

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
Thursday, August 14, 2014
Regional Water Board Office
Santa Rosa, California

- ITEM: 3
- SUBJECT: Public Hearing to consider Order No. R1-2014-0034, requiring the Russian River County Sanitation District and Sonoma County Water Agency to cease and desist from discharging or threatening to discharge effluent in violation of Waste Discharge Requirements Order No. R1-2014-0002 for the Russian River Wastewater Treatment Facility, WDID No. 1B820450SON, NPDES No. CA0024058, Sonoma County (*Cathleen Goodwin*)
- BOARD ACTION: The Board will consider adoption of Cease and Desist Order No. R1-2014-0034.
- BACKGROUND: The Russian River County Sanitation District and Sonoma County Water Agency (hereafter Permittee) owns and operates a wastewater treatment facility (Facility), which provides wastewater treatment and disposal services for a population of approximately 8,300 people in unincorporated areas of Rio Nido, Vacation Park, Guerneville, and Guerneville Park. The majority of the Facility's wastewater flow is from residential and commercial users.
- The Facility provides biological secondary treatment utilizing an extended air activated sludge process followed by tertiary filtration and ultraviolet (UV) disinfection. The Facility produces wastewater that meets title 22 guidelines for tertiary recycled water. The current Facility design treatment capacities are 0.71 million gallons per day (mgd) as an average dry weather flow (ADWF) and 3.5 mgd as a peak wet weather flow.
- During the Basin Plan discharge prohibition season (May 15 – September 30) and other periods when weather conditions are dry, the Permittee reclaims its tertiary-treated water on the 43-acre Northwood Golf Course, located south of the treatment plant on the opposite bank of the Russian River. Treated wastewater not used by the Northwood Golf Course during the irrigation season is disposed of by spray irrigation on 17 wooded acres adjacent to the treatment plant, referred to as the Burch property. Treated wastewater that is not reclaimed or disposed of on land is discharged to the Russian River during the permitted discharge season (October 1- May 14).

The Permittee is currently upgrading the Facility to include biological nutrient removal (BNR) in order to comply with ammonia effluent limitations and nitrate discharge specifications in the Permit.

The Facility is currently regulated under Waste Discharge Requirements Order No. R1-2014-0002, which serves as an NPDES permit for waste discharges to surface water and a master recycling permit for distribution and use of recycled water. The WDRs include discharge prohibitions, effluent limitations, land discharge specifications, reclamation requirements, and receiving water limitations (surface water and groundwater). The WDRs also include a compliance schedule for the Permittee to achieve compliance with effluent limitations for ammonia and land discharge specifications for nitrate. In the Permittee's Report of Waste Discharge (ROWD) that supported the permit renewal process, the Permittee requested this compliance schedule. Several weeks prior to the adoption of the WDRs, the Permittee requested that the Regional Water Board adopt a cease and desist order (CDO) that allows time for the Permittee to investigate source control options, treatment process changes, and disposal procedures to bring the effluent into compliance with land discharge specifications for total dissolved solids (TDS) and sodium, and to ensure consistent compliance with groundwater receiving water limitations.

The CDO addresses actual and potential violations of the discharge prohibitions, land discharge specifications, and groundwater limitations, as follows:

1. Discharges to the land disposal system may be creating conditions of nuisance in violation of Discharge Prohibition III.B. The CDO includes a compliance schedule that requires the Permittee to submit a work plan for assessing whether nuisance conditions (e.g., ponding that is conducive to mosquito breeding, odors, etc.) are present in the land disposal area on the lower Burch property, and the extent of any nuisance conditions identified. The Permittee is required to submit the work plan by December 14, 2014, complete the assessment work during the 2015 irrigation season, and submit a written report summarizing the results of the investigation by December 31, 2015.
2. The Facility currently does not comply with land discharge specifications for nitrate, TDS, and sodium. At the time that the ROWD was submitted, the Permittee anticipated that replacing the chlorination disinfection system with an ultraviolet (UV) light disinfection system would address exceedances of land discharge specifications for TDS. Monitoring data collected since

the UV system replaced the chlorination system in October 2012 has shown that TDS continues to exceed the land discharge specification in the WDRs. The CDO includes interim land discharge specifications for TDS and sodium (interim limits for nitrate are also in the WDRs) and a compliance schedule that includes tasks that the Permittee must complete to achieve compliance with final land discharge specifications for TDS and sodium. The primary task in the compliance schedule requires the Permittee to conduct performance monitoring upon completion of the BNR upgrade project to determine if the improved removal of nitrate also results in compliance with TDS specifications (nitrate is one of the salts that contributes to TDS). The CDO also requires an evaluation of the Facility operation and chemical additions to determine if there are opportunities to reduce TDS and/or sodium, and other tasks that are conditionally required if these first two tasks do not result in compliance with the land discharge specifications. These additional tasks include source control efforts and infiltration and inflow studies to identify locations where poor quality, shallow groundwater may be infiltrating the collection system and contributing TDS.

3. In addition, groundwater monitoring data collected during the term of the previous WDRs, Order No. R1-2009-0003, revealed higher concentrations of wastewater pollutants, including nitrate, TDS, sodium, chloride, and aluminum and lower pH in a downgradient groundwater monitoring well (GW-001) in comparison to an upgradient monitoring well (GW-003). The CDO includes a primary compliance schedule task that requires groundwater monitoring for 15 months following completion of the BNR upgrade project to determine whether improved effluent quality that results from the BNR upgrade project results in improved groundwater conditions during land disposal activities, and additional conditional tasks that must be completed if groundwater monitoring continues to show significant changes in the downgradient well in comparison to the upgradient well. These additional tasks include the option of conducting a hydrogeologic study to evaluate the fate and transport of pollutants or a commitment to expand the reclamation capacity.
4. The CDO includes findings related to a February 13, 2014 force main rupture and spill from the Permittee's collection system. Follow-up repairs associated with that incident, including preventive work throughout the system is a high priority for water quality protection, and as a result, the compliance schedules in this CDO provide more time and flexibility than would otherwise be afforded in order to allow the Permittee to

make important improvements to the collection system in parallel to correcting issues related to the land disposal and reclamation systems.

ISSUES:

Significant comments that were submitted and staff's proposed resolution are summarized in the following paragraphs:

1. The Permittee requested changes to some of the task descriptions and compliance dates in Requirement 2 in order to obtain and utilize information from the tasks as they are implemented and ensure sufficient time is available to prepare useful, complete reports.

Resolution: The Proposed Order includes modified descriptions and compliance dates for Requirement 2 as described in the Response to Comments document (Comment A.4).

2. The Permittee requested inclusion of a new finding to address future violations and enforcement actions related to this CDO. Specifically, the Permittee requests that if additional violations of land discharge specifications, groundwater limitations, and discharge prohibitions occur while the Permittee is implementing tasks under the CDO, that the Regional Water Board consider actions already undertaken and progress made to improve conditions.

Resolution: The Regional Water Board recognizes that violations of Discharge Prohibition III.E, Land Discharge Specification IV.B.1, and Receiving Water Limitation V.B may occur while the Permittee is addressing the violations and/or potential violations that are the subject of the Proposed CDO. The Proposed CDO includes interim land discharge specifications for TDS and sodium that are based on current Facility performance to recognize that the Facility cannot currently meet the Land Discharge Specifications in section IV.B.1 of Order No. R1-2012-0002. Requirement 5 of the Proposed CDO requires the Permittee to operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with all prohibitions, effluent limitations and requirements identified in Order No. R1-2014-0002.

Any future enforcement action related to the issues addressed in the Proposed CDO would be discretionary actions and Regional Water Board staff routinely consider on-going efforts and progress a permittee has made toward compliance in determining any civil liabilities assessed. The State Water Board Water Quality Enforcement Policy requires Regional Water Board staff to consider a number of factors in setting a proposed administrative civil liability, including three factors related to the violator's conduct: the violator's culpability, efforts to clean

up and cooperate with regulatory authorities after the violation, and compliance history. Given these considerations, no changes were made to the draft CDO.

3. The Permittee requested confirmation from the Regional Water Board that the tasks prescribed in Requirement 5 can be used to offset any penalties that might be assessed in relation to the February 13, 2014 spill. If penalties are assessed for the February 13, 2014 spill, the Permittee will ask the Regional Water Board to approve an Enhanced Compliance Action (ECA) so that a portion of the penalty can be utilized for collection system evaluation and preventative repairs.

Resolution: Staff have removed the compliance schedule identifying collection system tasks (Requirement 5 of the Draft Order) from the Proposed Order. Staff has retained the findings describing the February 13, 2014, force main rupture and the Permittee's response, in order to give a complete description of the many issues that the Permittee must address.

4. Lester Feldman of AMEC requested that compliance schedules in Requirement 3 (nuisance conditions) and 4 (hydrogeologic study/reclamation system expansion) be shortened.

Resolution: The compliance schedule for Requirement 3 has been shortened, as requested. The compliance schedule for Requirement 4 has not been shortened. This compliance schedule was established with some built-in flexibility because the Regional Water Board recognizes that the Permittee's work to proactively evaluate and upgrade the collection system has a high benefit to water quality because it will minimize the potential of large spills of raw sewage in the future. The collection system evaluation and upgrade is a costly undertaking.

RECOMMENDATION: Adopt Order No. R1-2014-0034, as proposed.

**SUPPORTING
DOCUMENTS:**

1. Proposed Order No. R1-2014-0034
2. Staff Response to Comments
3. Comment Letters
4. Public Notice