Regional Water Quality Control Board North Coast Region

Executive Officer's Summary Report Thursday, September 6, 2018 Regional Water Board Office 5550 Skylane Blvd, Suite A Santa Rosa, CA

ITEM: 3

SUBJECT: Public Hearing on Order No. R1-2018-0033 to consider adoption of proposed Waste Discharge Requirements for the Garberville Sanitary District Wastewater Treatment Facility, 1B831200HUM (Rachel Prat).

BOARD ACTION: The Board will consider adoption of Waste Discharge Requirements Order No. R1-2018-0033.

BACKGROUND: The Garberville Sanitary District (Discharger) owns and operates the Garberville Wastewater Treatment Facility (Facility), a municipal wastewater treatment facility (WWTF) that serves approximately 350 commercial and residential connections within the community of Garberville. The Facility is located west of the Eel River on Bear Canyon Road in Garberville, Humboldt County.

The Facility is currently regulated under Waste Discharge Requirements Order No. R1-2011-0096 which authorizes a waste discharge of 0.162 million gallons per day (mgd), average dry weather flow. The Facility consists of three oxidation ponds, four constructed wetland treatment cells, a sodium hypochlorite injection system, chlorine contact pipe lines, two percolation ponds and an operations and maintenance building. Wastewater treatment at the Facility is achieved through settling, absorption, aerobic and anaerobic bacterial actions, disinfection and other biogeochemical processes. Treated wastewater is discharged to percolation ponds located 500 feet west of the South Fork Eel River. Order R1-2011-0096 became effective on November 3, 2011.

Order R1-2011-0096 includes interim and final effluent limitations for biochemical oxygen demand (BOD). Interim effluent limitations, which expired on October 31, 2014, were based on the treatment performance expected while the wetland vegetation reached maturity. Final effluent limitations are technology-based limitations that reflect the treatment performance projected after the wetland plants were fully developed.

DISCUSSION: On May 27, 2016, the Discharger requested a change of the final effluent limitations for BOD because the Facility was unable to consistently attain the final monthly average limit of 15 mg/l and the final daily maximum limit of 30 mg/l established in Order No. R1-2011-0096. The Discharger requested a relaxation of the final BOD limitations to a monthly average limit of 30 mg/l and the daily maximum limit of 45 mg/l, which are effluent limitations commonly prescribed for municipal wastewater discharges to land. However, because constructed wetland treatment systems are not conventional

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wastewater treatment systems whose effluent quality is easily predictable, Regional Water Board staff determined that the Facility's actual, rather than projected, performance-based effluent limitations were appropriate.

Performance-based limitations for the Discharger's constructed wetlands treatment system were established using the 95th and 99th percentile values of the monthly reported BOD concentrations achieved by the Facility in 2016, 2017 and the early months of 2018 to represent the monthly and daily maximum limitations, respectively. The results of the Regional Water Board analysis indicate that the effluent from the constructed wetlands treatment system will attain 26 mg/l BOD as a monthly average and 33 mg/l BOD as a daily maximum. The new BOD effluent limitations are included in proposed Waste Discharge Requirements Order No. R1-2018-0033.

A copy of the draft Order was posted on the Regional Water Board website and was available for public comment from May 25, 2018, through June 25, 2018. No written comments were received. Regional Water Board staff conferred with the Discharger during the public comment period to review the draft Order and explained the proposed new requirements. Subsequent, editorial changes were made to the draft Order. The proposed Order is uncontested.

RECOMMENDATION: Adopt Order No. R1-2018-0033, as proposed.

SUPPORTING DOCUMENTS:

1. Proposed Order R1-2018-0033

Attachments: A. Facility Map

B. Flow Schematic

C. Monitoring and Reporting Program

2. Notice of Public Hearing