to cause or contribute to an exceedance of water quality objectives for chloroform or total trihalomethanes.

The proposed NPDES Permit also contains effluent limitations for ammonia, chlorine residual, chlorodibromomethane, diazinon, dichlorobromomethane, electrical conductivity, beta-endosulfan, endrin aldehyde, heptachlor, lead, manganese, mercury, nitrate plus nitrite, and nitrite. The proposed effluent limitations for ammonia and chlorine residual are based on implementation of the Basin Plan's narrative toxicity objective using the USEPA's National Recommended Ambient Water Quality Criteria for protection of aquatic life. The proposed effluent limitations for electrical conductivity, manganese, nitrate plus nitrite, and nitrite are based on implementation of the Basin Plan's narrative chemical constituents objective. DPH's Primary and Secondary MCLs for protection of human health are the basis of the interpretation of the narrative objective and the effluent limitations for manganese, nitrate plus nitrite, and nitrite. The agricultural water goal in Water Quality for Agriculture, Food and Agriculture Organization of the United Nations—Irrigation and Drainage Paper No. 29, Rev. 1 (R.S. Ayers and D.W. Westcot, Rome, 1985) is the basis of the interpretation of the narrative objective and the performance-based effluent limitation for electrical conductivity.

The proposed Cease and Desist Order (CDO) includes a time schedule for the Discharger to comply with effluent limitations for aluminum, ammonia, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, and nitrite.

ISSUES:

The Central Valley Water Board office received public comments from the following interested parties:

- the Discharger;
- Central Valley Clean Water Association (CVCWA);
- California Sportfishing Protection Alliance (CSPA); and
- Save Auburn Ravine Salmon and Steelhead (SARSAS).

The major issues discussed in the public comments are summarized below. Further detail on all comments is included in Central Valley Water Board staff Responses to Comments.

Aluminum: The Discharger and CVCWA support Alternative No. 1 (Effluent Limitations for Aluminum) which does not implement the chronic criteria of 87 ug/L. The Discharger comments that this alternative is protective of the receiving water and refers to its receiving water monitoring which indicates that the chronic criterion may not be applicable to the receiving water. CVCWA comments that that the downstream receiving water conditions, after mixing with the effluent, supports that the chronic criterion is not applicable to the receiving water. CVCWA also refers to a recent technical report which supports use of a less stringent chronic criterion for aluminum. CSPA and SARSAS comment that if Alternative No. 1 (Effluent Limitations for Aluminum) is adopted, the proposed NPDES Permit would fail to contain an effluent limitation for aluminum in accordance with federal regulations. USEPA also supports the implementation of the 87 ug/L criteria.

Central Valley Water Board staff recommends effluent limitations for aluminum based on the chronic criterion because sufficient new site-specific information is not available at this time to support removal of the existing effluent limitations based on the chronic criterion for aluminum. Staff recommendation is consistent with a 24 June 2010 letter from USEPA Region 9 regarding a similar issue for the tentative NPDES permit renewal for the Placer County Sewer Maintenance District No. 1 WWTP, also scheduled to be considered for adoption at the September 2010 Board Meeting.

Chloroform: The Discharger comments that the Chloroform limitation should be based on the DPH MCL which is both protective and consistent with the reduced potential for the presence of trihalomethanes in the effluent as a result of the replacement of the chlorine disinfection system with an ultraviolet light (UV) disinfection system. Staff has concern regarding backsliding from the existing effluent limitations due to no new information since the adoption of the existing permit that supports the removal of the existing effluent limitations.

Title 27 and Antidegradation: CSPA and SARSAS comment that the proposed NPDES Permit fails to implement the requirements of the California Code of Regulations (CCR) Title 27 and that the proposed NPDES Permit fails to implement the State Water Board's Antidegradation Policy, which requires that best practicable treatment and control (BPTC) of the wastewater discharge be provided.

The ponds are part of the treatment system, which are unconditionally exempt from the requirements of Title 27, pursuant to Title 27 CCR section 20090(a). Data indicates that Iron is the only constituent that exceeded the applicable water quality objective (i.e., the Secondary MCL) and the background concentration in the downgradient wells. Iron also exceeded the Secondary MCL in the upgradient well. The proposed NPDES Permit requires the Discharger to conduct a BPTC study to further evaluate natural background quality, assess how discharges from the ponds are impacting groundwater, and develop a work plan and schedule for providing BPTC, as required by Resolution 68-16 for iron in the groundwater underlying the equalization ponds. BPTC may include, but is not limited to, lining of the equalization ponds.

Mgmt. Review \_\_\_\_\_

Legal Review PEP

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