

ITEM: 13

SUBJECT: City of Angels, Wastewater Treatment Plant, Calaveras County

BOARD ACTION: *Consideration of NPDES Permit Renewal (NPDES Permit No. CA0085201)*

BACKGROUND: The City of Angels is the owner and operator of the City of Angels Wastewater Treatment Plant (Facility), located in the Sierra Nevada foothills in Calaveras County. The Facility provides sewerage service for the City of Angels, serving a population of approximately 3800. Tertiary treated wastewater from the Facility is stored in a 66 million gallon storage reservoir where it is used for spray irrigation on 61 acres of disposal fields or reclaimed on the Greenhorn Creek Golf Course. When wastewater flows exceed the land disposal and storage capacity of the Facility, tertiary treated wastewater may be discharged seasonally from 15 November to 15 May to Angels Creek, a water of the United States, and a tributary to New Melones Reservoir and the Stanislaus River.

Discharges from the Facility are currently regulated by Waste Discharge Requirements Order R5-2007-0031-01. The existing permit provided an allowance for dilution for acute and chronic aquatic life criteria and human health criteria. The Discharger has upgraded to tertiary filtration with ultraviolet light disinfection and has improved nitrogen removal. These facility improvements have resulted in better effluent quality. Consequently, less dilution is needed to comply with the applicable water quality criteria. A mixing zone for acute aquatic life criteria is no longer needed, which results in more stringent proposed effluent limits for ammonia. With the improved nitrogen removal, the Facility is capable of meeting the more stringent proposed ammonia limits. The discharge also no longer demonstrates reasonable potential for copper, dichlorobromomethane, lead, zinc, aluminum, chlorine residual, and settleable solids, so effluent limits for these constituents are proposed to be removed. . A tentative Order was issued on 29 June 2012 for a 30-day public comment period.

ISSUES: Public comments were received from the Central Valley Clean Water Association (CVCWA). The following is a summary of the comments and Central Valley Water Board staff responses. Detailed comments and responses are included in the Staff Response to Comments document included in the agenda package.

**Chemical Additives Evaluation and Minimization Study.** *CVCWA requests revising the proposed Permit by removing the requirement for a Chemical Additives Evaluation and Minimization Study, because the proposed permit already requires a Salinity Evaluation and Minimization Plan, which addresses chemical additions at the Facility.*

Central Valley Water Board staff concurs that the proposed Chemical Additives Evaluation and Minimization Study requirements overlap with the requirements of the proposed Salinity Evaluation and Minimization Plan. Therefore the Chemical Additives Evaluation and Minimization Study requirement has been removed from the proposed permit. However, to ensure the Discharger adequately evaluates chemical usage at the Facility, the proposed Salinity Evaluation and Minimization Plan requirement has been clarified to require an evaluation of all chemicals at the Facility.

**Antidegradation Policy.** *CVCWA asserts that recent treatment plant performance constitutes an improper baseline for interpreting consistency with the Antidegradation Policy. CVCWA further states that it is inappropriate to use the Antidegradation Policy to truncate effluent limitations.*

The reduction in the dilution credits, and thus implementation of more stringent water quality based effluent limits for ammonia from the previous permit, is appropriate because the Discharger changed Facility operations that have improved ammonia removal. The proposed permit requirements are included to ensure the Discharger implements its current Best Practical Treatment or Control for its facility. Only considering existing permitting requirements for evaluating compliance with the Antidegradation Policy is not appropriate.

**Ultraviolet (UV) Disinfection Specifications** *CVCWA comments that UV disinfection system operational and monitoring requirements in the Tentative Order impermissibly specifies the manner of compliance with the Tentative Order's disinfection requirements.*

Equivalent to Title 22 disinfected tertiary recycled water is required to protect public health. The proposed Permit includes effluent limits and operating specifications to ensure the required level of disinfection for this municipal wastewater discharge, including effluent limits for total coliform organisms, and operating specifications for the UV disinfection system (e.g., turbidity and UV dose). Compliance with both the effluent limits and the UV operating specifications is necessary to demonstrate appropriate disinfection takes place and to determine compliance with the equivalency to Title 22 disinfection requirement.

**Ammonia Findings and Water Quality Objective.** *CVCWA request that the language regarding the reasonable potential analysis for ammonia stated in Section IV.C.3.c.i.(b) of the Fact Sheet be revised to be consistent with the Basin Plan's narrative toxicity objective.*

The tentative permit states that, "Discharges of ammonia would violate the Basin Plan narrative toxicity objective." CVCWA asserts that simply discharging ammonia does not violate the narrative toxicity objective and requested the statement be clarified to state, "Discharges of ammonia in concentrations that produce detrimental physiological responses to human, plant, animal, or aquatic life would violate the Basin Plan narrative toxicity objective." The language in the Tentative Permit Section IV.C.3.c.i.(b) of the Fact Sheet has been revised to provide this clarification.

**Bis (2-Chloroethyl) Ether Effluent Limitations.** *CVCWA request that the Effluent Limitations for Bis (2-Chloroethyl) ether should be replaced with monitoring requirements in accordance with the State Implementation Policy (SIP), because there is insufficient data to conduct a reasonable potential analysis (RPA).*

Central Valley Water Board staff does not concur. Only two effluent bis(2-chloroethyl)ether samples were collected during the current permit cycle and were non-detect. However, the Minimum Levels (MLs) were above the California Toxics Rule (CTR) human health criterion of 0.031 µg/L. Central Valley Water Board staff concur that there is insufficient data to conduct the reasonable potential analysis. However, the existing effluent limits in the current permit cannot be removed due to federal antibacksliding regulations. The Clean Water Act (CWA) specifies that a renewed permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions. The existing data for bis(2-chloroethyl)ether provides insufficient information to be considered "new data" that meet the exceptions to the federal antibacksliding provisions of the CWA. Therefore, the bis(2-chloroethyl)ether effluent limits was not removed from the proposed permit renewal.

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

Legal Review \_\_\_\_\_

4/5 October 2012 Board Meeting

11020 Sun Center Dr. #200

Rancho Cordova, CA 95670