



North Coast Regional Water Quality Control Board

## Regional Water Quality Control Board North Coast Region Staff's Summary Report April 4, 2024

## ITEM: 4

**SUBJECT:** Public Hearing on Order No. R1-2024-0004 to consider adoption of proposed Waste Discharge Requirements and Water Recycling Requirements for the Forestville Water District Wastewater Treatment, Recycling, and Disposal Facility WDID No. 1B83100OSON, NPDES Permit No. CA0023043 (Sabrina Cegielski).

**BOARD ACTION:** The Board will consider adoption of Waste Discharge Requirements Order No. R1-2024-0004. The Order will serve as a National Pollutant Discharge Elimination System (NPDES) permit for a period of five years.

**BACKGROUND:** The Forestville Water District (Permittee) owns and operates the Forestville Water District Wastewater Treatment, Recycling, and Disposal Facility (Facility) and associated wastewater collection system that provides sewer service to approximately 384 connections, serving a population of approximately 930, including residential, commercial, and institutional customers in the Forestville and Mirabel Heights Zone of Benefit (Mirabel Heights) area. There are no industrial users that discharge into the Facility. The Facility is located at 6194 Forestville Street, Forestville, Sonoma County.

The Facility is currently regulated under Waste Discharge Requirements Order No. R1-2018-0002, which serves as a NPDES permit for waste discharges to surface waters.

The Facility discharges tertiary treated wastewater and has an average dry weather design treatment capacity of 0.13 million gallons per day (mgd) and a peak daily wet weather treatment capacity of 0.78 mgd. The treatment system consists of a headworks, an aeration pond (also known as the South Pond), a settling pond (also known as the North Pond), microfiltration, chlorine disinfection with sodium hypochlorite and dechlorination with sodium bisulfite. Treated wastewater is discharged to an approximately 3.25-million-gallon effluent storage pond used for storage of advanced treated wastewater prior to discharge to Jones Creek or the recycled water system.

HECTOR BEDOLLA, CHAIR | VALERIE QUINTO, EXECUTIVE OFFICER

During the wet weather season (October 1 through May 14), the Permittee may discharge from the on-site effluent storage pond via a one quarter mile outfall pipe to Jones Creek (Discharge Point 002). Jones Creek is a water of the United States and tributary to the Russian River via Green Valley Creek.

During the dry weather season (May 15 through September 30), and other periods as allowed under the proposed Order, treated wastewater from the 3.25-million-gallon effluent storage pond is recycled for urban and agricultural irrigation, including frost control on vineyards (Discharge Point 003) or Graton Community Services District's effluent storage ponds at Discharge Point 004. The existing irrigation system includes approximately 296 acres of agricultural land with an irrigable capacity of 54 acre-feet and 18 acres of urban land with an irrigable capacity of approximately 39 acre-feet.

**DISCUSSION:** Order No. R1-2024-0004 (Proposed Permit), replaces Order No. R1-2018-0002 (Previous Permit). While the Previous Permit expired on August 31, 2023, it was administratively extended pending issuance of a new permit pursuant to California Code of Regulation, title 23, section 2235.4.

The Proposed Permit continues to prescribe technology-based effluent limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS), and water quality-based effluent limitations for settleable solids, total residual chlorine, total coliform bacteria, pH, and ammonia. The Proposed Permit also retains discharge specifications for the discharge of tertiary recycled water at Discharge Point 003. The Proposed Permit further retains the special provisions which require studies and reports to ensure compliance with the operations, toxicity, source control, and biosolids disposal requirements.

Noteworthy changes to the Proposed Permit include the following:

- 1. **Recycled Water Discharge Prohibition**. Updated language has been included to comply with updated title 22 Recycled Water Engineering Report submitted by the Facility and accepted by the Division of Drinking Water. (Order Section 3.6)
- 2. **Ammonia Impact Ratio.** Reasonable potential is present for ammonia to cause or contribute to exceedances of the Basin Plan's applicable narrative water quality criterion for toxicity. The effluent limitation for ammonia nitrogen has been replaced with an ammonia impact ratio limitation. (Order section 4.1.3)
- 3. **Toxicity Provisions.** Updated chronic toxicity requirements have been included in the Proposed Permit to implement the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Toxicity Provisions), adopted on December 1, 2021. (Order Section 4.1.3.1.)
- 4. **Chronic Toxicity Effluent Limitations.** Reasonable potential for chronic aquatic toxicity is present; therefore, effluent limitations for chronic toxicity have been included as required by the new Toxicity Provisions. (Order Section 4.1.3.1.)

- 5. **Manganese Effluent Limitation.** Monitoring results from the current permit term showed that Manganese was present in the effluent discharge, in levels that exceeded the primary MCL. Therefore, WQBELs for Manganese were added based on the primary Maximum Contaminant Level (MCL) for Manganese. (Order section 4.1.3.)
- Revised Basin Plan Receiving Water Limitations. To implement the 2016 amendments, approved by U.S. EPA in 2018, to the Water Quality Control Plan for the North Coast Region (Basin Plan), updated dissolved oxygen and new specific conductance and total dissolved solids limitations have been added to the Proposed Permit. (Order Section 5.1.)
- 7. **Bacteria Provisions.** New receiving water limitations for *E. coli* bacteria have been added to the Proposed Permit to implement the new bacteria provisions that were adopted by the State Water Board on August 7, 2018, and amended into the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. (Order Section 5.1.21)
- Reasonable Potential. WQBELs for acute toxicity, copper, and chlorodibromomethane were removed and not included in the Proposed Order as the reasonable potential analysis (RPA) results indicate that reasonable potential to exceed applicable water quality objectives no longer exists. (4.3.3.3. of the Order Fact Sheet.)
- 9. **Monitoring and Reporting Requirements.** Changes to the monitoring and reporting requirements have been made as follows:
  - a. **Disaster preparedness assessment report and action plan.** A requirement to prepare a disaster preparedness assessment report has been added to require the Permittee to assess the Facility's vulnerability to natural disasters and extreme weather and other conditions that may be exacerbated by climate change. (MRP Section 11.4.2)
  - b. **Pathogen Special Study**. A requirement to prepare a pathogen special study has been added that requires the Permittee to assess the Facility's ability to comply with the bacteria water quality objective in Section 5.1.21 of the Order. (MRP section 11.4.3.)
  - c. **Salts Special Study**. A requirement to prepare a Salts Special Study to evaluate the potential impact of Total Dissolved Solids (TDS) and sodium effluent concentrations on groundwater quality. If the study finds that recycled water discharge causes or contributes to violations of the groundwater limitations the Permittee is required to propose effluent limitations, a workplan, and a schedule for compliance. Upon written approval from the Regional Water Board Executive Officer, the Permittee will be required to complete corrective actions that ensure the discharge does not result in

degradation of groundwater, exceedances of water quality standards, or impacts to the beneficial uses of groundwater. (MRP section 11.4.4.)

- e. New language to ensure that all monitoring is conducted using sufficiently sensitive methods in accordance with U.S. EPA's Sufficiently Sensitive Methods Rule which became effective November 6, 2018. (MRP section 1.5)
- f. New effluent and receiving water monitoring requirements for *E. coli* bacteria to verify that total coliform effluent limitations result in achievement of Statewide Bacteria Standards. (MRP sections 4.3.1 and 8.1.1)
- g. The effluent monitoring frequency requirement for chronic aquatic toxicity has been increased from annually to semiannually to meet the minimum allowed monitoring frequency identified within the new Toxicity Provisions. (MRP section 4.3.1)
- h. The Whole Effluent Toxicity Testing Requirements included in the monitoring and reporting program have been updated significantly to reflect the new Toxicity Provisions. (MRP Section 5)

A copy of the Draft Permit was posted on the Regional Water Board website and was available for public comment from December 8, 2023, through January 11, 2024. A comment letter was received from the Permittee on January 11, 2024. No other comments were received. The attached Response to Comments document includes a full explanation of the Permittee's comments and Staff's response to the Permittee's comments; several permit modifications were made to the Proposed Permit in response to the Permittee's comments.

Staff notified the Permittee of the proposed changes to the Proposed Permit on February 27, 2024. Staff met with the Permittee to discuss changes to the Proposed Permit on March 5, 2024 and the Permittee. The Permittee indicated that Staff's response to the Permittee's comments and changes made to the Proposed Permit are acceptable to the Permittee. Staff anticipates that the Proposed Permit will be uncontested.

**RECOMMENDATION:** Adopt Order No. R1-2024-0004 as proposed.

## SUPPORTING DOCUMENTS:

- 1. Proposed Order No. R1-2024-0004
- 2. Response to Comments Document
- 3. Notice of Public Hearing