STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MAY 4-5, 2011

Prepared on April 11, 2011

ITEM NUMBER: 14

SUBJECT: Revision of Waste Discharge Requirements, Reissuance of National

Pollutant Discharge Elimination System Permit No. CA0047953 for the City of Paso Robles Wastewater Treatment Plant, San Luis

Obispo County, Order No. R3-2011-0002

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KEY INFORMATION

Location: 3200 Sulphur Springs Road, Paso Robles, California

Type of Discharge: Treated municipal wastewater

Permitted Flow: 4.9 million gallons per day (mgd; dry weather flow design capacity)

Average Annual Flow: 3.0 mgd

Type of Treatment: Primary and secondary treatment followed by chlorination and dechlorination

Disposal Method: Surface water discharge to the Salinas River

Solid Wastes: Primary and secondary solids are anaerobically digested and dried on-site for

disposal at City-owned landfill

Existing Orders: Waste Discharge Requirements Order No. R3-2004-0031

Reclamation None

This Action: Adopt Order No. R3-2011-0002

SUMMARY

The City of El Paso de Robles (City) owns and operates a municipal wastewater treatment plant and discharges the treated wastewater to the Salinas River channel. The facility provides treatment and disposal of municipal wastewater for the City, Templeton Community Services District (CSD) and the California Department of Corrections and Rehabilitation (Corrections). The CSD and Corrections own and operate wastewater collection systems tributary to the City's collection system.

The City is currently at the 100 percent design phase for a complete wastewater treatment system upgrade that will include biological nutrient removal to achieve total nitrogen removal down to less than 10 mg/L total nitrogen. The anticipated project completion and startup date is currently October 2013. To address ongoing groundwater supply quality issues and resulting effluent salinity violations, the City has recently procured a better quality surface water supply from the Nacimiento Water Project and the proposed Order contains findings that will allow the City to implement a sewer ordinance to control the use of self-regenerating water softeners. Significant reductions in salt constituent loading to the Salinas River and Paso Robles Groundwater basin are anticipated as a result of the City's new water supply and source control efforts. In addition, the City is taking a leadership role in the development of regional salt and nutrient management planning efforts in alignment with the Recycled Water Policy.

CHANGES FROM THE EXISTING ORDER

The proposed Order is structured in accordance with the statewide NPDES permit template. The proposed Order is consistent with the previous Order with the exception of the following substantive changes/modifications:

- Effluent limitations have been removed and effluent monitoring requirements reduced for cyanide and bromoform based on the Reasonable Potential Analysis (RPA) conducted as part of the permit renewal process. See Sections IV.C.3, IV.D.1 and VI.B of the Fact Sheet for additional information.
- Effluent limitations have been established and added for whole effluent acute toxicity of pass/fail and whole effluent chronic toxicity of 1.0 TUc based on the RPA conducted as part of the permit renewal process. See Section IV.C.5 of the Fact Sheet for additional information.
- An average monthly effluent limitation of 10 mg/L total nitrogen has been added consistent with other Central Coast Water Board waste discharge requirements to control nitrogen loading to surface and groundwater and based on the pending treatment system upgrade. Central Coast Water Board staff is considering a separate time schedule order (TSO) to establish interim nitrogen limits until the City upgrades the treatment facility, as the existing treatment facility cannot meet the newly proposed nitrogen effluent limitation.
- Effluent limitations have been modified (increased and changed from maximum daily to average monthly) for the salinity parameters total dissolved solids (TDS), sodium (Na), chloride (Cl), and sulfate (SO₄) in conformance with the Antidegradation Policy, Anti-Backsliding Requirements and Basin Plan based on a detailed analysis and modeling of site-specific water quality conditions and an evaluation of beneficial uses within the immediate vicinity of the discharge. See Sections IV.C.8 and IV.D.1 and 2 of the Fact Sheet starting on page F-21 for specific details.
- A Special Provision was added requiring the Discharger to participate in the development of a regional salt and nutrient management plan pursuant to the Recycled Water Policy (SWRCB Resolution No. 2009-0011)
- A requirement for an additional downstream groundwater monitoring well (GW-003), and sampling of that of that well along with the two existing wells, has been added within Table E-1 of the Monitoring and Reporting Program to validate the model used to develop the revised effluent limitations for TDS, Na, Cl, and SO₄.
- Quarterly upstream and downstream surface water quality monitoring has been added (Table E-5) for TDS, Na, Cl, and SO₄ based on USEPA comments regarding salinity and to provide surface water quality data in the immediate vicinity of the discharge for these parameters. Monitoring Salinas River flow conditions via the upstream USGS gaging station has also been added to complement the water quality monitoring for the purposes of conducting mass balance loading calculations.
- Quarterly effluent monitoring has been added for Total Nitrogen in addition to the existing requirements for ammonia, nitrate and nitrite.
- The descriptions of discharge points and monitoring station locations have been revised from the public comment draft within Section II.B.a of the proposed Order and Tables E-1 and E-3 (footnote [9]) of the Monitoring and Reporting Program based on the City's written comments and to be consistent with the previous Order.

COMMENTS

Comments were received by the City and the USEPA, NPDES Permit Office, Region IX. Comments and staff responses are contained within Section VIII.B. of the Fact Sheet (Attachment F) starting on page F-42.

RECOMMENDATION

Adopt Order R3-2011-002, as proposed.

ATTACHMENT

For copies, please refer to the Central Coast Water Board's internet website at: http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2011/2011_agendas.shtml

1. Proposed Order No. R3-2011-0002, including the following attachments:

Attachment A - Definitions

Attachment B - Map

Attachment C - Flow Schematic

Attachment D - Standard Provisions

Attachment E – Monitoring and Reporting Program (MRP)

Attachment F – Fact Sheet

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