

Central Valley Regional Water Quality Control Board
20/21 February 2025 Board Meeting

Response to Written Comments on
Tentative Waste Discharge Requirements for
Paradise Irrigation District
Paradise Water Treatment Plant
Butte County

At a public hearing scheduled for 20/21 February 2025, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of tentative Waste Discharge Requirements (NPDES No. CA0083488) for Paradise Irrigation District's Paradise Water Treatment Plant. This document contains responses to written comments received from interested persons and parties in response to the tentative order. Written comments from interested persons and parties were required to be received by the Central Valley Water Board by 6 December 2024 in order to receive full consideration. Comments were received prior to the deadline from:

1. Paradise Irrigation Discharger (Discharger) (received 6 December 2024)

Written comments from the above party are summarized below, followed by the response of Central Valley Water Board staff.

PARADISE IRRIGATION DISTRICT (DISCHARGER) COMMENTS

DISCHARGER COMMENT #1 – Instream Waste Concentration

An IWC of 100% does not reflect actual conditions in the receiving water resulting from the substantial dilution that occurs. PID requests that the IWC be modified to a more reasonable value that reflects, at least in part, the existing available dilution similar to the approach used to grant a dilution credit of 9:1 for DCBM. In addition, PID requests that the rationale for how the IWC was determined be provided in the Fact Sheet, at a similar level of detail to that provided for dilution credits and other permit requirements.

RESPONSE:

Staff do not concur with the Discharger's request to modify the instream waste concentration (IWC) for chronic whole effluent toxicity. Since chronic whole effluent toxicity is an aquatic life criterion, an aquatic life mixing zone is needed to justify an IWC of less than 100 percent effluent. Attachment F, section IV.C.2.c.iii. of the tentative Order details a mixing zone study, performed by the Discharger in 2018, that provided an analysis of the available dilution, in the receiving water, for human health criteria. The mixing zone study demonstrated, to the satisfaction of the Central Valley Water

Board, that a dilution credit for dichlorobromomethane (DCBM) criteria was appropriate. The study did not provide the necessary information to support the establishment of an aquatic life criteria mixing zone in the receiving water nor the establishment of a mixing zone specifically for chronic whole effluent toxicity.

On 8 April 2023, Staff sent a report of waste discharge (ROWD) reminder letter to the Discharger which included the following information related to IWC:

Instream Waste Concentration (IWC)

The Toxicity Provisions defines the IWC as the concentration of effluent in the receiving water after mixing and is the concentration of effluent used for the whole effluent toxicity testing. By default, the Instream Waste Concentration (IWC) used to determine toxicity will be set at 100% effluent. IWC for the whole effluent toxicity testing can be reduced if a mixing zone is allowed. The Toxicity Provisions allow Mixing Zones and Dilution Credits to be granted for the numeric aquatic toxicity objectives in accordance with Section 1.4.2 of the Policy for Implementation of Toxics Standards for Inland Surface Water, Enclosed Bays, and Estuaries of California (SIP 2005). If you wish to request an IWC less than 100% effluent, justification should be provided with the upcoming ROWD.

On 21 June 2024, the Discharger submitted a ROWD that did not contain a request for an IWC of less than 100 percent effluent or documentation to support consideration of an IWC of less than 100 percent effluent.

At this time, there is insufficient information in the record to support granting an aquatic life criteria mixing zone and reducing the IWC to less than 100 percent effluent, as a result, no changes to the tentative Order have been made in response to Comment #1. The tentative Order includes a reopener provision that would allow the Order to be reopened to consider a reduced IWC should the permittee provide justification for aquatic life and toxicity dilution credits.

DISCHARGER COMMENT #2 – Chronic Toxicity Monitoring Frequency

Monitoring for chronic toxicity is required once per quarter in the Tentative Order (Monitoring and Reporting Program Section V.B.2, p. E-7) while in the current permit, toxicity testing is only required annually. Quarterly testing is excessive given that reasonable potential is triggered by a value of 12.3% effect with no dilution. If dilution was considered and the IWC were less than 100%, it is unlikely that there would be reasonable potential and there would be no reason for an effluent limit. Given the low probability of a toxicity limit exceedance, PID requests that the monitoring frequency be changed from quarterly to annual, with testing to be performed at the IWC.

RESPONSE:

Staff do not concur with the Discharger's request to change the chronic whole effluent toxicity monitoring frequency from quarterly to annually. The State Policy for Water Quality Control: Toxicity Provisions (Toxicity Provisions) require quarterly chronic whole effluent toxicity monitoring for non-publicly owned treatment work (POTWs) discharging less than 5 million gallons per day (mgd) that have reasonable potential for chronic whole effluent toxicity. The Discharger's Facility has a design flow capacity of 2 mgd, and the tentative Order contains effluent limits for chronic whole effluent toxicity due to a reasonable potential determination.

The Toxicity Provisions do allow for a reduction in the monitoring schedule for chronic aquatic toxicity. Section III.C.4.b.i(B) of the Toxicity Provisions specifies conditions in which the Central Valley Water Board may consider a reduction in monitoring frequency. However, at this time, the Discharger does not meet the conditions specified in section III.C.4.b.i(B) of the Toxicity Provisions.

Therefore, in accordance with the Toxicity Provisions, the tentative Order is required to have quarterly chronic toxicity monitoring. No changes are proposed to the tentative Order.