Central Valley Regional Water Quality Control Board
8/9 December 2022 Board Meeting

Revised Response to Comments (8 December 2022)
for the
City of Tracy
Tentative Waste Discharge Requirements

The following are Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements, National Pollutant Discharge Elimination System (NPDES) Permit CA0079154 renewal for the City of Tracy (Discharger) Wastewater Treatment Plant (Facility).

The tentative NPDES Permit was issued for a 30-day public comment period on 11 October 2022 with comments due by 11 November 2022. The Central Valley Water Board received public comments regarding the tentative Permit by the due date from the Discharger and Jo Anne Kipps. Some changes were made to the proposed Permit based on public comments received.

The submitted comments were accepted into the record, and are summarized below, followed by Central Valley Water Board staff responses.

DISCHARGER COMMENTS

1. **Chronic Toxicity Effluent Limitation and Dilution Credit**
   The Discharger contends that chronic whole effluent toxicity does not have reasonable potential to cause or contribute to an instream excursion above the water quality objective, so the tentative Order should contain a trigger and not an effluent limitation for chronic toxicity, citing four State Water Board precedential orders. The Discharger contends their dilution analysis was conducted per U.S. EPA's Water Quality Standards Handbook and mixing zone guidance. The Discharger also informed the Central Valley Water Board of their intent to complete an additional evaluation for their request of 5.25:1 dilution for chronic toxicity and plans to reopen the permit for the consideration of the dilution credit.

   After reviewing Board staff's initial Response to Comments, the Discharger submitted additional comments for Board staff consideration on 6 December 2022. These are discussed below.

RESPONSE: The Central Valley Water Board staff partially concur. The mixing zone study the Discharger references addressed human health in response to State Water Board Order WQ 2009-0003 (*In the Matter of the Petition of Environmental Law Foundation and California Sportfishing Protection Alliance for Review of Waste Discharge Requirements Order No. R5-2007-0136 and Time Schedule Order No. R5-2007-0037 [NPDES No. CA0079154] for the City of Tracy Wastewater Treatment Plant*). Neither the Discharger nor Central Valley Water Board staff could find an aquatic life mixing zone study meeting the requirements of Section 1.4.2 of the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Plan), which are the applicable requirements for authorizing chronic toxicity dilution credits. The proposed Order also contains a reopener provision to allow the Central Valley Water Board to consider a dilution credit for chronic toxicity once the Discharger completes and submits an aquatic life mixing zone study for Central Valley Water Board staff review that fully meets the requirements of Section 1.4.2 of the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Plan).

After reviewing Board staff's initial Response to Comments, the Discharger submitted additional comments for Board staff consideration on 6 December 2022. The current permit includes a chronic toxicity monitoring trigger of 1 TUc at 100 percent effluent. The Discharger's chronic toxicity data showed two sample results of 2 TUc (as 100/NOEC) on 21 May 2019 and 14 September 2020, both for *Ceriodaphnia dubia* reproduction.

After the 2019 toxicity result of 2 TUc, the Discharger evaluated if the result was greater than 1.3 TUc (as 100/EC25) and had a percent effect of greater than 25 percent at 100 percent effluent. The result was 5.2 TUc (as 100/EC25) with a 38 percent effect at 100 percent effluent. The Discharger took two additional samples within 6 weeks of the initial routine sampling event exceeding the chronic toxicity trigger. The 6-week median was less than 1.3 TUc (as 100/EC25) and the percent effect was less than 25 percent at 100 percent effluent. The Discharger checked for operational or sample collection issues and returned to routine chronic toxicity monitoring.

After the 2020 toxicity result of 2 TUc, the Discharger evaluated if the result was greater than 1.3 TUc (as 100/EC25) and had a percent effect of greater than 25 percent at 100 percent effluent, in line with permit guidance. The result was 1.1 TUc (as 100/EC25) with a 27 percent effect at 100 percent effluent. Therefore, based on Order R5-2017-0113, Special Provision VI.C.2.a.ii(a), the Discharger did not conduct accelerated monitoring and returned to routine monitoring.

Board staff therefore determined that chronic toxicity does not have reasonable potential to cause or contribute to an in-stream excursion above the Basin Plan's narrative toxicity objective.

2. **Total Dissolved Solids Effluent Limitation**
   The Discharger requests the continuation of the total dissolved solids mass-based effluent limitation contained in Order R5-2017-0113 in the proposed Order.

   RESPONSE: The Central Valley Water Board staff concur, and the total dissolved solids mass-based effluent limitation has been retained in the proposed Order.

3. **Pyrethroids Pesticides Monitoring**
   The Discharger contends that, since they completed water column pyrethroids effluent monitoring before it was required in their permit, it is inappropriate to state that they did not complete the required monitoring per Resolution R5-2017-0057 and requests the removal of the text below contained in Attachment F, section VII.E.5:

   "The Discharger did not complete receiving water pyrethroids baseline monitoring or pyrethroids water column toxicity monitoring as required by the BPA. Thus, this Order includes the outstanding receiving water pyrethroids baseline monitoring and pyrethroids water column toxicity monitoring."

   The Discharger also requests the following revision to the language contained in section VI.C.3.c of the proposed Order to reflect that publicly owned treatment works (POTWs) are not sources of pyrethroids and that the Pyrethroids Management Plan consists of public outreach actions:

   "If concentrations of pyrethroids in the discharge are found to exceed the acute and/or chronic pyrethroids triggers (Table 4-2 of the Basin Plan), the Discharger must submit a draft pyrethroid **public outreach** plan for approval by the Executive Officer."

   RESPONSE: The Central Valley Water Board staff do not concur on all requested changes. Although the Discharger was not previously subject to pyrethroids pesticides monitoring requirements, the Discharger conducted the water column pyrethroids effluent baseline monitoring but did not complete the receiving water pyrethroids baseline monitoring and pyrethroids water column toxicity monitoring required by Basin Plan Amendment (BPA) for Control of Pyrethroids Pesticides Discharges (Resolution R5-2017-0057). Thus, the proposed Order includes the remaining baseline monitoring to be conducted to fulfill the requirements of the Basin Plan Amendment. To remove any implication that the Discharger was in violation of an existing requirement, permit text in Attachment F, section VII.E.5, has been revised to state:

"This Order includes receiving water pyrethroids baseline monitoring and pyrethroids water column toxicity monitoring which is required by the BPA."

The Central Valley Water Board staff also do not concur with the request to modify the language contained in section VI.C.3.c of the proposed Order. The BPA acknowledges that primary sources of pyrethroids pesticides are from agricultural use and municipal stormwater; however, the BPA also names Municipal and Domestic Wastewater Dischargers as Dischargers subject to the conditional prohibition of pyrethroid pesticides discharges. Additionally, the Pyrethroid Management Plan has not been renamed as a pyrethroid public outreach plan to maintain consistency with the Basin Plan Amendment and the terminology that other dischargers use. The details of the Pyrethroid Management Plan, including education and outreach components that may be implemented as part of the Pyrethroid Management Plan, are described in section 4.5.5.2.2.2 of the Basin Plan.

Jo Anne Kipps COMMENTS

1. **Comment 1: Primary Effluent to the Emergency Storage Basin**
   Jo Anne Kipps requests confirmation of the Discharger's ability to pump or otherwise route wastewater discharged to the Emergency Storage Basin to the Primary Effluent Distribution Box and a description of how this is done. Furthermore, Jo Anne Kipps notes that Google Earth satellite images since 2017 show the Emergency Storage Basin to contain evidence of frequent discharges.

   RESPONSE: The Central Valley Water Board contacted the Discharger for an accurate response to Ms. Kipps' comment. The Discharger confirmed that primary effluent is routed from the Primary Effluent Distribution Box to the equalization basin to the aeration basins. When the primary effluent storage capacity of the equalization basin is exceeded, overflow from the equalization basin is discharged to the Emergency Storage Basin. The equalization basin was designed to equalize peak wet weather flows at full Facility buildout such that overflow to the Emergency Storage Basin has never occurred. If an emergency requires that primary effluent overflows to the Emergency Storage Basin, three existing primary effluent pumps can be operated such that primary effluent can be pumped to the primary effluent wet well. From this point, primary effluent can be pumped to the aeration basins or back to the equalization tank. The permit facility description has been updated to include this information.

   Furthermore, the Discharger clarified that frequent emergency discharges to the Emergency Storage Basin are not occurring; rather, groundwater from active construction activities to complete facility upgrades and expansion has been pumped to and temporarily stored in the Emergency Storage Basin over the past

several years. Central Valley Water Board staff will notify the Discharger that use of the Emergency Storage Basin for construction dewatering in the future may require a Report of Waste Discharge (ROWD) be submitted to the Waste Discharge to Land Permitting Unit for consideration.

2. **Comments 2-8 Relating to Sludge Disposal and the Sludge Drying Beds**
Jo Anne Kipps requested information about sludge disposal and the sludge drying beds which include capacity, design, Title 27 standards, and groundwater degradation concerns. Ms. Kipps also requests that the permit's authorized discharge flow increase be removed until potential groundwater degradation concerns have been addressed and mechanical dewatering capacity is in place.

RESPONSE: Sludge handling and disposal requirements are covered separately in Waste Discharge Requirements (WDR) Order R5-2007-0038. Comments 3-8 and most of Comment 2 are therefore beyond the scope of this proceeding. Waste Discharge to Land Permitting Staff have been made aware of Ms. Kipps' comments and will address these comments upon the next update of WDR Order R5-2007-0038.

With respect to Comment 2, the Discharger clarified that temporary mechanical dewatering practices are in place during the Facility's construction and phased expansion to handle the increase in sludge production. The Discharger plans to construct permanent mechanical dewatering facilities and construction is anticipated to start in 2023. Material changes in the Facility's sludge handling will trigger the submittal of a ROWD to update WDR Order R5-2007-0038. An improved description of the sludge practices and planned improvements have been added to the proposed Order. A condition to certify the Discharger's ability to accommodate and de-water the increased sludge volume has been added to the capacity increase provisions of the proposed Order. Section VI.C.6.b of the Permit has been revised as follows, as well as Sections VI.C.1.i and VI.C.1.j to include similar text:

> **b. Discharge Flow Increase (12.5 MGD).** Phase 2 improvements include construction of a second outfall pipeline and diffuser and second primary clarifier. Before initiating average dry weather flows greater than 10.8 MGD, the Discharger shall provide certification of completion of Phase 2 Improvements by the design engineer. The certification of completion submitted by the Discharger shall certify that the upgraded Facility can accommodate and de-water the increased sludge volume and should certify that the upgraded Facility can meet the requirements of sections IV.A.1, IV.A.2, and V.A of this Order.

Staff do not concur with the request to remove the authorized NPDES surface water discharge capacity flow increase. This is because mechanical dewatering of the sludge is currently in place and permanent/expanded dewatering of the sludge is planned to ensure adequate capacity, also a ROWD to update Order R5-2007-0038 is required to expand or change sludge handling practices. Essentially, adequate dewatering will ensure excess water can be routed to the treatment operations and reduce potential discharge to groundwater associated with sludge handling practices. Given that increased sludge handling will be needed to accommodate the increased discharge capacity, a ROWD is required that will ensure WDRs can be updated if needed. The commenter's concerns regarding groundwater protection with respect to sludge handling operations will be considered during the process of updating WDRs Order R5-2007-0038.