Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
Thursday, May 17, 2018
Regional Water Board Office
Santa Rosa, California

ITEM: 2

SUBJECT: Public Hearing on Order No. R1-2018-0001 to consider adoption of proposed Waste Discharge Requirements and Master Recycling Permit for the Graton Community Services District Wastewater Treatment, Recycling and Disposal Facility, WDID No. 1B84060OSON, NPDES No. CA0023639 (Justin McSmith)

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2018-0001. The Order will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

BACKGROUND: The Graton Community Services District (Permittee) owns and operates a municipal wastewater treatment plant (WWTP) and associated wastewater collection, recycling, and disposal facilities that serve a population of 1,815, including residential, commercial, industrial, recreational, government, utility, and institutional users in the Graton Service Area.

The Facility is currently regulated under Waste Discharge Requirements Order No. R1-2012-0016, which serves as a NPDES permit for waste discharges to surface waters and recycling requirements for reclamation of disinfected 2.2 tertiary effluent (filtered and subsequently disinfected wastewater to meet Title 22 requirements).

The Facility is designed to treat an average dry weather flow of 0.14 million gallons per day (mgd) and a peak wet weather flow of 0.85 mgd. Treatment operations at the Facility include the headworks (solids removal and flow meter), two aerated ponds, a settling pond, a tertiary filtration chain, a pasteurization disinfection system, and two effluent storage ponds.

Biosolids generated during the treatment process accumulate in the aeration and settling ponds, where they undergo anaerobic digestion and compaction. Over time, the volume of settled solids increases, reducing the retention time of flow through the pond. Sludge that collects in the aeration and settling ponds was removed most recently in 2007. The Permittee plans to mine sludge from the bottom of the ponds during periods of low flow and remove it through the Suspended Air Floatation (SAF) system to mitigate future sludge blanket accumulation.

Dewatered solids from the SAF system are transferred to the compost area. The solids are composted using static aeration to meet or exceed Cal Recycle title 14 standards, and the composted solids are used on site. The County of Sonoma Department of Health Services oversees the permitting, regulation, and inspection of the composting operation.

During the wet weather season (October 1 – May 14), the Permittee may discharge disinfected tertiary effluent from the on-site effluent storage ponds via a 1,000-foot long, 10-inch outfall pipe at Discharge Point 002 to Atascadero Creek, a water of the United States and a tributary to the Russian River via Green Valley Creek. During the dry weather season (May 15 – September 30), and other periods as allowed under this Proposed Order, effluent from the effluent storage ponds is recycled for agricultural irrigation, including frost control on vineyards, at Discharge Point 003. The Facility currently provides recycled water for five authorized users and irrigates a 20.5-acre parcel on-site. The Permittee has written agreements with individual recycled water customers. Discharge to Atascadero Creek is prohibited during the dry weather season.

ISSUES: Effluent Limitations and Monitoring and Reporting Requirements. Order No. R1-2018-0001, as proposed, continues to prescribe technology-based effluent limitations for biochemical oxygen demand (BOD), total suspended solids (TSS), settleable solids, and pH, and water quality-based effluent limitations for total coliform bacteria and ammonia.

Due to reasonable potential to exceed water quality objectives, the Proposed Order includes new effluent monitoring and reporting requirements for TCDD-Equivalents (combined measurement of chlorinated dibenzodioxins and chlorinated dibenzofurans) and chronic toxicity.

Request for Reduced Coliform Testing When Discharging to Approved Recycling Uses. The Permittee's comment letter asked for clarification on total coliform sampling during recycling operations. In previous discussions with Regional Water Board staff, the Permittee had requested monitoring relief for total coliform when discharging recycled water to property owned by the Permittee. Title 22, Division 4, Chapter 3, Article 3, Section 60304(d)(1) – (7) identifies recycled water use types that require a minimum of weekly total coliform testing. The Permittee currently recycles water under the use type described in section 60304(d)(4), "fodder and fiber crops and pasture for animals not producing milk for human consumption". If the Permittee recycles water to any use type listed under section 60304 (a) – (c), they will be required to sample for total coliform daily.

Water Recycling Requirements: Water recycling requirements in Order No. R1-2018-0002 have been modified to be consistent with water recycling requirements in State Water Resources Control Board Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use. In addition, during review of the Permittee's Title 22 Recycled Water Engineering Report, State Water Board Division of Drinking Water (DDW) staff identified the need for the Permittee to perform a modal contact time tracer

study to document that the chlorine disinfection process is capable of providing a CT value (the product of total chlorine residual and modal contact time measured at the same point) of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather flow. The Permittee shall submit a testing protocol to DDW before conducting the tracer study. The Permittee has plans to perform a tracer study to show that their contact chamber is capable of meeting Title 22 disinfected tertiary treatment requirements. DDW conditionally approved the Permittee's Title 22 Engineering Report on February 16, 2018. The monitoring conditions of that approval have been incorporated into the Proposed Order.

Public Comment. Regional Water Board staff received timely comments on the Draft Order from the Permittee and made several changes to the Proposed Order in response to those comments. No other comments were received. The most significant changes made to the Proposed Order in response to the Permittee's comments were: (1) removal of receiving water monitoring requirements for electric conductivity and total dissolved solids; (2) adding language to clarify total coliform monitoring requirements when discharging to the recycled water distribution system; and (3) adding DDW requirements related to the conditionally approved Title 22 Engineering Report as discussed above. A full explanation of the comments and responses is documented in the attached Response to Comments document.

The changes were acceptable to the Permittee. Staff expects the Proposed Order will be uncontested.

RECOMMENDATION: Adopt Order No. R1-2018-0001, as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order No. R1-2018-0001
2. Staff Responses to Written Comments
3. Graton CSD Comment Letter
4. Public Notice