

Executive Officer's Summary Report
1 p.m., June 22, 2011
North Coast Regional Water Board
David C. Joseph Hearing Room
5550 Skylane Blvd., Suite A
Santa Rosa, California

Item: 4

Subject: Public Hearing on Order No. R1-2011-0016 to consider adoption of Waste Discharge Requirements and Master Reclamation Permit for the **Forestville Water District Wastewater Treatment, Reclamation and Disposal Facility** NPDES No. CA0023043, WDID No. 1B83100OSON

DISCUSSION

The Forestville Water District is currently discharging under Order No. R1-2004-0027 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023043, adopted by the Regional Water Board on October 6, 2004. The Discharger submitted a Report of Waste Discharge, dated March 9, 2009, and applied for an NPDES permit renewal to discharge an average daily dry weather flow of up to 0.130 million gallons per day (mgd), a peak weekly wet-weather design flow of 0.58 mgd, and a maximum daily wet-weather design flow of 0.78 mgd of treated wastewater from the District's Wastewater Treatment Facility (hereinafter Facility). The application was deemed complete on May 4, 2009.

The Discharger owns and operates a municipal wastewater treatment facility and associated wastewater collection and disposal facilities that serve a population of approximately 930 people. The Discharger's wastewater makeup is primarily residential flow with a small percentage of the flow coming from commercial or institutional (schools) flows. The tertiary treatment system includes headworks with rotary hydroscreen system, screenings washer and metering flume, an aeration pond, a settling pond, microfiltration, chlorine disinfection using gaseous chlorine, and dechlorination. Biosolids generated during the treatment process accumulate in the aeration and settling ponds, where they undergo anaerobic digestion and compaction. As necessary, biosolids will be removed and disposed at a legal point of disposal. The Discharger does not anticipate needing to remove biosolids during the term of this permit.

Filtered, disinfected wastewater is discharged year-round to an on-site 3.5 million gallon (MG) storage pond and an off-site 14.7 MG storage pond. During the period of October 1 through May 14, the Discharger discharges as needed to Jones 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 tertiary effluent is reclaimed for irrigation of 11 urban and agricultural parcels, including two schools, a town park, vineyards, and pastures. Several parcels utilize recycled water for frost protection during the late winter and spring.

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, dichlorobromomethane, and total trihalomethanes. The previous Order included interim effluent limitations for copper, lead, zinc, DCBM and THMs, but monitoring conducted during the term of the previous permit resulted in a determination of no reasonable potential for lead and zinc, 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. Increased monitoring of the receiving water for field parameters, including dissolved oxygen, temperature, pH and turbidity in recognition of the fact that stream conditions are extremely variable during the discharge season. This additional data will be needed by the Discharger to justify an exception to the Basin Plan one percent discharge limitation.
4. Final effluent limitations and monitoring requirements for nitrate based on monitoring data collected during the previous permit revealed reasonable potential for nitrate to exceed the maximum contaminant level of 10 mg/L as nitrate established by the California Department of Public Health.
5. 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.

6. 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.
7. 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.
8. 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, semivolatile organics, etc) in a single pollutant scan.
9. 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.
10. 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 February 4, 2011 and March 7, 2011. The public comment period was extended to April 1, 2011 due to the fact that a cease and desist order that should be adopted concurrently with the proposed permit was not available for public comment until March 11, 2011. Comment letters were received from three parties representing the Discharger: the District's wastewater treatment plant operator, consulting engineer, and attorney. The proposed Order was modified in response to some of the comments received. The comment letters are included as Attachments A, B and C.

During the public comment period, Regional Water Board staff identified some changes that are needed to provide clarity, correct typographical errors, and to provide consistency between language in the permit, monitoring and reporting program and Fact Sheet.

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. Attachment 1.A provides an expanded description of changes made in response to the Discharger's concerns about the inclusion of monitoring requirements for lead and Attachment 1.B includes a description of additional changes recommended by Staff. Comment letters submitted by the Discharger's representatives are also included as attachments to this Staff Report.

This permit package also includes two copies of the final proposed Order. One copy includes all proposed changes in strikeout/underline format, while the second copy has accepted these changes.

PRELIMINARY STAFF
RECOMMENDATION:

Adopt the Order No. R1-2011-0016 as proposed.

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