

Regional Water Quality Control Board  
Central Valley Region  
Board Meeting – 25/26 January 2007

Response to Written Comments for El Dorado Irrigation District  
Deer Creek Wastewater Treatment Plant  
Proposed Waste Discharge Requirements Order Amendment

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The following are responses to written comments received from interested parties in response to the proposed Tentative Waste Discharge Requirements (WDR) Amendments (NPDES No. CA0078662) for the El Dorado Irrigation District Deer Creek Wastewater Treatment Plant issued on 28 November 2006. Written comments from interested parties on the proposed Amendment were required to be received by the Regional Water Quality Control Board (Regional Water Board) by 2 January 2007 in order to receive full consideration. Comments were received by the due date from the following parties:

1. El Dorado Irrigation District
2. California Sportfishing Protection Alliance
3. Central Valley Clean Water Association

Written comments from the above interested parties are summarized below, followed by the response of the Regional Water Board staff.

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**1. EL DORADO IRRIGATION DISTRICT (DISCHARGER) COMMENTS**

**DISCHARGER –COMMENT #1.** As defined by the proposed amendment to the existing Waste Discharge Requirements (permit), the WWTP discharge does not have reasonable potential to cause or contribute to an exceedance above the applicable copper water quality criteria, therefore removal of the copper effluent limitations is proposed. The Discharger is commenting that the existing weekly copper effluent monitoring frequency be reduced to not exceed quarterly.

**RESPONSE**

The copper effluent monitoring in the MRP is not modified in the proposed amendment. 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 reduction in 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 in the permit, Water Board staff believes that continued copper effluent monitoring is appropriate for the reasonable potential analysis for renewal of the NPDES permit, that expires in December 2007.

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**DISCHARGER –COMMENT #2.** The Discharger commented that clarification should be made through the proposed amendment to include the words “total recoverable” when referring to the effluent copper concentration. The Discharger also suggests alternate wording throughout the proposed amendment for further clarification

**RESPONSE**

Staff concurs with the suggested text that provides further clarification to the proposed WDR amendment and has made the appropriate clarification to the tentative permit amendment included in the January 2007 Regional Water Board agenda package.

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**2. California Sportfishing Protection Alliance (CSPA) Comments**

**CSPA –COMMENT #1.** The Regional Board did not hold a public hearing regarding the development of the site-specific objective for copper contrary to the requirements of the SIP. The public has been excluded from the process of development of the proposed water quality objective.

**RESPONSE**

SWRCB Resolution 2005-0019 dated February 24, 2005 amended the SIP to allow for water effect ratios (WER) to be established in individual NPDES, rather than through the Basin Planning process. The SIP now allows Regional Boards to adjust the criteria/objective for metals with discharger-specific WERs established in accordance with EPA guidance (EPA-822-R-01-005) *Streamlined Water-Effect Ratio Procedure for Discharges of Copper* following the normal NPDES permit development process which was done in this case. Section 5.2 of the SIP applies to site-specific objectives established to amend the Basin Plan, not site-specific objectives related to NPDES permit development and renewal.

**CSPA –COMMENT #2.** In proposing the site-specific water quality objective the proposed Permit does not contain an analysis of the factors listed in Water Code Section 13241.

**RESPONSE**

Water Code Section 13241 applies to site-specific water quality objectives established during the basin plan amendment process. SWRCB Resolution 2005-0019 dated February 24, 2005 amended the SIP to allow for WERs to

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be established in individual NPDES, rather than through the Basin Planning process. Therefore, analysis of the Section 13241 factors is not required. Section 1.2 of the SIP allows for WER ratios to be established in accordance with EPA guidance (EPA-822-R-01-005) *Streamlined Water-Effect Ratio Procedure for Discharges of Copper*. The discharger performed a WER Study for copper consistent with EPA guidance and the SIP.

**CSPA –COMMENT #3.** Finding 20.d states the lowest recorded upstream hardness value was 23 mg/L. However, further investigation indicates that the hardness value represented an analytical reporting error. Upstream receiving water hardness recorded on the same day also indicated a hardness of 226 mg/L. There is no information to conclude that the lower hardness is invalid as opposed to the higher value, only that they conflict.

**RESPONSE**

The hardness monitoring data submitted by the Discharger indicated that the lowest receiving water hardness value of 23 mg/L as CaCO<sub>3</sub> was measured on 5 November 2003. The Discharger submitted subsequent information and laboratory documentation demonstrating that this value was reported incorrectly. The corresponding laboratory bench sheet indicated that the use of the appropriate conversion factor of “10” to convert hardness units to mg/l of CaCO<sub>3</sub> was overlooked. This documentation shows that the value of 23 was not properly multiplied by 10 for a converted value of 230 mg/L as CaCO<sub>3</sub>, for the upstream receiving water hardness on 5 November 2003. The reported receiving water hardness value of 226 mg/L as CaCO<sub>3</sub> measured during the same time period confirmed the error.

Staff determined that the originally reported hardness value for 5 November 2003 was in error and removed it from the dataset used to determine reasonable potential. As discussed in the Fact Sheet, the worse-case receiving water hardness of 66 mg/L as CaCO<sub>3</sub> was used in the reasonable potential analysis.

**CSPA –COMMENT #4.** The establishment of water quality objectives is subject to the requirements of CEQA. A thorough CEQA analysis is necessary to determine the water quality impacts of the proposed water quality objective and the impacts to surface water beneficial uses. The proposed permit fails to fulfill the requirements of the SIP and comply with the Clean Water Act, Federal Regulations and CEQA.

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**RESPONSE**

A thorough CEQA analysis is not required since SWRCB Resolution 2005-0019 dated February 24, 2005 amended the SIP to allow for water effect ratios (WER) to be established in individual NPDES permits through the permit adoption process, rather than through the Basin Planning process. Under Water Code 13389, the action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

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**3. CENTRAL VALLEY CLEAN WATER ASSOCIATION (CVCWA) COMMENTS**

**CVCWA –COMMENT #1. Prohibition of the Use of Chlorine.** The proposed Discharge Prohibition for chlorine may be appropriate for this discharger that is using ultraviolet disinfection for its effluent; however, there are many permittees in the Central Valley for which a similar prohibition would have significant negative impacts.

**RESPONSE** Per Regional Water Board staff request, the Discharger submitted certification that chlorine and/or chlorine containing substances are not used in the wastewater treatment process for effluent discharged to the receiving water. The discharger's certification supports the proposed removal of the existing chlorine residual effluent limitations and corresponding monitoring. Water Board staff will only consider removal of chlorine-related effluent limitations and monitoring with Discharger certification that chlorine and /or chlorine-containing substances are not used in the treatment process for the regulated effluent. Therefore, the discharge prohibition is being considered on an individual-discharger basis.

**CVCWA –COMMENT #2. Copper Water Effect Ratio (WER).** There is concern that the Regional Board may view the development of WERs as a surrogate for using the appropriate hardness value for calculating California Toxic Rule (CTR) metals criteria. WER studies are expensive and time consuming. Before public agencies expend the resources to develop a proper WER, the Regional Board should be certain that such a study is necessary.

**RESPONSE** Conducting a WER study is not a requirement; it is an alternative that the State Implementation Plan allows and is the Discharger's decision on

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whether the study shall be conducted and submitted to the Regional Board for consideration. Regional Water Board staff procedures for selecting a hardness value are consistent with the State Implementation Plan and the State Water Resources Control Board (State Water Board) decision (Water Quality Order No. 2004-0013). The State Water Board Order states: (1) the hardness value selected should provide protection for all times of discharge under varying hardness conditions, and (2) it is appropriate for the Regional Water Board to use the worst-case observed minimum hardness.

**CVCWA –COMMENT #3. Upstream Hardness.** We are concerned with the Regional Board's use of upstream hardness to calculate California Toxic Rule (CTR) criteria for hardness-dependent metals. The use of upstream hardness does not account for the hardness of the effluent and its impact on the toxicity of effluent to organisms in the receiving water. Thus, we encourage the Regional Board to re-evaluate its current practice and policy of almost always using upstream hardness. We look forward to continual discussion on this issue.

**RESPONSE** As required by the State Implementation Plan, the reasonable potential analysis and the proposed effluent limitations were calculated for hardness-dependent CTR metals using the receiving water hardness. (See response in the above Comment #2 regarding hardness.)