

ITEM: 20

SUBJECT: Donner Summit Public Utilities District, Wastewater Treatment Plant Nevada County

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

BACKGROUND: The Donner Summit Public Utilities District (hereinafter Discharger) owns and operates the Donner Summit Public Utilities District Wastewater Treatment Plant (hereinafter Facility). The existing facility provides advanced secondary and tertiary wastewater treatment service to the small disadvantaged community, including wastewater from the Norden and Soda Springs areas, the Sugar Bowl and Soda Springs Ski Resorts, the Serene Lakes Subdivision, and the Sierra Lakes Community Water District. Treated tertiary-level effluent is discharged to the South Yuba River, tributary to the Yuba River and the Englebright Reservoir.

The discharge is currently regulated by existing Waste Discharge Requirement (WDR) Order No. 2002-0088 (NPDES Permit) and Cease and Desist Order (CDO) No. 2002-0089. The existing permit and CDO contain times schedules for numerous final effluent limitation in which the Discharger has not been able to comply.

The proposed NPDES Permit renewal continues to authorizes a discharge of up to 0.52 million gallons per day (mgd) to the South Yuba River. When weather conditions permit, the treated wastewater is discharged, through spray irrigation, to a nearby hillside, for disposal. The proposed permit is more stringent than the existing permit. New and/or more stringent effluent limitations are included for ammonia, aldrin, alpha BHC, aluminum, copper, cyanide, dichlorobromomethane, electrical conductivity, manganese, silver and zinc. Proposed effluent limitations for aluminum, ammonia and total chlorine residual are based on implementation of the narrative Basin Plan objective. USEPA's National Recommended Ambient Water Quality Criteria for protection of aquatic life is the basis of the interpretation of the narrative objective and the effluent limitation calculations. The Discharger is not able to comply with the new limitations; therefore, compliance schedules are included in the proposed permit and the new CDO.

Public comments were received by the Discharger, the South Yuba River Citizens League (SYRCL), the California Sportfishing Protection Alliance (CSPA), and numerous members of the public. The major issues discussed in the public comments are summarized below. Further detail on all comments is included in a separate Regional Water Board Staff Responses to Comments document.

ISSUES: Dilution Credits: In its Report of Waste Discharge, the Discharger requested dilution credits for nitrate and dichlorobromomethane effluent limitations, both constituents based on human health criteria. The tentative NPDES Permit and CDO package issued for public review included tentative options, allowing public comments on a tentative

permit ranging from allowing dilution for both constituents, to not allowing dilution for any constituent. Several commenters express concern that the receiving water is ephemeral and no dilution should be allowed due to the incomplete mixing at the point of discharge. Concerns include that the proposed dilution credits, based on estimated receiving water flows from the Cisco gauge station (approximately 10 miles downstream) and adjusted on a sub-watershed area basis, is not valid for protection of the surface water quality at the discharge location. Other commenters suggest not allowing dilution credits until the cross-stream diffuser is constructed and a mixing zone analysis is completed.

The Discharger comments that the No-Dilution Option is contrary to the District's planning efforts, and that installing a cross stream diffuser without being granted dilution credits is a financial impossibility without grant funding. Without dilution credits, the Discharger has no viable means to achieve immediate compliance with final effluent limitations and the cost of compliance projects and mandatory minimum penalties may force the District into bankruptcy. The Discharger additionally comments that (1) the requested dilution is for human health constituents in which the water quality criteria are based on long-term exposure, and (2) the South Yuba River provides tremendous dilution during winter and spring (snow melt) months.

As identified in the State Water Board's draft Water Quality Order for the City of Tracy NPDES Permit petition, the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) does not allow the granting of dilution credits for California Toxic Rule (CTR) constituents (such as dichlorobromomethane) without a full mixing zone study. Although nitrate is not a CTR constituent, the human health criteria is based on a 30-day exposure, and staff is recommending consistent policy procedures for human health constituents and not recommending dilution for either dichlorobromomethane or nitrate.

The tentative NPDES permit issued for public review proposed dilution as the main option. The tentative permit in this agenda item does not propose dilution. The tentative permit has been modified, however, to include a reopener provision for the Regional Water Board to consider dilution with the Discharger's installation of a cross-stream diffuser and a corresponding complete mixing zone study.

Compliance Time Schedules: Multiple commenters state that the proposed 5-year compliance schedules in the NPDES permit and the CDO are too long and suggest a 2-year time schedule. Options for compliance with the proposed final effluent limitations, including the existing nitrate effluent limitation, include a plant upgrade and a potential in-stream modification for installation of a cross-stream diffuser. The Discharger comments that the planning, CEQA process, CWA 404 certification process, design, funding and construction of the necessary facilities may take greater than five years to complete. Staff believes the proposed five-year time schedule is as short as practicable.

Groundwater Monitoring: CSPA comments that, to assure compliance with the groundwater limitations and the antidegradation policy, and to qualify for exemption from CCR Title 27, the tentative permit must contain groundwater monitoring of the land application area. The land application area is a sloped hillside in which a standard groundwater monitoring well network may not adequately monitor the subsurface flow within the geological rock formation. The tentative NPDES permit has been modified to require the Discharger to conduct a study to evaluate the feasibility of installing monitoring wells on the sloped terrain, and identification of the appropriate location and depth of monitoring.

STAFF

RECOMMEND

Adopt tentative NPDES Permit and CDO as proposed.

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

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

23/24 April 2009

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