

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF JULY 11, 2008

Prepared on June 18, 2008

ITEM NUMBER: 15

SUBJECT: **South County Regional Wastewater Authority, Santa Clara County; Modification to Flow Rate Prohibition – Resolution No. R3-2008-0014**

KEY INFORMATION:

Treatment System Location: 1500 Southside Drive, Gilroy, Santa Clara County
Discharge Type: Municipal wastewater
Design Capacity: 8.5 million gallons per day (mgd) average flow, 9.0 mgd peak flow
Average Flow: 6.424 mgd
Treatment: Secondary-treated discharge, tertiary-treated recycled water
Disposal: Pájaro River
Reclamation: Agricultural irrigation
Existing Orders: WDR Order No. R3-2004-0099
Recommended Action: Adopt Resolution No. R3-2008-0014

SUMMARY

The South County Regional Wastewater Authority (the Discharger) proposes to increase the limit on its monthly average wastewater flowrate through its treatment plant from 7.5 mgd to 8.5 mgd. Staff does not object to the proposed increase and drafted the attached Resolution, which raises the flow limit, for the Central Coast Water Board (Water Board) to consider. Staff recommends the Water Board adopt the proposed Resolution.

BACKGROUND

On behalf of the Cities of Gilroy and Morgan Hill, the Discharger operates and maintains a municipal wastewater treatment plant (WWTP) in Gilroy. The WWTP treats municipal wastewater to secondary standards and discharges the treated wastewater to percolation ponds. Waste Discharge Requirements (WDR) Order No. R3-2004-0099 regulates both the discharge to the ponds and, as NPDES Permit No. CA0049964, the occasional discharge to the Pájaro River. (A separate plant provides tertiary treatment to the WWTP effluent; farmers use the recycled water to irrigate their crops.)

The WWTP provides secondary treatment with two treatment sequences, each including four pre-anoxic basins, an aerated oxidation ditch, and a secondary clarifier. A post-anoxic basin and a reaeration basin serve both sequences, which jointly discharge to percolation ponds and the Pájaro River, as necessary. In 2002, the Discharger added more pre-anoxic units (to provide a total of eight pre-anoxic units) to reduce nitrogen to comply with effluent limitations.

In 2005, the Discharger reviewed the WWTP's design criteria and concluded the plant could treat an average dry weather flow of 8.5 mgd and an average wet weather flow of 10.2 mgd, an 1.0 mgd

increase. The review found that denitrification capacity during extended high-flow conditions, aeration capacity, and solids settling control the WWTP's effective treatment capacity. (Denitrification means nitrogen removal by converting nitrate to nitrogen gas, which transfers to the atmosphere, thereby removing nitrogen from the wastewater.)

DISCUSSION

The Discharger conducted a full-scale study of the WWTP's ability to comply with effluent limitations included in WDR Order No. R3-2004-0099. The Discharger evaluated the WWTP's ability to reduce pollutants to compliant levels at 8.5 mgd, at 11.9 mgd (the peak monthly flow), and at 25.5 mgd during a peak four-hour flow test.

In 2006, the Discharger submitted the *2006 Capacity Re-rating Application* (Rerating Study), which describes the full-scale study. The Rerating Study reports on how the Discharger verified the WWTP's capacity to effectively aerate the oxidation ditch, settle solids in the secondary clarifiers, and nitrify and denitrify the wastewater. The Rerating Study reports the Discharger's computer modeling of the WWTP's treatment processes and evaluation of the treatment technology. The Discharger concluded that the study found that the plant reduced the controlling wastewater pollutants to well below the adopted effluent limitations at the specified flowrates.

Water Board staff reviewed the Rerating Study and found it comprehensive and fully supported by data obtained during the WWTP tests. The pollutant concentrations in the effluent will not increase significantly, if at all, as the design flowrate increases by one mgd. Based on the studies provided, the Discharger will continue to be able to comply with all the requirements of the Order, including all effluent limitations, which limit pollutant concentrations, not mass discharges. Therefore, at the higher flowrate, the discharge will not impair nor threaten to impair, the beneficial uses of the groundwaters or surface waters receiving the wastewater.

COMMENTS

On April 23, 2008, the Executive Officer (EO) sent the Discharger and interested parties draft Resolution No. R3-2008-0014, the Staff Report, and the Notice of Public Hearing (Notice). The EO also sent the Discharger instructions to post the Notice in a local newspaper with general circulation, which was done in accordance with the instructions.

South County Regional Wastewater Authority. The Discharger requested the Resolution limit the average daily wet weather flow to 10.2 mgd, instead of 9.0 mgd as specified in the proposed Resolution.

Staff Response. As noted above and demonstrated by the rerating study, the plant can treat the community's wastewater to levels compliant with effluent limitations specified in Order No. R3-2004-0099 up to 11.9 mgd. Therefore, staff changed the Resolution and Table 12 in the Order to 10.2 mgd.

No other entity on the Interested Parties List for this item commented on the proposed Resolution.

RECOMMENDATION

Adopt Resolution No. R3-2008-0014 as proposed.

ATTACHMENT

Proposed Resolution No. R3-2008-0014