

ITEM: 26

SUBJECT: Uncontested NPDES Permits

REPORT: Following are proposed permits. All agencies and the dischargers concur, or have offered no comments. Consideration of NPDES Permits

a **BEAR VALLEY WATER DISTRICT, BEAR VALLEY WASTEWATER TREATMENT FACILITY, ALPINE COUNTY**

Bear Valley Water District is the owner and operator of the Bear Valley Wastewater Treatment Facility (Facility), a publicly owned treatment works located at 441 Creekside Drive, Bear Valley, California. The Facility provides sewerage services for the communities of Bear Valley, Bear Valley Mountain Resort, and Lake Alpine/United States Forest Service, serving a population of approximately 121 permanent residents, as well, as seasonal users. The Facility provides secondary treatment for up to 0.50 million gallons per day. Secondary treated wastewater from the Facility may be discharged to Bloods Creek, a water of the United States and a tributary to the North Fork Stanislaus River. Discharges from the Facility are currently regulated by Waste Discharge Requirements Order R5 2011-0053 (NPDES Permit) and Time Schedule Order R5-2011-0054 (TSO), issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 4 August 2011. With the proposed Order the NPDES permit will be renewed and the TSO rescinded. The proposed permit renewal includes allowance of mixing zones for aluminum, copper, lead, and ammonia resulting in revised effluent limitations for these constituents. In addition, new effluent limitations are included for nitrate plus nitrite and pH, and the effluent limitations for iron and manganese have been removed because the discharge does not demonstrate reasonable potential to cause or contribute to an instream exceedance of the applicable water quality objectives.

A Notice of Public Hearing was sent to the Discharger and interested parties on 29 April 2016 for a 30-day public comment period closing on 31 May 2016. Timely public comments on the tentative NPDES permit were received by the Discharger. The following is a summary of the main comment from the Discharger and Central Valley Water Board staff response. Detailed comments and responses to all comments are included in the Staff Response to Comments document included in the agenda package.

Chronic Toxicity Trigger. The proposed Permit at Section VI.C.2.a includes a chronic whole effluent toxicity (WET) numeric monitoring trigger of >1 chronic toxicity units (TUc) to ensure compliance with the Basin Plan's narrative toxicity objective. The Discharger requests a change in the numeric monitoring trigger from >1 TUc to >4 TUc. The proposed Permit requires a 20:1 dilution ratio when discharging and allows dilution credits for chronic aquatic life criteria dilution credits of 5:1 for aluminum, ammonia, copper and lead. Therefore, the Discharger requests a numeric monitoring trigger consistent with the dilution available and allowed in the proposed Permit. The Discharger contends this would be consistent with other similar dischargers, such as the San Andreas Sanitary District Wastewater Treatment Plant.

Unlike the San Andreas Sanitary District, which provided WET test data to support an increased numeric monitoring trigger, the Discharger has not yet provided WET test data for its discharge. Therefore, though the Central Valley Water Board will provide the Discharger with the opportunity to provide information supporting an increased toxicity trigger, the Central Valley Water Board staff does not concur that the monitoring trigger should be changed at this time.

The Discharger provided a mixing zone study estimating a 5:1 dilution ratio at 10 feet downstream of the outfall and provided sampling data for aluminum, ammonia, copper and lead for the effluent and Bloods Creek. This information was sufficient to grant a chronic aquatic life criteria mixing zone and dilution credits for these constituents. The mixing zone study demonstrates there may be sufficient hydraulic dilution to allow a chronic WET numeric monitoring trigger of >4 TUc. However, toxicity can be synergistic and/or

additive when the effluent mixes with the receiving water and the same amount of dilution granted for aluminum, ammonia, copper, and lead may not exist for toxicity. The Discharger in this case has not provided any WET data to support the request for the increased numeric monitoring trigger. In order to allow the higher trigger, chronic WET testing is needed to demonstrate a numeric monitoring trigger of 4 TUc will not result in chronic toxicity outside an approved chronic aquatic life mixing zone. To do this the Discharger must conduct chronic WET testing using the dilution series required in Table E-4 of the proposed Permit, which will evaluate the toxicity of the effluent/receiving water mixture at various dilutions. The Discharger may collect this data in conjunction with the updated dilution/mixing zone study or at a later date. The proposed Permit has been modified to allow the Executive Officer to increase the chronic WET numeric monitoring trigger up to a trigger of >4 TUc provided sufficient information has been submitted by the Discharger.

**b CITY OF CORNING, CORNING WASTEWATER TREATMENT PLANT, TEHAMA COUNTY**

The City of Corning (hereinafter Discharger) is the owner of the Corning Wastewater Treatment Plant (hereinafter Facility), a Publicly-Owned Treatment Works. The Facility is operated by Severn Trent Services, a contract operator retained by the Discharger. The design average dry weather flow capacity of the Facility is 1.4 million gallons per day (mgd). The treatment system consists of influent screening, an oxidation ditch, secondary clarifiers, disinfection with gaseous chlorine, and dechlorination.

Solids wasted from the secondary treatment system are thickened, dewatered via sludge drying beds, and then hauled to a solid waste landfill for final disposal. Treated wastewater is discharged year-round to the Sacramento River, a water of the United States, using an outfall and multiport diffuser system that is shared with treated effluent from Bell-Carter Olive Company's Industrial Wastewater Treatment Plant. Discharge from Bell-Carter Olive Company is regulated under a separate NPDES permit (Order R5-2015-0030). The outfall and diffuser system is owned by the Discharger.

The existing NPDES permit has water quality based effluent limitations for ammonia, chlorine residual, and dichlorobromomethane. Review of the last three years of effluent/receiving water data indicated that there is still reasonable potential to exceed water quality objectives for ammonia, chlorine residual, and dichlorobromomethane. Additionally, new nitrate plus nitrite effluent limitations will be included in the permit renewal. The Discharger is able to immediately comply with the effluent limitations for ammonia, chlorine residual, dichlorobromomethane, and nitrate plus nitrite.

A Notice of Public Hearing was sent to the Discharger and interested parties on 15 April 2016 for a 30-day comment period. No public comments on the proposed permit were received.

**c SANTA FE AGGREGATES, INC. AND WALTER JOHN SEABORN, SAND AND GRAVEL PLANT, TULARE COUNTY.**

Santa Fe Aggregates, Inc. is the owner and operator of the Sand and Gravel Plant (Facility) located at 22400 Avenue 335, Woodlake, CA 93286. Walter John Seaborn owns the property on which the Facility is located. Operations at the Facility require the water table to be maintained below the invert of the open mining pit. Ditches convey storm water and infiltrated groundwater from the open pit by gravity flow to an unlined dewatering trench. Up to 1.99 million gallons per day of water from the dewatering trench may be discharged to St. Johns River, a water of the United States. Water may also be discharged to an on-site groundwater recharge system or to an unlined settling pond for reuse in aggregate washing activities. Used aggregate wash water is confined to the settling pond and is not sent to the dewatering trench or to the St. Johns River. Discharges from the Facility are currently regulated by Waste Discharge Requirements (WDRs) Order R5-2011-0041. The Discharger submitted a Report of Waste Discharge and requested renewal of the existing NPDES permit. The proposed permit is a WDRs/NPDES permit renewal to regulate the discharges from the Facility. All effluent limitations included in WDRs Order R5-2011-0041 are carried over into the proposed permit. The United States Environmental Protection Agency and the Central Valley Water Board have classified this discharge as a minor discharge.

**d QUINCY COMMUNITY SERVICES DISTRICT, QUINCY WASTEWATER TREATMENT PLANT, PLUMAS COUNTY**

Quincy Community Services District is the owner and operator of the Quincy Wastewater Treatment Plant (Facility), a publicly owned treatment works located at 900 Spanish Creek Road, Quincy, California. The Facility provides sewerage services for the communities of Quincy and East Quincy, serving a population of approximately 4,217. The Facility provides secondary treatment with a design average dry weather flow of 1.6 million gallons per day (MGD). Secondary treated wastewater from the Facility is discharged to Spanish Creek, a water of the United States.

Discharges from the Facility are currently regulated by Waste Discharge Requirements Order R5 2010-0032 (NPDES permit) and Cease and Desist Order (CDO) R5-2010-0033, issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 18 March 2010. An Order is proposed to renew the NPDES permit. The proposed permit includes new or updated effluent limitations for copper, lead, ammonia, and nitrate plus nitrite. CDO R5 2010-0033 contains compliance schedules for copper and lead that expired on 18 March 2015. The Discharger has made diligent efforts to comply with the final effluent limitations for copper and lead, however, the Discharger has demonstrated that additional time is needed to comply. Therefore, a Time Schedule Order (TSO) is proposed allowing an extension of the time schedule for compliance with these final effluent limitations an additional five years until 1 June 2021.

A Notice of Public Hearing was sent to the discharger and interested parties on 18 April 2016 for a 30-day public comment period, with comments due by 18 May 2016. Public comments on the tentative NPDES permit were received by the due date on 12 May 2016 from the Discharger and the East Quincy Community Services District (EQCSD). The Discharger and EQCSD submitted similar comment letters. The letters did not provide specific comments about the tentative Permit or tentative TSO but expressed general concerns about uncertainty of obtaining a mixing zone and dilution credits, funding acquisition for Facility upgrades and anticipated financial impacts to ratepayers, and stringency of effluent limits in comparison to other dischargers. The following is a summary of the comments and Central Valley Water Board staff's response.

**Comment: Discharger and EQCSD**

The Discharger and EQCSD submitted similar comment letters. The letters did not provide specific comments about the tentative Permit or tentative TSO but expressed general concerns about uncertainty of obtaining a mixing zone and dilution credits in the future, funding acquisition for Facility upgrades and anticipated financial impacts to ratepayers, and stringency of effluent limits in comparison to other dischargers.

The letters point to concerns about the estimated costs to upgrade the Facility. Both district boards have concerns about the cost burden of the upgrades on the small community, whose population has not changed since 1970 and whose economy is weak. While the Discharger is pursuing grant funding through Clean Water State Revolving Fund and United States Department of Agriculture Rural Development, funding approval is not a guarantee and wastewater rates could potentially increase by 55% over the next six years. They have reached out to the upper Feather River watershed Integrated Regional Water Management Group for financial help but the timeframe for their next grant funding cycle is uncertain. The letters also point to a perceived unfairness to this Facility versus other dischargers in the area with regard to tighter effluent limits.

**Response.**

Central Valley Water Board staff understands the concerns expressed by the Discharger and EQCSD and recognizes the financial impact on the ratepayers to comply with the permit. The compliance issues are not new to the proposed NPDES permit renewal. The effluent limitations for ammonia, copper, and lead proposed in the tentative NPDES permit are similar to the limits required in the current permit for which the Discharger has been under compliance schedules to meet. The proposed TSO extends the compliance schedules an additional 5 years allowing the Discharger additional time to come into compliance. As an

alternative to constructing facility upgrades, the proposed TSO provides the Discharger the opportunity to first determine if a mixing zone is feasible. If a mixing zone study demonstrates that dilution credits and mixing zones comply with the requirements of the State Implementation Policy the NPDES permit could be amended to modify the effluent limitations for ammonia, copper, and lead using dilution credits. The tentative NPDES permit acknowledges the Discharger's desire to seek dilution credits and includes a specific reopener provision for a mixing zone if the appropriate information is submitted by the Discharger.

The comment letters also discuss a concern that the Quincy Community Services District is being treated unfairly. The letters also point to other dischargers in Plumas County that have less stringent effluent limitations. Central Valley Water Board staff do not concur that the Discharger is being treated unfairly. The proposed NPDES permit has been developed consistent with other NPDES permits, which must consider site-specific conditions of the discharge and the receiving water. While the Delleker Wastewater Treatment Plant and City of Portola Wastewater Treatment Plant, the two facilities near Quincy, do have less stringent effluent limitations than proposed in the Quincy tentative permit, site-specific conditions were taken into account. In these specific cases, the dischargers have conducted the necessary mixing zone studies and have been granted mixing zones and dilution credits. As discussed above, mixing zones may also be feasible for Quincy. A permit reopener is proposed in the tentative Permit that will allow the permit to be reopened later should the Discharger provide the necessary studies.

e **THE BOEING COMPANY, INTERIM GROUNDWATER EXTRACTION AND TREATMENT SYSTEMS, GET H-B AND SOUTHERN GROUNDWATER STUDY AREA GET, SACRAMENTO COUNTY**

The Boeing Company operates two groundwater extraction and treatment systems at the Inactive Rancho Cordova Test site project in Rancho Cordova. The two systems extract groundwater polluted with perchlorate and trichloroethylene and discharge the treated water to Morrison Creek. This revision modifies the effluent limitation for chloroform. The current effluent limitations are 0.75 µg/L for a daily maximum and 0.5 µg/L for a monthly average. Chloroform was not originally a contaminant of concern when the first permit was issued in 2002, but was monitored for as one of a group of volatile organics. Recently one of the extraction wells has been found to have up to 3 µg/L chloroform. Boeing uses granular activated carbon (GAC) for removal of volatile organics, which is not efficient at removing chloroform. The yearly cost of removing chloroform in the influent at 3 µg/L to 0.5 µg/L is estimated to be \$190,000. The California Public Health Goal (estimated  $1 \times 10^{-6}$  incremental excess cancer risk) for chloroform is 1 µg/L and the Primary Maximum Contaminant Level (MCL) is 80 µg/L (based on total trihalomethanes). The effluent limitation for chloroform is proposed to be modified to a daily maximum of 5 µg/L, with a monthly average 3 µg/L. There is nearly a 100% dilution for the GET H-B effluent as Aerojet Rocketdyne uses the same outfall for its GET HA facility. The discharge at the effluent flow rate and effluent limitation would be significantly below the MCL and would represent an excess incremental cancer risk of  $1.5 \times 10^{-6}$ .

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

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

June 24, 2016

Central Valley Regional Water Quality Control Board meeting