

Central Valley Regional Water Quality Control Board
18/19 February 2021 Board Meeting

Response to Comments
for the
City of Manteca
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 CA0081558 renewal for the City of Manteca (Discharger) Wastewater Quality Control Facility (Facility).

The tentative NPDES Permit was issued for a 30-day public comment period on 28 October 2020 with comments due by 27 November 2020. The Central Valley Water Board received public comments regarding the tentative Permit by the due date from the Discharger and the Central Valley Clean Water Association. 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 Compliance Determination

Various sections throughout the Tentative Order reference Compliance Determination section VII.L for procedures for calculating the six-week median for chronic toxicity. The Discharger contends that section VII.L discusses turbidity receiving water limitations and that there is no compliance determination section for calculating the chronic toxicity 6-week median.

RESPONSE: Central Valley Water Board staff concur and have revised section VII. Compliance Determination of the Tentative Order to include the compliance determination for chronic toxicity. Compliance determination for chronic toxicity has been included as section VII.L of the Tentative Order as shown below, and subsequent sections and references have been renumbered as appropriate:

- L. Chronic Whole Effluent Toxicity Effluent Trigger (Section VI.C.2.a.ii).** To evaluate compliance with the chronic whole effluent toxicity effluent 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 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 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 trigger.

2. Most Sensitive Species Percent Effect

The Discharger identified inconsistencies in the percent effect used to determine the most sensitive species in Attachment E sections V.B and V.E.

RESPONSE: The Central Valley Water Board staff concur. The Tentative Order had been modified to use a percent effect of 25 percent in Attachment E – Monitoring and Reporting Program, section V.E consistent with section V.B. Sentence four of Attachment E – Monitoring and Reporting Program, section V.E.2 Determination of Most Sensitive Species, has been revised as shown below:

If none of the tests in the species sensitivity screening exceeds 1 TUc (as 100/NOEC), but at least one of the species exhibits a percent effect greater than 25 percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species.

3. Ammonia Effluent Limitations

The Discharger identified inconsistencies in the final ammonia effluent limitations throughout the Tentative Order. The Discharger also contends that the average weekly effluent limitations (AWEL) for ammonia was calculated using the 95th percentile occurrence probability instead of the 98th percentile occurrence probability as stated in Attachment H of the tentative Order.

RESPONSE: The Central Valley Water Board staff concur that the final effluent limitations for ammonia are inconsistent and that the AWEL was calculated incorrectly using the 95th percentile instead of the 98th percentile. During Central Valley Water Board staff's review of the ammonia limits calculations, other inconsistencies were noted in the calculations; therefore the final effluent limitations for ammonia were recalculated for the summer season (1 April to 30 November) and winter season (1 December to 31 March) using effluent data submitted in self-monitoring reports from September 2016 through August 2019. The corrected final effluent limits for ammonia at Discharge Point 001 have been modified in Table 4 Effluent Limitations as shown in part below and throughout the Tentative Order as necessary:

Table 4. Effluent Limitations

Parameters	Units	Average Monthly	Average Weekly
Ammonia Nitrogen, Total (as N) (1 April – 30 November)	milligrams per liter (mg/L)	2.0	4.2
Ammonia Nitrogen, Total (as N) (1 April – 30 November)	pounds per day (lbs/day) (see table note 1. below)	160	340
Ammonia Nitrogen, Total (as N) (1 April – 30 November)	lbs/day (see table note 2. below)	290	610
Ammonia Nitrogen, Total (as N) (1 December – 31 March)	mg/L	2.5	6.2
Ammonia Nitrogen, Total (as N) (1 December – 31 March)	lbs/day (see table note 1. below)	200	510
Ammonia Nitrogen, Total (as N) (1 December – 31 March)	lbs/day (see table note 2. below)	360	910

Table 4 Notes:

- (1) Based on an average dry weather flow of 9.87 million gallons per day (MGD). Effective immediately and until Executive Officer's written approval of flow increase (Special Provisions VI.C.6.b).
- (2) Based on an average dry weather flow of 17.5 MGD. Effective upon Executive Officer's written approval of flow increase (Special Provisions VI.C.6.b).

4. Definition of Upstream

The Discharger requests the definition of “upstream” receiving water in section VII.G of the Tentative Order and section X.B.7.f of Attachment E – Monitoring and Reporting Program be clarified to reflect the tidal nature of the receiving water.

RESPONSE: The Central Valley Water Board staff concur. The language has been changed throughout the Proposed Order when describing the receiving water similar to the last sentence of section VII.H of the Tentative Order shown below:

Due to the tidal nature of the receiving water, the direction of the San Joaquin River flow at the time of sampling will dictate which monitoring location is representative of the “upstream” receiving water and which monitoring location is representative of the “downstream” receiving water.

5. Standard Minerals Monitoring Requirements

The Discharger noticed that Attachment E – Monitoring and Reporting Program section VIII.B.2 list required groundwater monitoring for standard minerals, but Table E-9. Groundwater Monitoring Requirements does not include monitoring requirements for standard minerals. The Discharger requests that monitoring requirements for standard minerals be added to Table E-9 or the list item in section VIII.B.2 for standard minerals be removed.

RESPONSE: The Central Valley Water Board staff determined that the footnote was included in error and it has been removed from the Proposed Order.

6. Incomplete Sentence in Table Footnote

The Discharger noticed an incomplete sentence at the end of Attachment E – Monitoring and Reporting Program section IX.B.2.b that reads, “The Discharger shall not”, and requests that the sentence be completed or removed.

RESPONSE: The Central Valley Water Board staff determined there was a typographical error, and the incomplete sentence has been removed in the Proposed Order.

7. Section Reference

The Discharger contends that Attachment E – Monitoring and Reporting Program section X.B.7.f should refer to the Tentative Order section IV.A.1.e instead of section IV.A.1.d.

RESPONSE: The Central Valley Water Board Staff concur and the typographical error has been corrected in the Proposed Order.

8. Clarify Meaning of Supplemental Irrigation

The Discharger requests clarification for the definition of supplemental irrigation used to determine the variable Csi in Attachment E – Monitoring and Reporting Program section X.D.7.

RESPONSE: The “supplemental irrigation” for variable Csi is any irrigation water other than wastewater produced at the Facility (e.g., groundwater supply). Clarifying text has been added to the Proposed Order.

Central Valley Clean Water Association (CVCWA) COMMENTS

1. Ammonia Effluent Limitations

CVCWA also contends that the ammonia AWELs were calculated using the 95th percentile occurrence probability instead of the 98th percentile occurrence probability. CVCWA suggests the same edits as the Discharger to the ammonia AWEL multiplier and the ammonia AWELs throughout the Tentative Order.

RESPONSE: See the response to Discharger comment three above.

2. Central Valley Salinity Alternatives for Long Term Sustainability (CV-SALTS)

Due to the recent approval by U.S. EPA of the CV-SALTS Basin Plan Amendment, CVCWA suggests incorporating an updated reopener provision in the Tentative Order section VI.C.1 and modified rationale for the electrical conductivity effluent limitations in Attachment F section IV.C.3. regarding CV-SALTS.

RESPONSE: The Central Valley Water Board staff concur that update language regarding the CV-SALTS Basin Plan Amendment is needed. The Proposed Order includes the following revised reopener language consistent with CVCWA’s comment at Waste Discharge Requirements section VI.C.1.h and in the Fact Sheet as appropriate:

- h. **Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).** On 17 January 2020, certain Basin Plan Amendments to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the Central Valley became effective. Other provisions subject to U.S. EPA approval became effective on 2 November 2020, when approved by U.S. EPA. As the Central Valley Water Board moves forward to implement those provisions that are now in effect, this Order may be amended or modified to incorporate new or modified requirements necessary for implementation of the Basin Plan Amendments. More information regarding these Amendments can be

found on the [Central Valley Salinity Alternatives for Long-Term Sustainability \(CV-SALTS\) web page:](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

(https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/)

With regard to the requested changes to the Fact Sheet discussion for salinity, the Proposed Order includes revised language in the Fact Sheet (Attachment F), Section IV.C.3.b.iv.(c) that incorporates the intent of CVCWA's suggested language, as follows:

- (c) **WQBEL's.** As discussed above, the discharge does not have reasonable potential to cause or contribute to an instream excursion of water quality objectives for salinity. However, allowing the Discharger to increase its current salt loading may be contrary to the Region-wide effort to address salinity in the Central Valley. Therefore, this Order includes a performance-based effluent limitation of 1000 $\mu\text{mhos/cm}$ for EC to be applied as a calendar annual average effluent limitation (AAEL) to limit the discharge to current levels. The AAEL, which has been carried forward from previous Order R5-2015-0026, is based on Facility performance and adjusted to account for possible drought, water conservation, and water recycling efforts. Furthermore, this Order requires continued implementation of its Salinity Evaluation and Minimization Plan.

On 17 January 2020, certain amendments to the Basin Plan incorporating a Program to Control and Permit Salt Discharges to Surface and Groundwater (Salt Control Program) became effective. Other amendments became effective on 2 November 2020 when approved by the U.S. EPA. The Salt Control Program is a three-phased program, with each phase lasting 10 to 15 years. The Basin Plan requires all salt dischargers to comply with the provisions of the program. Two compliance pathways are available for salt dischargers during Phase 1.

The Phase 1 Compliance pathways are: 1) Conservative Salinity Permitting Approach, which utilizes the existing regulatory structure and focuses on source control, conservative salinity limits on the discharge, and limits the use of assimilative capacity and compliance time schedules; and, 2) Alternative Salinity Permitting Approach, which is an alternative approach to compliance through implementation of specific requirements such as participating in the Salinity Prioritization and Optimization Study (P&O) rather than the application of conservative discharge limits.

The performance-based AAEL for EC in this Order is consistent with the Alternative Salinity Permitting Approach. If the Discharger is authorized to participate in the Conservative Salinity Permitting

Approach the conservative salinity limits required by the Salinity Control Program will be applied, which may result in more stringent effluent limits.

3. Bay-Delta Plan Water Quality Objectives for Electrical Conductivity (EC)

The 2006 Bay-Delta Plan amendments established water quality objectives in the Southern Delta for salinity expressed as EC of a 14-day running average of 700 micromhos per centimeter (umhos/cm) from 1 April through 31 August and 1,000 umhos/cm from 1 September through 31 March. CVCWA contends that these EC limitations are not enforceable against the Discharger as a result of the Sacramento County Superior Court's orders in the matter of *City of Tracy v. State Water Resources Control Board* (Case No. 34-2009-8000-0392-CU-WM-GD) and *City of Manteca v. State Water Resources Control Board and California Regional Water Quality Control Board for the Central Valley Region* (Case No. 34-2011-80000831). CVCWA also contends that there is no reasonable potential for the Discharger to exceed the EC objective from the 2018 Bay-Delta Plan

RESPONSE: The Central Valley Water Board staff concur. The EC water quality objectives, EC effluent limitations, and corresponding rationale that implemented the Bay-Delta Plan salinity objectives have been revised throughout the Proposed Order consistent with Sacramento County Superior Court's orders. This has resulted in the effluent limitations and salinity minimization requirements being carried forward from existing Order R5-2015-0026. In addition, a reopener has been added for possible inclusion of the Bay-Delta Plan salinity objectives once approved by U.S. EPA in Waste Discharge Requirements section VI.C.1, Reopener Provisions as subsection g, shown below, and in the Fact Sheet of the Proposed Order as appropriate:

- g. **Bay-Delta Plan.** On 25 February 2019, the California Office of Administrative Law approved the 2018 Bay-Delta Plan amendments, which include a numeric water quality objective (WQO) for the San Joaquin River at Vernalis of 1,000 μ mhos/cm maximum, year-round, applied as a 30-day running average of mean daily electrical conductivity. Once approved by the United States Environmental Protection Agency (U.S.EPA), the revised WQO will be applicable to the San Joaquin River at Vernalis and this Order may be amended or modified to implement the Bay-Delta Plan WQO's.