

ITEM: 23

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

BOARD ACTION: *Consideration of an Order Amending Waste Discharge Requirements Order No. R5-2008-0173 (NPDES No. CA0078662)*

BACKGROUND: On 4 December 2008, the Central Valley Water Board issued Waste Discharge Requirements Order R5-2008-0173 for the El Dorado Irrigation District's Deer Creek Wastewater Treatment Plant (Facility) in El Dorado County. The activated-sludge treatment system at the Facility includes secondary biological nutrient removal, tertiary filtration, and ultraviolet (UV) disinfection. Tertiary-treated wastewater is discharged to Deer Creek, a tributary to the Cosumnes River and the Sacramento San Joaquin Delta.

The California Sportfishing Protection Alliance (CSPA) filed a petition for a writ of mandate challenging the Permit issued by the Central Valley Water Board (Sacramento County Superior Court, Case No. 34-2009-80000309). On 28 March 2011, the Sacramento County Superior Court issued a judgment requiring the Central Valley Water Board to address the following:

- (1) Reconsider the effluent limitations for the hardness-dependent metals;
- (2) Reconsider whether to impose an effluent limitation for aluminum;
- (3) Add an effluent limitation for bromodichloromethane and modify sampling requirements for bis (2-ethylhexyl) phthalate; and
- (4) Consider whether use of a certified laboratory for temperature and pH monitoring is legally or factually possible.

This Order proposes revisions to Order R5-2008-0173 to comply with the judgment. The proposed revisions are discussed in Findings 4 through 7 of the proposed Order and in the revised Fact Sheet.

ISSUES: The Central Valley Water Board office received public comments from the following interested parties:

- The Discharger; and
- California Sportfishing Protection Alliance (CSPA).

The Staff Response to Comments document included in the agenda package discusses all comments. The following is a summary of the major issues that remain to be addressed:

- (1) **Hardness-Dependent Criteria for Metals.** In light of the Court's uncertainty as to whether the Central Valley Water Board appropriately used effluent or receiving water hardness to calculate hardness-dependent CTR criteria, the Section IV.C.2.b of the Fact Sheet has

been revised to further demonstrate how the hardness-dependent criteria are determined. In the 2008 NPDES permit, the Central Valley Water Board relied on scientific literature to calculate protective hardness-dependent CTR criteria, considering all discharge conditions. The reasonable worst-case downstream ambient hardness was calculated to ensure the hardness-dependent metals do not cause receiving water toxicity under any downstream receiving water condition. This is required to comply with the CTR criteria and the narrative toxicity objective.

- (2) **Aluminum.** The Court required the Central Valley Water Board to either use the USEPA chronic criterion for aluminum or develop a site-specific standard for aluminum to protect freshwater aquatic life. A site-specific interpretation of the narrative toxicity objective was developed by using site-specific data and studies, which demonstrate that the Arid West Technical Report is an applicable study for use at Deer Creek. Based on the site-specific analysis, there is no reasonable potential for the narrative toxicity objective to be exceeded. However, an annual average limit of 200 µg/L was added because the pollutant variability analysis required by the Court order estimated the MEC to be greater than 200 µg/L, thus resulting in reasonable potential to exceed the Department of Public Health's Secondary Maximum Contaminant Level of 200 µg/L.
- (3) **Bromodichloromethane and Bis (2-ethylhexyl) phthalate Effluent Limitations.** The Court required the Central Valley Water Board to:
(a) include a bromodichloromethane effluent limit, and (b) to require that further bis (2-ethylhexyl) phthalate sampling be conducted using laboratory equipment that does not contain bis (2-ethylhexyl) phthalate. These modifications have been included in the proposed Order amended the existing NPDES permit.
- (4) **Environmental Laboratory Accreditation Program (ELAP) requirements for pH and Temperature Sampling.** The Court required the Central Valley Water Board to "consider whether it is legally and factually possible for the District to comply with the requirements of Water Code section 13176 either: (i) by having its on-site laboratory re-certified or (ii) by having certified laboratory personnel travel to the Deer Creek WWTP site and conduct the testing on-site." In April 2010, the District leased the on-site laboratory at its El Dorado Hills Wastewater Treatment Plant to Sierra Foothills Laboratory (a certified private contract lab) for a minimum of 3 years in an effort to save costs. Therefore, it is factually impossible for the District to recertify its own lab because it no longer operates its own lab. Although the Regional Water Board can require a discharger to comply with section 13176, the board cannot require a Discharger to have a certified lab on its site. (Wat. Code § 13360.) Additionally, the Regional Board cannot legally require a private, third-party lab to obtain ELAP certification. Sierra Foothills Laboratory is not certified for pH and temperature. Even if it decided to obtain this certification and send its own personnel and lab equipment to collect an onsite sample for pH and temperature, in this instance, it is

not possible for the collected samples at the Deer Creek WWTP site to be returned to the lab at the El Dorado Hills WWTP for proper analysis within the required holding time. In addition, it is not legally or factually possible to require ELAP certification of individual personnel or equipment, because ELAP only certifies laboratories. Therefore, neither the District's staff at the site nor their equipment can be ELAP certified.

Additional monitoring expense associated with ELAP certification makes it economically impossible for the District to comply with the requirements of Water Code section 13176. The NPDES permit fact sheet provides further detail as to why it is not legally or technically possible for the Regional Board to require ELAP certification for pH and temperature monitoring at the Deer Creek WWTP site.

Mgmt. Review _____

Legal Review _____

9/10 June 2011

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