

ITEM: 22

SUBJECT: City of Vacaville, Easterly Wastewater Treatment Plant, Solano County

BOARD ACTION: *Consideration of NPDES Permit Renewal (NPDES Permit No. CA0077691) and Rescission of Time Schedule Order R5-2008-0056-03*

BACKGROUND: The City of Vacaville (Discharger) owns and operates the Easterly Wastewater Treatment Plant (Facility), a publicly owned treatment works located at 6040 Vaca Station Road, Elmira, California. The Facility provides sewerage services for the City of Vacaville and the community of Elmira serving a population of approximately 97,000. The treatment system consists of headworks, primary sedimentation basins, aeration basins, secondary clarifiers, and chlorination and dechlorination facilities. Sludge is anaerobically digested, dewatered using a belt filter press, and air dried prior to final disposal of the biosolids at a landfill. The Discharger is constructing tertiary filtration to meet California Code of Regulations Title 22 (or equivalent) disinfection requirements by 1 May 2015. The proposed permit allows an average dry weather flow discharge of up to 15 million gallons per day of tertiary treated effluent from 1 May to 31 October and secondary treated effluent from 1 November to 30 April to Old Alamo Creek, tributary to New Alamo Creek, and tributary to Sacramento-San Joaquin Delta, all waters of the United States. The United States Environmental Protection Agency and the Central Valley Regional Water Quality Control Board (Central Valley Water Board) have classified this discharge a major discharge.

The proposed NPDES permit renewal includes new or more stringent effluent limitations for nitrate and ammonia. Effluent limitations are eliminated for cyanide, chlorodibromomethane, dichlorobromomethane, and total trihalomethanes, because the discharge no longer exhibits reasonable potential to cause or contribute to an exceedance of the applicable water quality objectives. With the adoption of the proposed NPDES permit renewal, Time Schedule Order R5-2008-0056-03 is no longer applicable and will be rescinded.

ISSUES: Public comments on the proposed NPDES permit renewal were received from the Discharger, United States Environmental Protection Agency, Region IX (USEPA), Central Valley Clean Water Association (CVCWA), and California Urban Water Agencies (CUWA). The following is a summary of comments on major permitting issues and Central Valley Water Board staff responses. Detailed comments and responses are included in the Staff Response to Comments document included in the agenda package.

**Turbidity Monitoring.** The Discharger requests monitoring for turbidity only when seasonal tertiary treatment is required, because the effluent turbidity specifications only apply when filtration is required (i.e., 1 May – 31 October). Central Valley Water Board staff does not concur. Although the turbidity specifications only occur seasonally, effluent turbidity monitoring is required year-round to evaluate the Facility's compliance with receiving water limitations for turbidity.

**Monitoring for Drinking Water Constituents.** CUWA requests adding effluent monitoring for key drinking water constituents, total Kjeldahl nitrogen, total organic carbon and dissolved organic carbon, and have requested that the permit require the Discharger to contact downstream drinking water agencies in the event of a non-complying discharge. Central Valley Water Board staff concurs regarding the addition of monitoring and updated the proposed permit. However, staff does not concur regarding

the need for additional notification requirements. There are currently no nearby drinking water intakes in the vicinity of the discharge. The closest drinking water intake is the Barker Slough Pumping Plant located over 20 miles from the discharge. Based on modeling, the Discharger estimates under worst-case conditions, the percentage of effluent to reach the Barker Slough Pumping Plant is less than 0.2 percent and would take a minimum of five days to reach the pump station. Staff provided this information to CUWA, which satisfied their concern.

**Performance-based Effluent Limits for Trihalomethanes.** USEPA, Region IX, agrees based on monitoring results that a finding of no reasonable potential is proper for chloroform, chlorodibromomethane, and dichlorobromomethane; however, USEPA remains concerned that removal of effluent limitations for these constituents is not consistent with federal antibacksliding requirements. USEPA, Region IX, requests performance-based effluent limits for these constituents to ensure the levels do not increase in order to comply with antibacksliding regulations. Central Valley Water Board staff disagrees. Removal of effluent limits is not expected to result in increased loadings and complies with federal and state antidegradation requirements, therefore, the removal of effluent limits complies with the antibacksliding exception provided in Clean Water Act section 303(d)(4).

**Monitoring for THMs in New Alamo Creek.** USEPA, Region IX, requests monitoring for all trihalomethane (THMs) compounds (i.e., bromoform, chloroform, chlorodibromomethane, and dichlorobromomethane), in New Alamo Creek downstream of the confluence with Old Alamo Creek where the site-specific objectives for THMs are applicable. The Discharger conducted extensive monitoring of the effluent, and Old and New Alamo Creeks that demonstrates the only source of THMs is from the Facility. The Order requires monitoring for THMs at the terminus of Old Alamo Creek immediately upstream of the confluence with New Alamo Creek. If the THM concentrations in Old Alamo Creek at the terminus do not exceed the site-specific objectives, the Facility's discharge will not cause the objectives to be exceeded in New Alamo Creek. The increased monitoring will not provide additional information needed to evaluate compliance. As such, the increased monitoring is not consistent with the State Water Resources Control Board's resolution regarding cost of compliance.

RECOMMENDATION      Adopt NPDES permit renewal and rescind Time Schedule Order R5-2008-0056-03.

Mgmt. Review \_\_\_\_\_

Legal Review \_\_\_\_\_

5/6 June 2014

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