

ITEM: 14

SUBJECT: El Dorado Irrigation District, Deer Creek Wastewater Treatment Plant,
El Dorado County

BOARD ACTION: *Consideration of NPDES Permit Amendment and Cease and Desist Order
Rescission.*

BACKGROUND: The El Dorado Irrigation District (Discharger) owns and operates the Deer Creek Wastewater Treatment Plant (WWTP) that provides sewerage service to the Cameron Park and Mother Lode Service Area. Tertiary treated wastewater is discharged to Deer Creek, a tributary to the Cosumnes River. The treatment system includes primary clarification, activated sludge secondary treatment, final clarification, tertiary filtration, and disinfection. Recent upgrades at the treatment facility include the installation of the ultraviolet disinfection process, replacing the use of chlorine and chlorine-containing agents in the wastewater treatment process.

Waste Discharge Requirements (WDR) Order No. R5-2002-0210 (NPDES No. CA0078662) regulates the discharge of approximately 2.5 million gallons per day (mgd) to Deer Creek. The proposed amendment to the permit addresses: (1) implementation of a site-specific water effect ratio (WER) for copper, and (2) recently adopted amendments to the Central Valley Regional Water Quality Control Board (Regional Water Board) Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) that added a site-specific temperature objective for Deer Creek. The proposed permit amendment includes the removal of the existing copper effluent limitations based on the conclusions of the Discharger's WER study for copper in Deer Creek. Although the copper effluent limitation is proposed to be removed, the effluent monitoring for copper remains unchanged. The proposed permit amendment also updates the existing receiving water limitation for temperature in accordance with the Basin Plan.

As part of a recent WWTP upgrade, the Discharger replaced their chlorination disinfection process with an ultraviolet disinfection process, eliminating the use of all chlorine-containing agents in the wastewater treatment process. The Discharger requested to have their Monitoring and Reporting Program (MRP) amended to address wastewater disinfection process changes implemented at the WWTP. Therefore, the proposed MRP amendment includes removal of the continuous chlorine monitoring of the WWTP effluent discharged to surface water and other modifications corresponding to the change in the disinfection process.

The Regional Water Board adopted Cease and Desist Order (CDO) No. R5-2002-0211, and subsequent amendments, to provide a time schedule for the Discharger to: (1) comply with Receiving Water Limitations and Effluent Limitations for nitrite, nitrate plus nitrite, and total trihalomethanes as specified in WDR Order No. R5-2002-0210, and (2) complete and comply with Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) Amendments for pH, turbidity and temperature. The Discharger is in compliance with the requirements of CDO No. 2002-0211, as amended by Resolution No. R5-2005-0029, and the corresponding compliance dates. Therefore the tentative Regional Water Board Resolution proposes rescission of CDO No. R5-2002-0211 and subsequent amendments.

ISSUES:

Copper Monitoring Frequency:

The Discharger is requesting the frequency of the effluent monitoring for copper in the MRP be amended from weekly to quarterly, to be consistent with other priority pollutants lacking reasonable potential in other NPDES permits.

The purpose of the proposed MRP amendment is to update the existing monitoring and reporting requirements for the change in disinfection process. Reduction in copper monitoring frequency was not considered during the development of this proposed amendment. The requested change in copper monitoring frequency would require reissuing the MRP for public comments prior to Regional Water Board consideration for adoption.

Although the implementation of the WER study conclusions led to the removal of the existing copper limitation, Water Board staff believes that continued copper effluent monitoring is appropriate to provide data for the reasonable potential analysis for renewal of the NPDES permit, that expires in December 2007.

California Sportfishing Protection Alliance (CSPA) comments regarding public process for development of copper WER:

CSPA comments that the Regional Water Board (1) did not comply with the SIP requirements, (2) did not consider factors listed in CWC 13241, or comply with CEQA requirements for development of a site-specific objective. The State Water Board amended the SIP in 2005 to allow WERs to be established in individual NPDES permits through the normal NPDES permit development process, rather than through the Basin Planning process. The process followed to develop the copper WER is consistent with the amended SIP requirements and consideration of CWC Section 13241 factors and CEQA are not triggered. Finally CSPA believes that the lowest recorded hardness of 23 mg/L should not have been excluded from analysis. Staff believes there is sufficient justification that the 23 mg/l hardness reading is in error to exclude it from the data set.

Temperature Basin Plan Amendment Monitoring:

Regional Water Board Resolution No. R5-2003-0006, that amended the Basin Plan to add the site-specific temperature objectives for Deer Creek, directed the Executive Officer to modify Monitoring and Reporting Program Order No. R5-2002-0210 to include temperature, flow and biological monitoring, consistent with Section 8.1.1 of the January 2003 basin plan amendment staff report. A requirement for the Discharger conduct this monitoring has been added to the Monitoring and Reporting Program.

Mgmt. Review _____
Legal Review _____

25 January 2007
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