

Executive Officer's Summary Report
9:00 a.m., March 15, 2012
River Lodge Conference Center
1800 Riverwalk Drive
Fortuna, California

Item: 3

Subject: **Public Hearing** on Order No. R1-2012-0017, to consider adoption of Waste Discharge Requirements for **Graton Community Services District Wastewater, Reclamation and Disposal Facility**, WDID No. 1B84060OSON, NPDES No. CA0023639, Sonoma County

DISCUSSION

The Graton Community Services District is currently discharging under Order No. R1-2004-0038 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023639, adopted by the Regional Water Board on October 6, 2004. The Discharger submitted a Report of Waste Discharge, dated April 2, 2009, and applied for an NPDES permit renewal to discharge an average daily dry weather flow of up to 0.14 million gallons per day (mgd) and a peak wet-weather design flow of 0.85 mgd of treated wastewater from the District's Wastewater Treatment Facility (hereinafter Facility). The application was deemed complete on November 19, 2011.

The Discharger owns and operates a municipal wastewater treatment facility and associated wastewater collection and disposal facilities that serve a population of approximately 1,045 people. The Discharger's wastewater makeup is primarily residential flow with a small percentage of the flow coming from commercial, industrial, and institutional (schools and government) facilities.

The Facility currently provides secondary treatment and includes headworks with a grit chamber and metering flume, two aeration ponds, a settling pond, and chlorine disinfection using gaseous chlorine. Dechlorination is accomplished through long detention times in the effluent storage ponds that provide for natural attenuation. Biosolids generated during the treatment process accumulate in the aeration and settling ponds, where they undergo anaerobic digestion and compaction. As necessary, biosolids are removed and disposed at a legal point of disposal. The Discharger does not anticipate needing to remove biosolids during the term of this permit.

The Discharger is planning to upgrade the Facility to provide tertiary (or advanced) wastewater treatment in order to comply with the Basin Plan requirements for advanced wastewater treatment for surface water discharges and in order to provide its disinfected, treated effluent for recycled water uses that require tertiary level treatment

in accordance with California Department of Health Services recycled water regulations in Title 22 of the California Code of Regulations. The Discharger has had difficulty completing its planned tertiary upgrade due to financial constraints, but anticipates receiving State Revolving Fund monies this spring. The planned Facility upgrade project will include replacement of the existing headworks equipment with automated headworks equipment, installation of a suspended air flotation cell for solids removal and a Fuzzy Filter compressible media deep bed filtration system for tertiary filtration, and replacement of the existing chlorine disinfection system with a cogeneration/pasteurization disinfection system. The Discharger also plans to improve its recycled water delivery system with a new pump station and to implement biosolids composting.

Disinfected secondary wastewater is currently discharged year-round to a two on-site effluent storage ponds with a combined capacity of 23 million gallons (MG) and a smaller off-site storage pond. During the period of October 1 through May 14, the Discharger discharges as needed to Atascadero Creek, a tributary to Green Valley Creek, thence the Russian River. Surface water discharges occur as needed as influent flows increase in response to rainfall and the amount of effluent in storage increases and reclamation ceases. The Discharger manages the disposal of its effluent in a manner that favors reclamation and minimizes the amount of effluent discharged to surface water to the extent possible. During dry weather, stored secondary effluent is reclaimed for irrigation of a 20.5 acre parcel owned by the Discharger and used to grow redwood trees and for irrigation of 6 agricultural parcels, including vineyards and berry farms. Several parcels utilize recycled water for frost protection during the late winter and spring. The Discharger plans to expand its reclamation system to include urban uses and additional agricultural uses after its tertiary upgrade is complete.

The Regional Water Board also adopted a cease and desist order (CDO), Order No. R1-2008-0109 to address the fact that the Discharger is not in compliance with the Basin Plan requirement for tertiary advanced wastewater treatment for dischargers to surface waters. The CDO includes a compliance schedule for the Discharger to complete its tertiary upgrade project by August 6, 2012, and interim effluent limitations for biochemical oxygen demand and total suspended solids. A revised CDO is proposed for adoption with the proposed permit renewal to provide the Discharger with an additional 14 months, to October 1, 2013, to complete the tertiary upgrade project in light of the fact that their award of grant and loan funds from the State Water Board has taken longer than originally anticipated.

The proposed permit contains several noteworthy requirements, including the following:

1. Final effluent limitations and monitoring requirements for several California Toxics Rule priority pollutants including copper, cyanide, and dichlorobromomethane. The previous Order included interim effluent limitations for copper, lead, zinc, dichlorobromomethane (DCBM), and chloroform plus DCBM, but monitoring conducted during the term of the previous permit

resulted in a determination of no reasonable potential for lead, zinc, and chloroform plus DCBM, thus effluent limitations for those pollutants were removed from the permit. Monitoring for cyanide during the term of the previous permit resulted in a finding of reasonable potential for cyanide.

2. Stricter effluent limitations for chlorine residual in the effluent discharge are established for the protection of aquatic life. The new effluent limitations include a monthly average limit of 0.01 mg/L and a maximum daily limit of 0.02 mg/L. These requirements are more stringent than the requirement in the previous permit to achieve non-detectable levels at a detection limit of 0.1 mg/L.
3. Final effluent limitations and monitoring requirements for ammonia based on monitoring data collected during the previous permit revealed reasonable potential for ammonia to exceed USEPA water quality objectives for the protection of aquatic life.
4. Monitoring requirements for other nutrients including ammonia, nitrite, organic nitrogen and phosphorus are included to assess whether the nutrient levels in the discharge have the potential to exceed water quality objectives intended to protect surface waters from toxicity or eutrophication impacts and to assess nitrogen application rates for irrigation to ensure that recycled water applications do not exceed nutrient agronomic rates.
5. Effluent monitoring for total dioxin equivalents, one time during the permit term is required because the Discharger has never conducted a complete scan for dioxins and furans.
6. Continuous effluent monitoring for temperature will be required upon completion of the pasteurization disinfection system to ensure that the Discharger is appropriately reducing the elevated temperatures that are created in the pasteurization process. Daily temperature monitoring of the discharge to receiving waters has been increased from monthly to daily to provide additional assurances that the temperature of the discharged effluent does not threaten to cause exceedances of the temperature receiving water limitation.
7. Recycled water findings, provisions and requirements have been expanded to clarify the need for agronomic application of recycled water and implementation of best management practices to minimize the potential for irrigation runoff; to modify the definition of incidental runoff to align with the *Recycled Water Policy*; and to require technical reports that include operations and management plans for recycled water. The proposed permit also includes a requirement for the Discharger to submit a workplan identifying a plan to assess current recycled water use sites to demonstrate agronomic application of recycled water and identify, if necessary, any sites in need of modifications to achieve agronomic

rates. The permit intentionally provides the Discharger with flexibility to utilize the entire permit term to complete this requirement if necessary.

8. Monitoring requirements for salts are included to assess the salt application rates in accordance with the *Recycled Water Policy* adopted by the State Water Board in 2009.
9. A requirement to monitor effluent one time during the permit term for Title 22 pollutants established by the California Department of Public Health for protection of drinking water. This monitoring may be conducted concurrently with the requirement to monitor effluent one time during the permit term for CTR pollutants in order to benefit from potential cost savings due to overlap of constituents and the ability to analyze for constituents in similar classes of pollutants (volatile organics, semi volatile organics, etc.) in a single pollutant scan.
10. Future recycled water storage ponds are required to be constructed in a manner that is protective of groundwater and that such demonstration be made to the Regional Water Board prior to construction.
11. Spill reporting requirements have been incorporated into the proposed Order to maintain consistency with State Water Resources Control Board Order No. WQ 2008-0002-EXEC. These requirements include 2-hour reporting to the Regional Water Board, Office of Emergency Services, and local health department of all spills and unauthorized discharges and 24-hour written certification that these agencies were contacted. In addition, spill reporting language addresses requirements for submitting spill reports based on the volume of the spill and whether it entered surface waters or not.

The draft permit and/or information to access the draft Orders on the Regional Water Board website was originally mailed to the Discharger, interested agencies, and persons, and the draft permit was open for public comment between December 29, 2011 and January 30, 2012. Comment letters were received from the Discharger and the California Department of Public Health (CDPH). The proposed Order was modified in response to some of the comments received.

This permit package includes a Response to Comments document (Attachment 1) that summarizes staff's responses to comments received and a summary of changes that staff identified. Comment letters submitted by the Discharger and CDPH are included as Attachments A and B to this Staff Report.

PRELIMINARY STAFF
RECOMMENDATION:

Adopt Order No. R1-2012-0016 as proposed.