LATE REVISIONS CITY OF TRACY WASTEWATER TREATMENT PLANT SAN JOAQUIN COUNTY

NPDES Permit Renewal (NPDES NO. CA0079154)
Regional Water Quality Control Board, Central Valley Region
Board Meeting – 9 December 2022
Agenda Item No. 19

The proposed Order for the City of Tracy (Discharger) Wastewater Treatment Plant has late revisions to remove the chronic toxicity effluent limitation since additional information provided by the Discharger on 6 December 2022 resulted in a determination of no reasonable potential for chronic toxicity to cause or contribute to an in-stream excursion above the Basin Plan's narrative toxicity objective.

- 1. Remove Effluent Limit for Chronic Whole Effluent Toxicity in Section IV.A.1.e
- Modify Reopener Provision, Section VI.C.1.f as shown in underline/strikethrough format below:
 - f. Whole Effluent Toxicity. As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a revised new chronic toxicity effluent limitation, a revised acute toxicity effluent limitation, and/or an effluent limitation for a specific toxicant identified in a TRE. Additionally, if the State Water Board revises the SIP's toxicity control provisions, this Order may be reopened to implement the new provisions.
- Modify Reopener Provision, Section VI.C.1.k as shown in underline/strikethrough format below:
 - k. Chronic Whole Effluent Toxicity Dilution Credit. The Discharger requested a dilution credit for chronic whole effluent toxicity in a letter dated 16 September 2022. However, the Discharger has not completed a mixing zone study to analyze the available dilution in the receiving water. Should the Discharger complete a mixing zone study that complies with Section 1.4.2 of the SIP, this Order may be reopened to modify the chronic whole effluent toxicity effluent limitation monitoring trigger, instream waste concentration, and dilution series, and, if applicable, to make other changes as required by the State Policy for Water Quality Control: Toxicity Provisions.
- 4. Add the paragraph below as Section VI.C.2.a.i:
 - i. Numeric Toxicity Monitoring Trigger. The numeric Toxicity Unit (TUc) monitoring trigger is 1 TUc (where TUc = 100/NOEC). The monitoring trigger is not an effluent limitation; it is the toxicity threshold above which the Discharger is required to initiate additional actions to evaluate effluent toxicity as specified in subsection iii, below.
- 5. Modify text to change "effluent limitation" to "monitoring trigger" throughout Section VI.C.2.a

- 6. Modify Compliance Determination Section VII.I as shown in underline/strikethrough format below:
 - I. Chronic Whole Effluent Toxicity Effluent Limitation Trigger (Section IV.A.1.e VI.C.2.a.i). To evaluate compliance with the chronic whole effluent toxicity effluent limitation trigger, the median chronic toxicity units (TUc) shall be the median of up to three consecutive chronic toxicity bioassays during a six- week period. This includes a routine chronic toxicity monitoring event and two subsequent optional compliance monitoring events. If additional compliance monitoring events are not conducted, the median is equal to the result for routine chronic toxicity monitoring event. If only one additional compliance monitoring event is conducted, the median will be established as the arithmetic mean of the routine monitoring event and compliance monitoring event.

Where the median chronic toxicity units exceed 1 TUc (as 100/NOEC) for any end point, the Discharger will be deemed out of compliance with the chronic toxicity effluent limitation as exceeding the chronic toxicity effluent trigger if the median chronic toxicity units for any endpoint also exceed a reporting level of 1.3 TUc (as 100/EC25) AND the percent effect at 100% effluent exceeds 25 percent. The percent effect used to evaluate compliance with the chronic toxicity effluent limitation trigger shall be based on the chronic toxicity bioassay result(s) from the sample(s) used to establish the median TUc result. If the median TUc is based on two equal chronic toxicity bioassay results, the percent effect of the sample with the greatest percent effect shall be used to evaluate compliance with the chronic toxicity effluent limitation trigger.

- 7. Modify Attachment E, Section V.C as shown in underline/strikethrough format below:
 - **WET Testing Notification Requirements.** The Discharger shall notify the Central Valley Water Board within 24-hours after the receipt of test results exceeding the chronic toxicity effluent limitation trigger, or an exceedance of the acute toxicity effluent limitation.
- 8. Modify Attachment F, Section IV.C.5.b.i as shown in underline/strikethrough format below:
 - i. RPA. No dilution has been granted for chronic whole effluent toxicity. Chronic toxicity testing results exceeding 1.3 chronic toxicity units (TUc) (as 100/NOEC) and a percent effect at 100 percent effluent exceeding 25 percent demonstrates the discharge has a reasonable potential to cause or contribute to an exceedance of the Basin Plan's narrative toxicity objective. Based on chronic toxicity testing conducted between February

2019 and January 2022 the maximum chronic toxicity result was 2 TUc (as 100/NOEC) on 21 May 2019 and 14 September 2020 with a percent effect of 5338 percent and 2127 percent, respectively.

After the 21 May 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 14 September 2020 toxicity result of 2 TUc. the Discharger performed an initial toxicity check and 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 1.1 TUc (as 100/EC25) with a 27 percent effect at 100 percent effluent. The Discharger did not conduct accelerated monitoring and returned to routine monitoring. Therefore, the discharge does not have reasonable potential to cause or contribute to an instream exceedance of the Basin Plan's narrative toxicity objective.

- 9. Remove WQBELs paragraph for chronic toxicity in Section IV.C.5.b.ii
- 10. Modify Attachment F, Section VI.2.a as shown in underline/strikethrough format below:

Chronic Whole Effluent Toxicity Requirements. The Basin Plan contains a narrative toxicity objective that states, "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." (Basin Plan at section 3.1.20). Based on whole effluent chronic toxicity testing performed by the Discharger from February 2019 through January 2022, the discharge has does not have reasonable potential to cause or contribute to an in-stream excursion above of the Basin Plan's narrative toxicity objective.

The Monitoring and Reporting Program of this Order requires chronic WET monitoring to demonstrate compliance with the numeric chronic toxicity effluent limitation Basin Plan's narrative toxicity objective. If the discharge exceeds the chronic toxicity effluent limitation monitoring trigger this provision requires the Discharger either participate in an approved Toxicity Evaluation Study (TES) or conduct a site-specific Toxicity Reduction Evaluation (TRE).

11. Replace Figure F-1, WET Accelerated Monitoring Flow Chart, with new Figure F-1 that refers to effluent monitoring trigger, not effluent limitation.

- 12. Modify Attachment F, Section VII.D.2 as shown in underline/strikethrough format below:
 - 2. **Chronic Toxicity**. Quarterly chronic whole effluent toxicity testing is required in order to demonstrate compliance with numeric chronic toxicity effluent limitation—the Basin Plan's narrative toxicity objective.