

Central Valley Regional Water Quality Control Board
22 June 2023 Board Meeting

Response to Comments
for
Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of
Discharge to Surface Water
Tentative General Waste Discharge Requirements

The following are Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff responses to comments submitted by interested persons and parties regarding the tentative General Waste Discharge Requirements (WDR), National Pollutant Discharge Elimination System (NPDES) Permit CA585001 renewal for Municipal Wastewater Dischargers That Meet Objectives/Criteria at the Point of Discharge to Surface Water (MGO).

The tentative General Waste Discharge Requirements was issued for a 30-day public comment period on 8 March 2023 with comments due by 7 April 2023. The Central Valley Water Board received public comments regarding the tentative Permit by the due date from Michael Garabedian, Sacramento River Source Water Protection Program (SRSWPP), the City of Galt, the City of Lodi, Robertson Bryan, Inc., Central Valley Clean Water Association (CVCWA), and Jo Anne Kipps. Changes were made to the proposed NPDES 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. Revisions proposed by staff are also summarized below the comments.

MICHAEL GARABEDIAN COMMENTS

1. Issuance of 401 Certifications.

Mr. Garabedian noted concern for issuance of 401 Certification for the Joiner East Project in the City of Lincoln including public engagement, stakeholder transparency, implementation of applicable conservation plans, forest management, and potential fire risks.

RESPONSE: The MGO covers municipal wastewater treatment facilities that provide secondary, advanced secondary, or tertiary treatment and can meet water quality objectives/criteria at the point of discharge to surface water. Comment noted for the record and no changes to the proposed MGO were included. Central Valley Water Board staff have directed Mr. Garabedian's concerns to the applicable unit.

ROBERTSON BRYAN, INC. (RBI) COMMENTS

1. Toxicity Requirements—Current Policy and Statewide Toxicity Provisions.

RBI contends that the tentative MGO was not clear as to how the Statewide Toxicity Provisions would be implemented in the Notice of Applicability (NOA) and suggested the following:

- Only one set of toxicity requirements be issued in NOAs,
- The approval date of the Statewide Toxicity Provisions be used to change which toxicity requirements are used in new and reissued NOAs, and
- A reopener provision for toxicity be included in the MGO (with corresponding Fact Sheet language) in the event that the toxicity requirements in the MGO are not consistent with the Statewide Toxicity Provisions as approved by the United States Environmental Protection Agency (U.S. EPA).

RESPONSE: On 1 May 2023, the U.S. EPA adopted the Statewide Toxicity Provisions. Based on the final adoption of the Statewide Toxicity Provisions, Central Valley Water Board staff have revised the proposed MGO to remove requirements based on the Basin Plan’s narrative toxicity objective so that only requirements based on the Statewide Toxicity Provisions are retained. See Staff Revision 4 below.

2. Recycling Specifications.

RBI provided edits to clarify that the Recycling Specifications in section V.C apply only to enrollees also covered by the Statewide General Order for Water Recycling Requirements, WQ 2016-0068-DDW.

RESPONSE: Central Valley Water Board staff do not concur the section needs clarification. Based on the current language, Recycling Specifications in section V.C state the section is “Applicable To Dischargers That Produce Recycled Water Under the General Order for Water Recycling Requirements”. No changes to the proposed MGO were made.

3. Bacteria Surface Water Limitation

RBI contends that the bacteria surface water limitation in section VI.A.2 of the MGO should be removed since the total coliform effluent limitations are more stringent than the bacteria water quality objective.

RESPONSE: Central Valley Water Board staff do not concur that the receiving water limitation for bacteria should be removed. As documented in Attachment F, section VI.A.1.a, the MGO includes the bacteria objectives from the Bacteria Provisions and a Water Quality Standards Variance Policy (Statewide Bacteria Objective) as a receiving water limitation since they are more stringent for discharges that have not met the Division of Drinking Water Title 22 disinfected tertiary reclamation criteria. Central Valley Water Board staff have revised section VI.A.2 to the following to clarify the applicability of the receiving water limitation:

2. Bacteria (Water Bodies With the Beneficial Use Water Contact Recreation and Not Required to Disinfect to Title 22 or Equivalent Standards). [...].

4. Dissolved Oxygen Surface Water Limitation.

RBI contends that section VI.A.6.b.iv and v of the MGO are not within the Sacramento-San Joaquin Delta and should be removed and placed in their own subsection under section VI.A.6.

RESPONSE: Central Valley Water Board staff concur and has revised section VI.A.6.b.iv and VI.A.6.b.v to be section VI.A.6.c of the MGO as shown below:

- c. **For the Sacramento River from Keswick Dam to Hamilton City from 1 June to 31 August**, dissolved oxygen concentrations shall not:
 - i. Be reduced below 9.0 mg/L; nor
 - ii. Fall below 95 percent of saturation when natural conditions lower dissolved oxygen below 9.0 mg/L.

5. Rotation of the Sensitive Test Species and Species Rescreening.

RBI contends that the MGO should, when referencing the sensitive species rotations in Screening Levels (Attachment C) section VI.C.2 and Attachment E, Monitoring and Reporting Program (MRP), sections V.F.1.b and V.F.2.b, should call out “sensitive species” rather than “test species” because chronic toxicity effluent limitations and triggers issued pursuant to the Provisions apply only to the sensitive species and section IV.B.2.b.iv of the Provisions requires the NPDES permit to specify the most sensitive species.

RBI also proposed that for dischargers that have rotated the sensitive species for the entirety of the 5-year permit term without identifying a single species that is most sensitive, the MGO allow 3-species sensitivity testing once every 15 years as allowed in the Statewide Toxicity Provisions.

RESPONSE: Central Valley Water Board staff concurs, in part, that the test species should be indicated as the “sensitive species”. The Statewide Toxicity Provisions reference only the “most sensitive species”, not “sensitive species”. Central Valley Water Board staff also concur that the three species sensitivity screening should be conducted once every 15 years as the Statewide Toxicity Provisions and proposed MGO currently allow. The proposed MGO was modified as follows to clarify the use of the test species as the “most sensitive species” and the applicability of conducting the species sensitivity screening:

- a. **Attachment C, Section VI.C.** Central Valley Water Board have removed Attachment C, section VI.C due to redundancy of the Most Sensitive Species Screening in MRP section V.F.

- b. **MRP Section V.F.1.b.** Due to the adoption of the Statewide Toxicity Provisions, MRP section V.F.1.b has been removed and subsequent sections have been renumbered as necessary.
- c. **MRP Section V.F.2.a.** Due to the adoption of the Statewide Toxicity Provisions, MRP, section V.F.2.a has been renumbered to MRP, section V.F.1 and revised to the following:
 - 1. **Frequency of Testing for Species Sensitivity Screening.** If the Discharger has not conducted a species sensitivity screening in the past 15 years, issuance or re-issuance of the NOA is to address toxicity, or the effluent used in the species sensitivity screening is no longer representative of the effluent, the species sensitivity screening shall be conducted with the following frequencies, as specified in the NOA:
- d. **Last paragraphs from MRP Section V.F.2.b.** Due to the adoption of the Statewide Toxicity Provisions, MRP, section V.F.2.b has been renumbered to MRP, section V.F.2 and the last paragraphs have been revised to the following:

If the most sensitive species is not able to be determined from the species sensitivity screening discussed above, the Discharger shall rotate the test species as the most sensitive species every toxicity calendar year as follows and specified in the NOA:

- a. *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the toxicity calendar year the NOA is issued;
- b. *Pimephales promelas* (larval survival and growth test) for the entire toxicity calendar year following the toxicity calendar year the NOA is issued;
- c. *Pseudokirchnerella subcapitata* (growth test) for the entire toxicity calendar year of the second year following the toxicity calendar year the NOA is issued; and
- d. Cycling back to *Ceriodaphnia dubia* (survival and reproduction test) after *Pseudokirchnerella subcapitata* (growth test) and through the same rotation.

If a single test exhibits toxicity, demonstrated by a test that results in a “fail” using the TST statistical approach, then the species used in that test shall be established as the most sensitive species until the next NOA reissuance.

6. Priority Pollutant Table Note.

RBI contends that a parenthetical in MRP, section IV.A.2.n does not include all priority pollutants listed in Table E-3 and suggests removing the parenthetical.

RESPONSE: Central Valley Water Board staff concur and have revised MRP, section IV.A.2.n for clarity to the following:

- n. **Priority Pollutants.** For priority pollutant constituents listed in Table E-3, the RL shall be consistent with sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) and the SSM Rule specified under 40 C.F.R. sections 122.21(e)(3) and 122.44(i)(1)(iv).

7. Acute and Chronic Toxicity Specifications under the Provisions.

RBI contends that the Statewide Toxicity Provisions include language that when no effluent is available to conduct a whole effluent toxicity test that the test is not required and that the MGO cannot require a routine or follow-up test when there is no effluent to complete the test. RBI requests that language be added to MRP, section V.B.2 in the event there is no effluent to sample during a routine monitoring test, MMET test, or MMEL test as allowed in the Statewide Toxicity Provisions.

RESPONSE: Central Valley Board staff concur, in part, that the Statewide Toxicity Provisions allow for exceptions to required testing if no effluent is available. For non-continuous dischargers, testing is not required when there is no effluent available to complete routine monitoring, MMET, or MMEL tests. If there is no effluent available to conduct a routine monitoring test, MMET test, or MMEL test for a continuous discharger due to circumstances outside of the discharger's control that were not preventable with the reasonable exercise of care, the Statewide Toxicity Provisions allow the permitting authority to require initiation of a replacement test that is outside of the required time period. Due to the adoption of the Statewide Toxicity Provisions, MRP, section V.B.2 has been renumbered to MRP, section V.B. Central Valley Water Board staff have revised the last paragraph of Replacement Test language in MRP, sections V.A.9 and V.B.11 (previously MRP, sections V.A.1.i and V.B.2.k, respectively) to the following:

If it is determined that any specific monitoring event was not initiated in the required time period due to circumstances outside of the Discharger's control that were not preventable with the reasonable exercise of care, the Discharger is not required to initiate the specific monitoring event in the required time period if the Discharger promptly initiates and ultimately completes a replacement test. For non-continuous dischargers, when there is no effluent available to complete a routine monitoring test, MMET test, or MMEL compliance test, the test shall not be required, and routine monitoring continues at the frequency specified in the NOA.

8. Chronic Toxicity Test Species.

RBI comments that conditions may arise within the term of an NOA that necessitate the Executive Officer to allow the Discharger to test with the second most sensitive species and requests language be added to MRP, section V.B.2.g to allow for Executive Officer approval to use the next most sensitive species for toxicity testing.

RESPONSE: Central Valley Water Board staff concur and have added the following as the last paragraph to MRP, section V.B.7 (previously MRP, section V.B.2.g):

The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

9. Toxicity Laboratory Reports.

RBI contends that Toxicity Reduction Evaluations (TREs) are Discharger-led investigations and are not the responsibility of the contract laboratories to include updates to any TRE investigations. RBI requests that MRP, section V.E.2.a be revised to remove the progress reports on TRE investigations from the laboratory reports.

RESPONSE: Due to the adoption of the Statewide Toxicity Provisions, MRP, section V.E.2.a has been renumbered to MRP, section V.E.1. Central Valley Water Board staff concur that MRP, section V.E.1 requires clarification. Updates on TRE investigations are intended to be submitted but not by the contract laboratories. Central Valley Water Board staff have revised the first paragraph of MRP, section V.E and V.E.1 to the following to clarify and remove language requiring laboratories to submit updates on TRE investigations:

Each Discharger shall submit the full laboratory report for all toxicity testing and, if applicable, progress reports on TRE investigations, as attachments to CIWQS for the reporting period (e.g., monthly, quarterly, semi-annually or annually) and provide the data (i.e., “pass”/“fail”) in the PET tool for uploading into CIWQS. The laboratory report shall include:

1. The valid toxicity test results for the TST statistical approach, reported as “pass” or “fail” and “Percent Effect” at the IWC for the discharge, the dates of sample collection and initiation of each toxicity test, all results for effluent parameters monitored concurrently with the toxicity test(s).

10. Next Most Sensitive Species.

RBI requests that language be added to the second paragraph to MRP, section V.F.2.b that allows the second most sensitive species to be used for compliance with the Toxicity Provisions to account for the fact that there is only one test species per taxon of the chronic freshwater toxicity tests.

RESPONSE: Central Valley Water Board staff concur and have revised the second paragraph of MRP, section V.F.1 (previously MRP, section V.F.2.b) to the following:

The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

11. TRE Trigger.

RBI notes that the opening paragraph in MRP, section V.G.1 only mentions an exceedance to the chronic toxicity monitoring trigger and not an exceedance of the chronic toxicity effluent limitation as a trigger to initiate a TRE investigation. Without reference to the toxicity effluent limitation, RBI contends that this differs from the process described in MGO, section V.G.1.c by which a discharger will determine if a TRE must be initiated.

RESPONSE: On 1 May 2023, the U.S. EPA adopted the Statewide Toxicity Provisions. Based on the final adoption of the Statewide Toxicity Provisions, Central Valley Water Board staff have revised the proposed MGO to remove requirements based on the Basin Plan’s narrative toxicity objective so that only requirements based on the Statewide Toxicity Provisions are retained. The section referenced in this comment has been removed. See Staff Revision 4 below.

12. Whole Effluent Toxicity (WET) Monitoring Flow Chart.

RBI requests that figure E-1 in the MRP be revised to remove the “AND” in the second decision (second diamond) so the flow chart is consistent with the TRE requirements, MRP, section V.G.1.c.i, and the current flow chart in Figure F-1 of the current MGO, Order R5-2017-0085-01.

RESPONSE: On 1 May 2023, the U.S. EPA adopted the Statewide Toxicity Provisions. Based on the final adoption of the Statewide Toxicity Provisions, Central Valley Water Board staff have revised the proposed MGO to remove requirements based on the Basin Plan’s narrative toxicity objective so that only requirements based on the Statewide Toxicity Provisions are retained. The figure referenced in this comment has been removed. See Staff Revision 4 below.

13. TRE Targets.

RBI requests revisions to MRP, section V.G.2.a to clarify that numeric targets that trigger a TRE investigation only apply to tests with the sensitive species, just as effluent limitation apply only to the sensitive species, consistent with the Statewide Toxicity Provisions.

RESPONSE: Central Valley Water Board staff concur and have revised MRP section V.G.1 (previously section MRP, section V.G.2.a) to the following:

a. **TRE Targets (Applicable to Dischargers Without Chronic Toxicity Effluent Limitations)**

i. **Chronic Whole Effluent Toxicity Median Monthly Effluent Target (MMET).** No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC for any endpoint.

ii. **Chronic Whole Effluent Toxicity Maximum Daily Effluent Target (MDET)**

(a) **If the most sensitive species is the water flea (*Ceriodaphnia dubia*) or fathead minnow (*Pimephales promelas*)**

No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the IWC for the sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

(b) **If the most sensitive species is Green alga (*Pseudokirchneriella subcapitata*)**

No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the IWC for the sub-lethal endpoint measured in the test and a percent effect for the sub-lethal endpoint greater than or equal to 50 percent.

14. Groundwater Monitoring.

RBI requests language to MRP, section VIII.B and Fact Sheet (Attachment F), section VIII.C.2 to clarify the type of enrollee that must fulfill the groundwater monitoring requirements since they may not apply to all dischargers, typically those dischargers with lined ponds and no discharge to land.

RESPONSE: Central Valley Water Board staff concur that groundwater monitoring requirements may not apply to all dischargers. The following was inserted as Fact Sheet, section VIII.B.1 and the subsequent sections renumbered as necessary:

1. If the Discharger is not covered by a separate Waste Discharge Requirements (WDRs), groundwater monitoring may be required for dischargers with unlined ponds or as specified in the NOA.

15. Standard Minerals.

RBI contends that dissolved iron and manganese should be monitored in the groundwater since the Secondary Maximum Contaminant Levels (MCLs) for these constituents apply to filtered water and requests that MRP, section VIII.B.4.f be revised to require monitoring of “dissolved iron” and “dissolved manganese”.

RESPONSE: Central Valley Water Board staff concur and have revised MRP, section VIII.B.4.f and MRP, section IX.B.2.f for consistency to the following:

- f. **Standard minerals.** Shall include the following applicable parameters, in totals: boron, calcium, iron, magnesium, potassium, sodium, chloride, manganese, phosphorus, total alkalinity (including alkalinity series), and hardness, and include verification that the analysis is complete (i.e., cation/anion balance). Samples for iron and manganese may be passed through a 1.5-micron filter for comparison to the respective Secondary MCLs.

16. Continuous Turbidity and UV Analyzers.

RBI contends that MRP, section IX.E.2.b and MRP, section IX.F.2.c are overly specific by directing dischargers to divert their wastewater when a continuous meter is being maintained and the need to divert wastewater would depend on the setup of the filtration and UV system at a particular facility. RBI requests removing and revising language from MRP, section IX.E.2.b and MRP, sections IX.F.2.c pertaining to diverting around filter units and UV channels.

RESPONSE: Central Valley Water Board staff concur, in part, that the MRP, section IX.E.2.b and MRP, section IX.F.2.c may be overly specific. The current language specifies that diversion shall take place to the extent feasible. If diversion is infeasible at particular facilities, this diversion is not applicable. Central Valley Water Board staff do concur that it is not necessary to divert flow to another disinfection channel or storage. Therefore, the proposed MGO has been revised as follows to specify that diversion is not necessary if a redundant meter is in place:

- a. **MRP, section IX.E.2.b.** Revise MRP, section IX.E.2.b to the following:
 - b. **Continuous analyzers.** If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another disinfection channel or to storage to the extent feasible. The Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation and no continuous measurements are available from a redundant meter. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or

effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

b. **MRP, section IX.F.2.c.** Revise MRP, section IX.F.2.c to the following:

c. **Continuous analyzers.** If analyzers are taken out of operation for routine maintenance activities and no continuous measurements are available from a redundant meter, the Discharger shall divert flow to another disinfection channel or to storage to the extent feasible. The Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation and no continuous measurements are available from a redundant meter. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

17. UV System Total Coliform Monitoring.

RBI contends that the total coliform monitoring frequency at the ultraviolet (UV) disinfection system, as shown on Table E-12 (previously Table E-13) in the MRP should either be qualified as applicable only to the production of recycled water in accordance with section V.C of the MGO, or removed since total coliform monitoring is required for discharges to the reclamation system (REC-001).

RESPONSE: Central Valley Water Board staff do not concur since compliance with the effluent limitation for total coliform organisms may be monitored at Monitoring Location EFF-001 or otherwise specified in the NOA. Currently, some dischargers specify the monitoring point for total coliform organisms at the UV disinfection system. Not all dischargers with UV disinfection systems enrolled under the MGO are producers of recycled water and may desire to continue monitoring total coliform organisms at the UV disinfection system for compliance. Therefore, monitoring of total coliform organisms at the UV disinfection system will be as specified in the NOA as necessary.

18. Water Column Pyrethroid Monitoring.

RBI contends that MRP, section IX.G.1 should specify that water column pyrethroid monitoring applies only when there is discharge to surface water and requests that this item limit pyrethroid monitoring to periods when there is discharge to surface water and correct the reference to the downstream monitoring location, from RSW-001 to RSW-002.

RESPONSE: Central Valley Water Board staff concur and have revised MRP, section IX.G.1 to the following:

1. **Water Column Chemistry Monitoring Requirements.** For facilities discharging greater than or equal to 1 MGD, the Discharger shall conduct effluent and receiving water baseline monitoring in accordance with Table E-13 as specified in the NOA. While discharging to surface water, quarterly monitoring shall be conducted for one year, as specified in the NOA, in the same quarter as the Effluent and Receiving Water Characterization Monitoring. The discharger shall also submit a minimum of one quality assurance/quality control (QA/QC) sample during the year to be analyzed for the constituents listed in Table E-13.

The monitoring shall be conducted in the effluent at monitoring location EFF-001, the downstream receiving water at monitoring location RSW-002, or as identified in the NOA, and any additional effluent discharge point and its respective downstream receiving water monitoring location and the results of such monitoring [...]

19. Exceedance of Pyrethroid Numeric Triggers.

RBI contends that if the Executive Officer can grant a change to the Pyrethroid testing schedule, then it is also appropriate that the Executive Officer be allowed to consider previously collected data. RBI requests edits to MRP, section IX.G.3 to allow the Executive Officer to grant a change in the Pyrethroid Monitoring schedule for Dischargers who have already conducted the monitoring as part of a group monitoring effort.

RESPONSE: Central Valley Board concur that Dischargers who have already conducted Pyrethroid monitoring should not be required to repeat the monitoring. Central Valley Water Board staff also concur with the request to allow the Discharger to submit, for Executive Officer approval, documentation demonstrating the pyrethroid monitoring requirements have been fulfilled as required by the MGO. It is more appropriate to insert requested changes in MRP, section IX.G.1 rather than MRP, section IX.G.3 as requested by RBI. Therefore, Central Valley Water Board staff have revised the third paragraph of MRP, section IX.G.1 to the following:

Monitoring can either be conducted by the Discharger or can be done as part of a group monitoring effort. If the Discharger chooses to participate in a group monitoring effort, the timing and the other study requirements of the monitoring can be modified by the Executive Officer. A Discharger may provide existing monitoring data to demonstrate that these study requirements have been fulfilled, which requires confirmation by the Executive Officer when issuing the NOA.

20. Acute and Chronic Toxicity Provisions

RBI contends that Fact Sheet, sections V.C.5.b.i.(a) through (b) and Fact Sheet, sections V.C.5.b.ii.(a) through (b) mistakenly state that toxicity tests are used to determine compliance with the narrative toxicity objective. Once the Statewide Toxicity Provisions are effective they will supersede the narrative toxicity objective as it applies to aquatic toxicity. RBI requests removal of the reference to the Basin Plan's narrative toxicity objective from Fact Sheet, sections V.C.5.b.i.(a) through (b)

and the last paragraph of Fact Sheet, section V.C.5.b.ii. RBI also requests clarifying language to these sections that effluent limitations apply only to the sensitive species.

RESPONSE: Central Valley Water Board staff concur that reference to the narrative Basin Plan Toxicity Objective should be removed. Similar to RBI Comment 5, Central Valley Water Board staff concur, in part, that the “sensitive species” should be referenced. The proposed MGO was modified as follows to remove references to the Basin Plan’s narrative toxicity objective and insert references that effluent limitations apply to the “most sensitive species”:

- a. **Attachment F (Fact Sheet) Sections V.C.5.b.i.(a) through (b).** Due to the adoption of the Statewide Toxicity Provisions, Fact Sheet sections V.C.5.b.i.(a) through (b) have been renumbered to Fact Sheet sections V.C.5.a.i through ii and revised to following:
 - i. **RPA.** This General Order is for municipal wastewater dischargers that meet criteria at the point of discharge to surface water; therefore, no dilution has been granted for acute whole effluent toxicity, and the instream waste concentration (IWC) is 100 percent effluent. If chronic toxicity testing is determined by the Central Valley Water Board to not be adequately protective of acute toxicity (e.g. - fish kills or intermittent recurring toxicity) and the Discharger is required to conduct acute whole effluent toxicity testing, the Central Valley Water Board will conduct the RPA for acute toxicity by reviewing acute whole effluent toxicity test data submitted by the Discharger. If the review of acute whole effluent toxicity data results in at least one test result that fails the Test of Significant Toxicity (TST), then the discharge has reasonable potential to cause or contribute to an exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, and water quality-based effluent limits for acute toxicity are required under this General Order, which shall be specified in the Notice of Applicability.
 - ii. **WQBELs.** If the Discharger has reasonable potential to cause or contribute to an instream exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, as determined by section V.C.5.a.i above, this General Order requires the following effluent limitations, as specified in the Notice of Applicability:
 - (a) **Acute Whole Effluent Toxicity MDEL.** No acute aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste Concentration (IWC) and a percent effect greater than or equal to 50 percent.
 - (b) **Acute Whole Effluent Toxicity MMEL.** No more than one acute aquatic toxicity tests with the most sensitive species initiated in a

toxicity calendar month shall result in a “fail” at the Instream Waste Concentration (IWC).

- b. **Fact Sheet, Section V.C.5.b.ii.** Due to the adoption of the Statewide Toxicity Provisions, Fact Sheet, section V.C.5.b.ii has been renumbered to Fact Sheet, section V.C.5.b. The last paragraph of Fact Sheet, section V.C.5.b that references the Basin Plan’s narrative toxicity objective has been removed.
- c. **Fact Sheet, Sections V.C.5.b.ii.(a) through (b).** Due to the adoption of the Statewide Toxicity Provisions, Fact Sheet, section V.C.5.b.ii.(a) has been renumbered to Fact Sheet, section V.C.5.a.ii.(a) and the second paragraph has been revised to the following:

For Dischargers with an average dry weather flow less than 5 MGD or Dischargers that are not required to have a pretreatment program, the Central Valley Water Board will conduct the RPA for chronic toxicity by reviewing chronic whole effluent toxicity test data submitted by the Discharger at an instream waste concentration of 100% or as specified in this General Order. If the review of the chronic whole effluent toxicity test data results in at least one test that fails the Test of Significant Toxicity (TST) or has a percent effect of greater than 10 percent at the IWC, then the discharge has a reasonable potential to cause or contribute to an exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, and water quality-based effluent limits for chronic toxicity are required under this General Order, which shall be specified in the Notice of Applicability.

- d. **Fact Sheet, Sections V.C.5.b.ii.(b).** Due to the adoption of the Statewide Toxicity Provisions, Fact Sheet sections V.C.5.b.ii.(b) has been renumbered to Fact Sheet section V.C.5.b.ii and revised to following:
 - ii. **WQBELs.** If the Discharger has reasonable potential to cause or contribute to an instream exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, as determined by section V.C.5.a above, this General Order requires the following effluent limitations, as specified in the Notice of Applicability:
 - (a) **Chronic Whole Effluent Toxicity Median Monthly Effluent Limitation (MMEL).** No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC for any endpoint.
 - (b) **Chronic Whole Effluent Toxicity Maximum Daily Effluent Limitation (MDEL).**
 - (1) **Most Sensitive Species Includes the Survival Endpoint.** No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste Concentration (IWC) for the

sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

- (2) **Most Sensitive Species Does Not Include the Survival Endpoint.** No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste Concentration (IWC) for the sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

21. Sensitive Species Screening Frequency.

RBI contends that the last sentence from Fact Sheet, section VIII.D.3 is not consistent with the preceding Fact Sheet, sections VIII.D.3.a and VIII.D.3.b, which require a sensitivity screening every 15 years or if the effluent used in the species sensitivity screening is no longer representative of the current effluent.

RESPONSE: Central Valley Water Board staff concur and the last sentence of Fact Sheet, section VIII.D.3 has been removed.

22. Prohibition IV.6: Maintain dilution ratio of 20:1 or greater in Amador Lake.

RBI provided an updated description to why the California Division of Drinking Water desires 20:1 dilution for the Jackson wastewater treatment plant discharge to Amador Lake and requested an update to the second paragraph to Fact Sheet, section V.A.6.

RESPONSE: Central Valley Water Board staff have revised the second paragraph of Fact Sheet, section V.A.6 to include the provided update as follows:

The Jackson Valley Irrigation District (JVID) primarily delivers non-potable irrigation water, some of which is effluent from the Discharger, from Lake Amador to customers in the Jackson Valley area of western Amador County for irrigation and agricultural purposes. JVID customers include the Lake Amador Recreation Area (LARA), located at Lake Amador, and The Oaks Community Association (TOCA), located approximately 1.5 miles downstream of Lake Amador in the Buena Vista township of Jackson Valley. DDW has determined that Lake Amador water is not suitable for drinking water purposes. Therefore, in 2014, JVID, as required by DDW, began working on a grant-funded construction project to replace Lake Amador source water for treatment with a new source water from the Mokelumne River diverted out of nearby Pardee Reservoir.

The first phase of the construction (\$2 million) was completed in 2014. That included the piping of new Mokelumne source water from Pardee Reservoir and the building of a new 175 gallon per minute treatment plant located at Lake Amador. JVID completed its Phase #2 pipeline construction project (\$10 million) in 2021. Phase #2 consisted of the installation of approximately 14 miles of treated water distribution lines to 162 JVID customers, the Lake Amador Recreation Area, and TOCA. The primary raw water source for treatment for this

newly built system comes from JVID’s Mokelumne River source water diverted from Lake Pardee. JVID does have the ability to use Lake Amador in the event of emergencies as a secondary raw water source for treatment. In addition, approximately 26 JVID customers are still being supplied bottled drinking water by JVID. A future Phase 2c pipeline project is planned to begin in 2024 that will supply potable water to these outlying customers. The remaining 26 residences would require up to 6-miles of new treated water distribution lines; therefore, to supply these residents with a treated drinking water source, JVID plans to begin using the \$3 million of contingency funds from its Phase #2 Prop 1 grant to connect them to the Mokelumne River source water. With the uncertainty of removing all raw water domestic users from JVID’s irrigation system, DDW has indicated that it would like the 20:1 dilution requirement to remain in place until all JVID customers are receiving treated potable water.

SRSWPP COMMENTS

1. Use of Dissolved Concentrations for Iron, Manganese, and Aluminum.

SRSWPP requested clarification regarding dissolved concentrations for iron, manganese, and aluminum, which is the equivalent to a 0.45-micron filter, to be consistent with the Secondary Maximum Contaminant Policy, which allows for filtered samples using a 1.5-micron filter, in the following places: Attachment C, Screening Levels, Section III; Attachment G, Calculation of Water Quality Based Effluent Limits (WQBELs).

RESPONSE: Central Valley Water Board concur. Therefore, Board staff have replaced references to dissolved concentrations for iron, manganese, and aluminum to total concentrations while retaining language that allows for the use of a 1.5-micron filter when comparing analytical data to the Secondary MCL. The proposed MGO was modified as follows:

- a. **Table C-3.** Remove portions of Table C-3, shown in part, and replace it with the following:

Table C-3. Screening Levels for Non-Priority Pollutant Constituents and Parameters of Concern

Constituent/Parameter
Aluminum, Total
Iron, Total
Manganese, Total

- b. **Table C-3, Note 3.** Remove the Table C-3 Note 3 and replace it with the following:

3. Iron, Total and Manganese, Total. MUN Criteria is based on the Secondary Maximum Contaminant Levels for taste and odor. The Central

Valley Water Board will evaluate reasonable potential of the effluent compared to the screening level for the MUN beneficial use for iron and manganese based on an annual average, which can be demonstrated with samples that have been passed through a 1.5-micron filter.

- c. **Attachment G, Calculation of WQBELs.** Remove portions of Table G-1, shown in part, and replace it with the following:

Table G-1 HUMAN HEALTH WQBELS CALCULATIONS – MUN USE

Parameter
Aluminum, Total
Manganese, Total

CITY OF LODI COMMENTS

1. White Slough Water Pollution Control Facility Mercury Requirements

The City of Lodi requests that the mercury compliance schedule, as well as the interim effluent limitation for mercury be removed for the MGO to allow for a final effluent limitation for methylmercury to be applied. The City of Lodi contends that it does not need additional time to comply with the final effluent limit for methylmercury and removing the compliance schedule in the MGO would allow the Central Valley Water Board to remove the parallel compliance schedule in the City’s next NOA.

RESPONSE: Central Valley Water Board staff concur that a compliance schedule for the City of Lodi, White Slough Water Pollution Control Facility; and City of Manteca and Dutra Farms, Inc., Wastewater Quality Control Facility should only be included in an NOA if applicable. Central Valley Water Board staff revised the proposed MGO as follows:

- a. **Compliance Schedules.** Revise section VII.C.7, shown in part, to the following:

7. Compliance Schedules

- a. **Methylmercury for the City of Lodi, White Slough Water Pollution Control Facility; and City of Manteca and Dutra Farms, Inc., Wastewater Quality Control Facility.** This Order requires compliance with the final effluent limitations for methylmercury for Dischargers in the Sacramento-San Joaquin Delta by **31 December 2030**. If a Discharger to the Sacramento-San Joaquin Delta cannot readily comply with final effluent limitations for methylmercury, those Dischargers shall comply with the following time schedule, as specified in the NOA, to ensure compliance with the final effluent limitations: [...]

- b. **Fact Sheet, Compliance Schedules.** Revise the first sentence of the second paragraph of Fact Sheet, section VII.B.7 to the following:

A compliance schedule, as specified in the NOA, is necessary because the Dischargers must implement actions, including a Phase 2 Implementation of Methlymercury Control Programs and possible facility upgrades to comply with the final effluent limitations.

2. Clarification whether multiple NOIs may be required during the next 5 years.

The City of Lodi contends that the MGO is not entirely clear if the City of Lodi's recently submitted NOI will be sufficient to issue an NOA under the reissued MGO. The City of Lodi also requests that if their recently submitted NOI is sufficient, clarification about whether a second NOI would be required by 31 May 2027, as per section II.D.

RESPONSE: The City of Lodi's recently submitted NOI will be sufficient for coverage under the proposed MGO and no other NOIs for coverage under the proposed MGO will be required by 31 May 2027, unless modifications are needed to the current or future NOA. MGO section II.A.2.b contains the dates existing dischargers under the current MGO shall submit an updated NOI by 2 October 2026. No changes to the proposed MGO were made.

3. Groundwater Monitoring

The City of Lodi contends that their Master Reclamation Permit is permitted for land application operations and includes groundwater monitoring. The City of Lodi requests that any groundwater monitoring for the White Slough Water Pollution Control Facility be retained only in their Master Reclamation Permit and not be introduced into a renewed NOA under the MGO.

RESPONSE: NOAs for dischargers with land discharge and groundwater requirements regulated under a different Order will not include land discharge and groundwater requirements per the MGO. Specifically for the City of Lodi, an NOA issued under the reissued MGO will not contain groundwater monitoring requirements.

4. Recycled Water Monitoring

The City of Lodi contends that their recycled water activities are separately permitted and expects that a renewed NOA under the reissued MGO would not include recycled water requirements.

RESPONSE: Similar to the groundwater response in Comment 3 above, NOAs for Dischargers whose recycled water production is regulated under a different Order will not include recycled water specifications or monitoring requirements per the MGO. Specifically for the City of Lodi, an NOA issued under the reissued MGO will not contain recycled water specifications or monitoring requirements.

5. Whole Effluent Toxicity and Pyrethroid Pesticide Requirements

The City of Lodi submitted Attachment 1 to their comments, which consisted of comments pertaining to the applicability of toxicity requirements based on either the Basin Plan's narrative toxicity objective or the Statewide Toxicity Provisions,

specifications of acute and chronic toxicity requirements, and the applicability of Pyrethroid Pesticides Monitoring.

RESPONSE: Comments submitted in Attachment 1 of the City of Lodi's comments are duplicative of comments received by RBI. These comments were addressed in this Response to Comments under RBI Comments 1, 5, 7, 8, 9, 10, 11, 12, 13, 18, 20, and 21.

CITY OF GALT COMMENTS

1. Site-Specific pH Effluent Limitations.

The City of Galt requested that site-specific pH effluent limitations are retained from the existing MGO to retain a lower pH effluent limitation that is contained within their existing Notice of Applicability (NOA). The City of Galt is concerned that lower pH effluent limitation may not be retained in a reissued NOA under the proposed MGO, which would affect effluent limits for ammonia.

RESPONSE: Board staff do not concur. Removal of the site-specific pH effluent limitations does not prevent the reissued NOAs from containing lower pH effluent limitations based on dischargers' operational pH. Board staff propose adding the following sentence to the last paragraph in Fact Sheet, section V.C.3.b.xi for additional clarification:

The maximum instantaneous pH effluent limitation may be lower than the respective maximum pH water quality objective as specified in the NOA based on the Discharger's operational pH.

2. Groundwater and Recycled Water Monitoring.

The proposed MGO adds groundwater monitoring and recycled water monitoring, which may be specified in issued NOAs as applicable. The City of Galt is also regulated under separate permits for land application and recycled water activities, which already include groundwater and recycled water monitoring. The City of Galt requested groundwater and recycled water monitoring are not required in a NOA reissued under the proposed MGO as they would be duplicative of their coverage under separate permits.

RESPONSE: Comment noted for the record and no changes to the proposed MGO were included. See responses to City of Lodi Comments 3 and 4.

3. Submittal of Notices of Intent (NOI)

The City of Galt requested clarification regarding NOI submittal. As specified in the City of Galt's NOA under the existing MGO, the NOI for reissuance of the NOA is due by 30 April 2025. The Tentative Order specifies requirements to submit a NOI for reapplication and administratively continue permit conditions of NOAs issued under the existing MGO. The City of Galt commented that the Tentative Order is not clear on whether the submittal of the NOI as specified in the City of Galt's NOA would be sufficient to meet requirements to continue coverage under the proposed

MGO and is concerned about submittal of a duplicative NOI due to language in the Tentative Order.

RESPONSE: Central Valley Water Board staff concur and have revised the section II.D of the proposed MGO to the following to clarify requirements to submit an NOI:

D. General Order Expiration

This General Order will expire five years after the effective date, as specified on the cover page of this General Order. In accordance with 40 C.F.R. sections 122.6 and 122.28(b)(2), if the permit is not reissued by the expiration date, the conditions of this General Order will continue in force and effect until a new general order is adopted. Only those facilities authorized to discharge under this General Order will remain authorized to continue discharge under the administratively continued permit conditions until a new general order is adopted and a new Notice of Applicability is issued by the Executive Officer, or the Discharger is issued an individual NPDES permit or WDRs.

Dischargers that intend to maintain coverage under this General Order after the expiration date and have not submitted a NOI within three years prior to the expiration date of this General Order shall submit the following at least one year prior to 1 October 2028:

1. Notification of the Discharger's intent to obtain regulatory coverage under this General Order and an NOI by the date in the existing NOA, or
2. A NOI, if a material change to the facility or the discharge is planned prior to the NOI due date.

4. Whole Effluent Toxicity and Pyrethroid Pesticide Requirements

The City of Galt submitted Attachment 1 to their comments, which consisted of comments pertaining to the applicability of toxicity requirements based on either the Basin Plan's narrative toxicity objective or the Statewide Toxicity Provisions, specifications of acute and chronic toxicity requirements, and the applicability of Pyrethroid Pesticides Monitoring.

RESPONSE: Comments submitted in Attachment 1 of the City of Galt's comments are duplicative of comments received by RBI. These comments were addressed in this Response to Comments under RBI Comments 1, 5, 7, 8, 9, 10, 11, 12, 13, 18, 20, and 21.

CVCWA COMMENTS

1. Additional Requirements for Existing Dischargers

CVCWA requests that the Central Valley Water Board confirm or otherwise clarify their understanding of section II.A.2.b that new or expedited effluent characterization monitoring, other than that currently required under the existing permit and Notice(s)

of Applicability (NOAs) will not be needed for existing enrollees as part of the submission of the Notice of Intent (NOI) (Attachment B).

RESPONSE: Requirements for General Order Application of existing Dischargers is contained in section II.A.2.b of the proposed MGO and shown in part as follows:

To obtain coverage under this General Order, existing Dischargers under the previous permit shall submit an updated NOI no later than the earliest of:

- i. Three years from the effective date of this General Order (2 October 2026);
- ii. As specified in their existing NOA for General Order R5-2017-0085-02, or;
- iii. An earlier date specified by the Executive Officer, to obtain coverage under this General Order.

In addition, section 6 of the NOI only requires characterization monitoring for existing Dischargers to be submitted with the NOI when there has been a major upgrade at a facility for which 3 years of representative data is not available and the effluent has not been analyzed for the priority pollutants and other constituents of concern in accordance with section IX.H of the MRP and as specified in the Discharger's NOA. No changes to the MGO were made.

2. Coverage Under the New MGO should reflect the effective date of the NOA

CVCWA requests revisions to section II.A.2.b.i to clarify that the timing of coverage under the new MGO should reflect the effective date of the NOA, not the date when the NOA is issued.

RESPONSE: Central Valley Water Board staff concur with the requested change and revised section II.A.2.b.i to the following, shown in part, below:

- i. The effective date of an NOA issued for coverage under this General Order (R5-2023-XXXX), even after the effective date of this General Order, or;[...]

3. Material Change to Facility

CVCWA requests confirmation that existing enrollees seeking continuing regulatory coverage who are in the process of completing a material change, including completing an upgrade or adding new customers that might substantially impact influent quality, will not be excluded from coverage or otherwise penalized based on the timing of the Executive Officer's issuance of the NOA.

RESPONSE: A Discharger under the MGO will not be precluded from continued coverage if a material change is proposed to take place. Based on proposed changes, Central Valley Water Board staff will make a determination whether the changes warrant submittal of a Notice of Intent for an amendment to the existing NOA or if the Discharger will need to apply for an individual permit. If it is determined that the discharge no longer meets eligibility criteria to remain under the proposed MGO, the Central Valley Water Board can evaluate whether an amendment to the

MGO would allow the Discharger to remain under the MGO if desired or if the material changes necessitate issuance of an individual permit. During this process, there will be no lapse of coverage for the Discharger if it is determined the MGO is no longer a viable permitting option.

4. Existing Dischargers not seeking Coverage under MGO.

CVCWA requests that section II.D be inclusive for those Dischargers choosing not to re-enroll in the MGO.

RESPONSE: Central Valley Water Board staff do not concur that the requested revisions are necessary. The proposed MGO contains language for Dischargers that wish to terminate coverage under the MGO in section II.C.

5. Toxicity Provisions

- a. **Compliance With Statewide Toxicity Provisions.** CVCWA requests clarity that the MGO be clear throughout that toxicity requirements be based on the NOA at the time and that the NOA may be revised to include the requirements of the Statewide Toxicity Provisions. CVCWA seeks confirmation as to whether the Central Valley Water Board intends to reopen the Municipal General Order after adoption to address any unintended or unexpected compliance concerns regarding toxicity that may arise if/when the Statewide Toxicity Provisions take effect.
- b. ***Ceriodaphnia dubia* As Most Sensitive Species.** Should the Statewide Toxicity Provisions become effective prior to 1 January 2024 CVCWA requests those provisions include a modified approach for permittees whose most sensitive species is *Ceriodaphnia dubia* in the interim if the Central Valley Water Board intends to enroll new or existing publicly owned treatment works (POTWs) under the Tentative Order.
- c. **Instream Waste Concentration.** CVCWA requests clarification regarding the calculation of the instream waste concentration (IWC) for the TST approach if/when the Statewide Toxicity Provisions take effect.

RESPONSE:

Compliance With Statewide Toxicity Provisions.

On 1 May 2023, the U.S. EPA adopted the Statewide Toxicity Provisions. Based on the final adoption of the Statewide Toxicity Provisions, Central Valley Water Board staff have revised the proposed MGO to remove requirements based on the Basin Plan's narrative toxicity objective so that only requirements based on the Statewide Toxicity Provisions are retained. See Staff Revision 4 below.

***Ceriodaphnia dubia* As Most Sensitive Species.**

Central Valley Water Board staff concur and have revised the first paragraph of section V.A.1.c.ii of the proposed MGO, previously section V.A.1.c.ii.(b), to the following:

If the most sensitive species is *Ceriodaphnia dubia*, a chronic WET MMEL will apply **beginning 1 January 2024**, as specified in the NOA. **Prior to 1 January**

2024, if the most sensitive species is *Ceriodaphnia dubia*, a chronic WET median monthly effluent target (MMET) will apply in lieu of a chronic WET MMEL, as specified in the MRP of NOA.

Instream Waste Concentration.

The MGO is applicable to dischargers that can meet effluent limitations at the point of discharge to surface water and does not allow for dilution credits. Therefore, since the MGO does not allow for dilution, the IWC is 100% effluent. Furthermore, section V.B.2.a also lists the IWC as 100% effluent. No changes were made to the MGO.

6. Table 3. Effluent Limitation – Secondary Treatment Requirements

CVCWA recommends that Table 3 only include either concentration-based effluent limitations or mass-based effluent concentrations, not both as it was written in the Tentative MGO. CVCWA recommends that if the Central Valley Water Board intends to include both, to clarify the need for application of each limitation for BOD₅ and TSS.

CVCWA requests that if the Central Valley Water Board intends to retain mass limitations in the Tentative Order based on average dry weather flow that section VII.H be modified to provide that any such mass-based effluent limitations will be assessed during dry weather only, as these limitations are not an appropriate compliance threshold for wet weather.

RESPONSE: Central Valley Water Board staff concur that both concentration and mass-based effluent limitations may not be required. However, the Central Valley Water Board staff have retained mass-based effluent limitations that may be issued on a case-by-case basis for secondary treatment facilities. Central Valley Water Board staff also concur that mass-based effluent limitations should be assessed during dry conditions. Existing compliance determination for mass-based effluent limitations in section VIII.H specifies the following, shown in part, which is equivalent of this consideration:

...If the effluent flow exceeds the permitted average dry weather flow during wet-weather seasons, the effluent mass limitations specified in the NOA shall not apply.

7. Table 5A. Effluent Limitations for Priority Pollutants with MUN

- a. **Environmental Laboratory Accreditation Program (ELAP) Methods.** CVCWA contends that the Central Valley Water Board must take additional action to ensure that Environmental Laboratory Accreditation Program (ELAP) has established and approved analytical methods for all parameters listed in the Tentative Order Table 5A or modify the table as applicable.
- b. **Non-Detect (ND) Effluent Limitations.** CVCWA requests that the Central Valley Water Board clarify the application of non-detect (ND) limitations to all of the constituents listed in Table 5A.

- c. **Designation of Beneficial Uses.** CVCWA requests that the Central Valley Water Board include language that provides a clear statement of its intention not to exercise its authority to designate beneficial uses within its authority under the Statewide Mercury Provisions. In this regard, CVCWA recommends revising Note 3 under Table 5A to the following shown in part:

For discharges to receiving waters with the beneficial uses of commercial and sport fishing (COMM), tribal tradition and culture (CUL), wildlife habitat (WILD), or marine habitat (MAR) designated in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins,

RESPONSE

ELAP Methods.

Central Valley Water Board staff do not concur that revisions are needed. The MRP, section I.C of the proposed MGO does not require ELAP-certified methods and instead states, "*Chemical, bacteriological, and bioassay analyses of any material required by this General Order shall be conducted by a laboratory accredited for such analyses by the State Water Resources Control Board [...].*" Central Valley Water Board staff appreciate CVCWA bringing attention to the issue of ELAP method certification and the potential need for the Central Valley Water Board to request methods to be certified by ELAP. Central Valley Water Board staff will continue to work with CVCWA on the issue of ELAP certification of analytical methods.

No changes to the MGO were made.

Non-Detect Effluent Limitations.

Non-detect limitations in Table 5A and 5B are applicable if reasonable potential for the parameter exists at the authorized analytical method reporting level. As specified in the NOA, the effluent limitation of ND for some parameters would be enforced based on the analytical method reporting level that is approved from the required Analytical Methods Report. No changes to the MGO were made.

Designation of Beneficial Uses.

Central Valley Water Board staff do not concur that revisions are needed. Beneficial Uses specified in the NOA will be Beneficial Uses that are designated in the Basin Plan. Future designation of Beneficial Uses will occur through amendments to the Basin Plan; no Beneficial Uses can or will be designated through issuance of a NOA. No changes to the MGO were made.

8. Ammonia Nitrogen

CVCWA contends that Table 19b of the MGO includes values that differ from Table 16A of the previous permit as well as the values in Tables C-5A and C-5B. CVCWA requests that the Central Valley Water Board provide additional information regarding the basis for the changes to ammonia effluent limitations and screening levels.

RESPONSE: Central Valley Water Board staff do not concur that changes are needed to the MGO regarding criteria and effluent limitations calculated using the 2013 U.S. EPA National Ambient Water Quality Criteria (NAWQC) for Ammonia. The proposed MGO implements the 2013 U.S. EPA NAWQC for Ammonia, which bases the acute criteria on pH and temperature, whereas Order R5-2017-0085 (and subsequent amendments) implemented the 1999 U.S. EPA NAWQC for Ammonia, which base the acute criteria only on pH. Based on the updated criteria, adjustments were made to the calculation of the acute criteria in Tables C-5A and C-5C as well as the subsequent effluent limitations in Tables 19A through 19C and the implementation of the 2013 U.S. EPA NAWQC for Ammonia is documented in Fact Sheet, section V.C.3.b.ii of the proposed MGO. No changes to the MGO were made.

9. Aluminum

- a. **Clarification on Effluent Aluminum Averaging Periods.** CVCWA contends that federal regulations require average weekly and average monthly effluent limitations for POTWs unless impracticable; however, the Basin Plan amended by Resolution R5-2018-0034 states that the annual average of sample results will be used to evaluate compliance with Secondary Maximum Contaminant Levels. CVCWA requests the MGO include a finding of impracticability based on the conflicting language of the federal regulations and the intent of the Basin Plan.
- b. **Site-Specific Aluminum Information.** Where the 2018 U.S. EPA NAWQC is determined to apply, CVCWA requests that the Central Valley Water Board confirm that consideration of additional, site-specific information (e.g., the results of previously performed Water Effect Ratio studies) is warranted in determining whether, and what, effluent limitation is applicable to the discharger. CVCWA requests that the Central Valley Water Board expressly state that site-specific information will be considered. The Tentative Order could include the site-specific information as is done for other constituents or, if necessary, indicate that the Central Valley Water Board may reopen the Municipal General Order to revise effluent limitations for aluminum.

RESPONSE:

Clarification on Effluent Aluminum Averaging Periods.

Central Valley Water Board staff do not concur. If the Secondary MCL is applicable, the reasonable potential analysis is conducted by comparing the maximum annual average effluent aluminum to the Secondary MCL. If reasonable potential exists for aluminum based on the Secondary MCL, it is not impracticable for effluent limitations based on the Secondary MCL to be included in the MGO on an average weekly and average monthly basis. No changes to the MGO were made.

Site-Specific Aluminum Information.

Central Valley Water Board staff concur that site-specific information can be considered whether the effluent limitation based on the 2018 U.S. EPA NAWQC for Aluminum is needed in the NOA. If it is determined that site-specific information is applicable, the MGO may be reopened to include the site-specific information

regarding applicable criteria and effluent limitations if necessary. No changes to the MGO were made.

10. Salinity

CVCWA recommends including language in the Tentative Order providing the Central Valley Water Board with authority and opportunity to revise the electrical conductivity triggers in Table 23 based on changing salt levels in water supply sources, drought, conservation, or increases in growth, as provided in the Basin Plan.

RESPONSE: Currently, the effluent limitations and triggers in Table 23 account for variability in salinity concentrations. Central Valley Water Board staff concur that the MGO may be amended in the future to revise triggers based on changing salt levels in water supply sources, drought, conservation, or increases in growth. The Central Valley Water Board may approve variances to account for changing salt levels based on these factors as a part of the amendment process after receipt of a variance application. However, language regarding the authority to revise these triggers is not required to conduct future revisions. No changes to the MGO were made.

11. Lower San Joaquin River (LSJR) Salinity

CVCWA recommends revising the following language in section V.A.1.c.viii(b)(1) for Discharges to the Lower San Joaquin River between the Mouth of the Merced River and the Airport to accommodate the potential inclusion of POTWs:

For discharges to the Lower San Joaquin River between the mouth of the Merced River and the Airport Way Bridge near Vernalis, the electrical conductivity effluent limitations, as identified in the Notice of Applicability from the Executive Officer, shall not exceed the effluent limitations in Table 24 below unless the discharger is a member of a Regional Water Board-approved real time management program or a pollutant trading program consistent with the Control Program for Salt and Boron Discharges into the Lower San Joaquin River.

Moreover, CVCWA commented that salinity water quality objectives in the Lower San Joaquin River provide for dilution and extended compliance schedules that may need to be incorporated into the MGO or an individual permit for POTWs.

RESPONSE: Central Valley Water Board do not concur with the suggested language pertaining to the applicability of the salinity water quality objectives in the LSJR. Participation in a Regional Water Board approved real-time management program and attainment of salinity water quality objectives at the Airport Way Bridge near Vernalis constitutes compliance with the Vernalis Salinity Control Program, however, not with the salinity water quality objectives of the LSJR upstream of Vernalis between the confluence of the Merced River and the Airport Way Bridge near Vernalis. Section 4.5.1.1.2.(2)(a) through section 4.5.1.1.2.(2)(d) of the Basin Plan does contain additional considerations for NPDES permitted discharges to the LSJR pertaining to evaluating reasonable potential and establishing water quality-

based effluent limitations in terms of EC concentration or total dissolved solids loading to account for site-specific consideration of dry weather versus wet weather conditions. If site-specific information is applicable, the MGO may be revised to reflect these considerations.

12. Nitrate Control Program

CVCWA contends that Donner Summit Public Utility District Wastewater Treatment Plant and Hammonton Gold Village Wastewater Treatment Plant are not in a designated groundwater basin; however, they would be required to submit NOI if a material change to their operation would increase the level of nitrate discharged to groundwater. CVCWA requests clarification from the Central Valley Water Board regarding the inclusion of this provision and recommends that a determination of whether these two POTWs are subject to the Nitrate Control Program should be determined if and when a change in operations would increase the level of nitrate discharged to groundwater.

RESPONSE: To provide clarification, Central Valley Water Board staff made the following revisions to section V.B:

- c. Donner Summit Public Utility District Wastewater Treatment Plant and Hammonton Gold Village Wastewater Treatment Plant are not located in a prioritized groundwater basin/sub-basin of the Nitrate Control Program; therefore, Donner Summit Public Utility District Wastewater Treatment Plant and Hammonton Gold Village Wastewater Treatment Plant are not subject to Nitrate Control Program requirements unless directed by the Executive Officer. If Donner Summit Public Utility District Wastewater Treatment Plant or Hammonton Gold Village Wastewater Treatment Plant submit a Notice of Intent to address a material change to their operation that increases the level of nitrate discharged to groundwater, the Executive Officer of the Central Valley Water Board will determine, based on the specific facts of the discharge, whether the discharger should be subject to the Nitrate Control Program and the Board's Executive Officer will notify the Discharger accordingly.

13. Mercury

CVCWA requests clarification regarding the basis of Tables 25 and 26, which contain effluent limitations for mercury. CVCWA is concerned with the establishment of mass-based limits for mercury on a categorical basis and requests the opportunity to discuss the reasoning and intent for the inclusion of the effluent limitations listed in Tables 25 and 26. Additionally, CVCWA requests that the Central Valley Water Board correct or clarify the title of Table 26, which currently matches the title of Table 25. CVCWA recommends that the title of Table 26 be revised to state "Table 26. Effluent Limitations – Total Mercury (If TMDL Planned Before Year 2027)" to match the section title.

RESPONSE: Effluent limitations in Tables 25 and 26 establish mass-based effluent limitations for dischargers to water bodies that are listed on the 303(d) list as

impaired for mercury. These effluent limitations will be included in the NOA only if applicable, and duplicative concentration-based effluent limitations for mercury would not be specified in addition to these mass-based effluent limitations for mercury. Central Valley Water Board staff concur that the title of Table 26 is incorrect and has revised the title to “Table 26 - Interim Effluent Limitations – Total Mercury (If TMDL Planned Before Year 2027)”.

14. Diazinon and Chlorpyrifos

CVCWA contends that the formulas for calculating limitations for effluent diazinon and chlorpyrifos concentrations are inconsistent with the Sacramento River and San Joaquin River Basins Basin Plan and recommends revising the MGO to include the appropriate effluent limitation calculations as stated in the Basin Plan. Moreover, CVCWA contends that the Tentative Order, previous permit, and Basin Plan all include different statements of the water bodies to which the diazinon and chlorpyrifos effluent limitations apply and requests clarification regarding the Central Valley Water Board’s understanding of whether the application of these effluent limitations has changed or whether the application is consistent with the Basin Plan.

RESPONSE: The average monthly and average weekly effluent limitations in the proposed MGO were converted to these averaging periods from the specified periods that are used for chlorpyrifos and diazinon water quality objectives in the Basin Plan. Additionally, these average monthly and average weekly effluent limitations in the proposed MGO are the same as the current MGO. The effluent limitations for chlorpyrifos and diazinon apply as specified in Table 3-4 of the Basin Plan for the Sacramento and San Joaquin River Basin. See section V.A.1.c.xii of the proposed MGO. This is consistent with the Basin Plan and no changes to the MGO were made.

15. Land Discharge Specifications

CVCWA has several concerns regarding language in the Tentative Order as follows:

- a. **Construction, Operation and Maintenance Specifications.** CVCWA commented that the Tentative Order contains provisions that align closely with Donner Summit’s current permit (Order R5-2021-0023) and are significantly different than Hammonton Gold’s current permit (R5-2022-0024). For example, Hammonton Gold Village’s spray field operating requirements are currently under “Construction, Operation and Maintenance Specifications,” whereas the Tentative Order includes these requirements under Land Discharge Specifications, section V.B.
- b. **Land Application Area Public Contact.** CVCWA commented that Hammonton Gold Village’s permit requires that “public contact with wastewater at the LAAs [land application areas] shall be controlled using fences, signs, and other appropriate means,” whereas in section V.B.1.b.viii of the Tentative Order requires “Public contact with effluent shall be precluded through such means as fences, signs or other acceptable alternatives.”

CVCWA requests that the language be changed in the Tentative Order from “precluded” to “controlled” to ensure consistency with California Code of Regulations, Title 22 (hereinafter “Title 22”), section 60310, subdivisions (f) and (g).

- c. **Land Discharge Compliance.** CVCWA requests clarification from the Central Valley Water Board regarding Hammonton Gold Village’s potential compliance with the proposed MGO compared to the POTW’s previous permitting requirements.
- d. **Duplicative Land Discharge Specifications.** CVCWA also requests that duplicative requirements contained in Land Discharge Specifications, section V.B be eliminated as follows:
 - Sections V.B.1.b.vi and V.B.1.ix(a)(1). Both of these provisions prohibit standing water.
 - Sections V.B.1.b.iii and V.B.1.b.x. Both of these provisions address runoff. Moreover, CVCWA recommends revising the Tentative Order to reflect the language in Title 22, § 60310, subdivision (1). The NOA should indicate whether this requirement applies based on whether the runoff poses a public health threat.
 - Sections V.B.1.b.v and VII.C.4.c.vi. (See Tentative Order, page 128). Both of these provisions address objectionable odors.
- e. **Land Discharge Setback Requirements.** CVCWA requests that the Central Valley Water Board clarify the inclusion of requirements related to an irrigation well in section V.B.1.b.xii, which is contrary to the direction in Title 22, section 60310(a), which specifies a 50-foot setback of the land application area and any domestic water supply well. CVCWA requests that the Central Valley Water Board clarify the basis of the 50-foot buffer for property boundaries, as stated in section B.1.b.xii.

RESPONSE:

Construction, Operation and Maintenance Specifications.

To ensure consistency between permittees, requirements for spray field discharges was condensed to one section in the proposed MGO versus the two different sections that Hammonton Gold Village and Donner Summit Public Utility District had these requirements in their individual permits. While it may not be consistent for one discharger, a common section in the MGO was decided on to maintain requirements for discharges to spray fields.

Land Application Area Public Contact.

Central Valley Water Board staff do not concur with the proposal to change “precluded” to “controlled” in section V.B.1.b.viii. Title 22, section 60310, subdivisions (f) and (g) does not specifically use “controlled” and instead specifies where spray irrigation of any recycled water may take place to minimize public exposure and what means are acceptable to use for public notification. In this case, “precluded” is more appropriate due to the need to minimize or prevent public

exposure from happening and not found to be so different from “controlled” as to cause compliance issues for Hammonton Gold Village.

Land Discharge Compliance.

The MGO applies to owners and operators of municipal wastewater treatment facilities that meet water quality objectives/criteria at the point of discharge to surface waters of the United States. If Hammonton Gold Village can meet the requirements of the proposed MGO, it will be eligible for coverage under the MGO and the applicable requirements of the MGO will be determined during the development of the NOA. The Central Valley Water Board does not anticipate compliance issues with Hammonton Gold Village due to this process.

Duplicative Land Discharge Specifications.

Central Valley Water Board staff do not concur with the duplicative language comment, as the language contended to be duplicative is similar but does provide additional detail. Additionally, the sections for V.B.1.b.v and VII.C.4.c.vi. are different and both may not be included in a NOA and at the issuance of the NOA may not be duplicative. Therefore, no changes were made to the proposed MGO in this regard.

Land Discharge Setback Requirements.

Central Valley Water Board staff concur that the setback requirement in section V.B.1.b.xii should be revised from 100 feet to 50 feet. Land Discharge Specifications in section V.B will be as specified in the NOA. The applicability of the 50-foot property line setback from the land application area originates from Donner Summit Public Utilities District’s individual permit. Central Valley Water Board staff have revised the proposed MGO as shown below to contain setback requirements in section V.B.1.b.xi, Table 28 (previously section V.B.1.b.xi through V.B1.b.xiii) to additionally clarify that these will be applicable as identified in the NOA:

- xi. As specified in the NOA, the following buffer zones in Table 28 shall be maintained:

Table 28. Land Application Area Setback Requirements

Category	Setback
Between any watercourse and the disposal areas	50 feet
Between any spring, domestic well or irrigation well and the disposal areas	50 feet
Between edge of use area and all property boundaries	50 feet

16. Recycling Specifications - Water Recycling Requirements.

CVCWA requests that language be added to the Tentative Order to make it clear that POTWs under the Municipal General Order will be able to maintain their individual recycled water permits and will not be required to enroll under the General Order for Water Recycling Requirements. Moreover, CVCWA recommends renaming section V.C.1. so that it is clear that this section applies to both POTWs

under the General Order for Water Recycling Requirements (WQ 2016-0068-DDW) and individual water recycling permits.

RESPONSE: Central Valley Water Board staff do not concur that the section needs to be specified to include applicability to individual water recycling permits. The current section V.C.1 title is “Applicable To Dischargers That Produce Recycled Water Under the General Order for Water Recycling Requirements” and continues to specify Recycling Specifications only for Dischargers that require coverage of production of recycling water, which are those that obtain coverage under the General Order for Water Recycling Requirements.

17. Recycling Specifications – MGO not consistent with the General Order for Water Recycling Requirements or Title 22

CVCWA contends that the Tentative Order is more restrictive and requires additional conditions not consistent with the General Order for Water Recycling Requirements or Title 22, section 60304. CVCWA requests that the Central Valley Water Board ensures that the language in the Tentative Order is consistent with the General Order for Water Recycling Requirements and Title 22. For example, the General Order for Water Recycling Requirements is not limited to tertiary water and is applicable to all levels of recycled water, and Title 22 provides for the option, not requirement, to use coagulant. Disinfection Requirements under section VII.C.6.a should also be revised.

RESPONSE: The Central Valley Water Board staff concur, in part. Disinfection Requirements under section VII.C.6.a specifies “oxidized, coagulated, filtered, and adequately disinfected” but also indicates “or equivalent” to Title 22 standards meaning that not all of the aforementioned methods are required. Section VII.C.1.c does not include “or equivalent”; therefore, Central Valley Water Board staff have revised this section to the following for consistency in clarifying that coagulation is not required:

- c. Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the State Water Board, DDW reclamation criteria, CCR, Title 22, division 4, chapter 3 (Title 22), or equivalent.

18. Receiving Water Limitations

CVCWA commented that second sentence of section VI.A of Tentative Order states the following:

Compliance with any amendment or revision to the water quality objectives contained in the Basin Plans adopted by the Central Valley Water Board subsequent to adoption of this General Order is also required.

CVCWA requests that the Central Valley Water Board revise this prospective incorporation language to state instead that a permit amendment will be required for incorporation of any future amendment or revision to the Basin Plan objectives.

RESPONSE: The Central Valley Water Board concur. Section VI.A of the proposed MGO has been revised to the following to remove the second sentence and revise the third sentence as shown below:

Receiving water limitations are based on water quality objectives contained in the Basin Plans for the Sacramento and San Joaquin River Basins and the Tulare Lake Basin and are a required part of this General Order. Any discharge authorized for coverage under this General Order shall not cause the following in the receiving water as specified in the NOA:

19. Bacteria

CVCWA contends that the receiving water limitation for bacteria is similar, but not exactly identical, to the language of the Statewide Bacteria Objective and is unclear why the language in the Tentative Order (section VI.A.2) deviates from Statewide Bacteria Objective language. CVCWA recommends that the Central Valley Water Board revise the Tentative Order as needed to ensure consistency with the limitation established in the Basin Plan.

RESPONSE: Central Valley Water Board staff do not concur that the language in the proposed MGO deviates significantly enough to cause consistency issues with the Bacteria Provisions. No changes to the MGO were made.

20. Dissolved Oxygen

To ensure consistency with the Basin Plan, CVCWA recommends rewriting sections VI.A.6.b.iv and VI.A.6.b.v of the MGO as a single requirement as show below:

- v. From June 1st through August 31, the dissolved oxygen concentrations shall not be reduced below 9.0 mg/L for the Sacramento River from Keswick Dam to Hamilton City. When natural conditions lower dissolved oxygen below this level, the concentrations shall be maintained at or above 95 percent of saturation.

RESPONSE: Central Valley Water Board staff concur, in part, with the revisions. Similar to RBI Comment 4, the requirements for receiving water dissolved oxygen in sections VI.A.6.b.iv and VI.A.6.b.v were revised to VI.A.6.c of the proposed MGO as follows:

- c. **For the Sacramento River from Keswick Dam to Hamilton City from 1 June to 31 August**, dissolved oxygen concentrations shall not:
 - i. Be reduced below 9.0 mg/L; nor
 - ii. Fall below 95 percent of saturation when natural conditions lower dissolved oxygen below 9.0 mg/L.

21. Taste and Odors

The language regarding Taste and Odors in each basin plan is different from the language in the Tentative Order (see Basin Plan, page 3-13; Water Quality Control

Plan for the Tulare Lake Basin, page 3-8.). CVCWA requests clarity on how the Central Valley Water Board is interpreting and addressing these differences.

RESPONSE: While the language regarding taste and odors in the Basin Plan for the Sacramento River and San Joaquin River Basins and the Basin Plan for the Tulare Lake Basin is slightly different, each sentence is comprised of the exact same components in the respective sections for Tastes and Odor. Central Valley Water Board staff have revised section VI.A.15 of the proposed MGO to the following:

15. **Taste and Odors.** Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or domestic or municipal water supplies, or that cause nuisance, or otherwise adversely affect beneficial uses or domestic or municipal water supplies.

22. Salinity

CVCWA requests that the Central Valley Water Board confirm and ensure that the Receiving Water Limitation for salinity (section VI.A.19) is the same as the language in the Basin Plan. Moreover, CVCWA is concerned that the receiving water limitation for salinity is phrased in a way that suggests that the discharge “shall not exceed” the stated water quality objectives. For salinity (and all other receiving water limitations in the Tentative Order), the language should be clear that discharges shall not cause the receiving water to exceed the specific receiving water limitations. Therefore, for salinity and any other receiving water provisions, CVCWA recommends that the subject language be revised to:

Applicable to the Sacramento River, salinity, based upon previous 10 years of record, shall not cause the river to exceed: . . .

RESPONSE: Central Valley Water Board staff concur, in part. The existing language in section VI.A states that “[a]ny discharge authorized for coverage under this General Order shall not cause the following in the receiving water.” For additional clarity, staff have revised section VI.A.19 of the proposed MGO, shown in part, to the following:

19. **Salinity (Applicable to discharges to the Sacramento River).** Salinity, based upon the previous 10 years of record, shall not exceed: . . .

23. Provisions - Standard Provisions

- a. **Standard Provision Applicability.** CVCWA recommends revising section VII.A.2.b. and VII.A.2.b.iv to clarify whether these provisions apply to the Municipal General Order, the NOA, or both. It is CVCWA’s recommendation that this provision apply to an NOA.
- b. **Effluent Standards and Prohibitions Compliance.** CVCWA recommends removing the following second paragraph from section VII.A.2.c:

All Dischargers authorized to discharge under this General Order shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this General Order has not yet been modified.

c. **Pretreatment Standards Compliance.** Similarly, section VII.A.2.g states:

All Dischargers authorized to discharge under this General Order shall ensure compliance with any existing or future pretreatment standard promulgated by U.S. EPA under section 307 of the CWA, or amendment thereto, for any discharge to the municipal system.

Instead, CVCWA recommends including language to state that the Central Valley Water Board will provide adequate notice to all dischargers under the Municipal General Order of any such pending modifications.

d. **Effective Notice of Applicability Period.** Lastly, CVCWA requests clarification as to why an NOA remains in effect for three years, instead of five.

RESPONSE:

Standard Provision Applicability.

Central Valley Water Board staff concur and have revised section VII.A.2.b and VII.A.2.b.ii to the following:

- b. After notice and opportunity for a hearing, a NOA issued under this General Order may be terminated or modified for cause, including, but not limited to: . . .
 - ii. obtaining a NOA under this General Order by misrepresentation or by failing to disclose fully all relevant facts; . . .

No changes to section VII.A.2.b.iv were made as revisions to section VII.A.2.b specify the applicability to the NOA.

Effluent Standards and Prohibitions Compliance.

Central Valley Water Board staff concur, in part. If effluent standards or prohibitions are updated, Central Valley Water Board staff review and update permits as applicable to comply with these changes. The second paragraph of section VII.A.2.c of the proposed MGO was revised to remove “, even if this General Order has not yet been modified” as shown below:

All Dischargers authorized to discharge under this General Order shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions.

Pretreatment Standards Compliance.

Central Valley Water Board staff do not concur with the requested revision. Section VII.A.2.g is a general Standard Provision meant to ensure that modifications to pretreatment programs are specified to be applicable to dischargers under the MGO. No changes to the proposed MGO were made.

Effective Notice of Applicability Period.

Central Valley Water Board staff concur that as written the Standard Provision needs to be clarified to apply to previously issued NOAs and their administrative continuation under the proposed MGO. Central Valley Water Board staff have revised section VII.A.2.o to the following to clarify the three-year effective period applies to NOAs issued under the Order R5-2017-0085-02:

- o. If the Discharger submits a timely and complete Notice of Intent under this General Order, an NOA issued under Order R5-2017-0085-02 shall continue in force and effect for up to three (3) years after the effective date of the renewed General Order, until the NOA is reissued or the Regional Water Board rescinds the NOA, whichever is sooner.

24. Provisions - Mercury

- a. **Delta Mercury Control Program Phase 2.** CVCWA requests that the language on pages 123 and 124 of the Tentative Order be updated to reflect that Phase 2 of the Delta Mercury Control Program Review has begun.
- b. **Pollution Prevention Plan.** CVCWA requests that the Central Valley Water Board confirm that the Pollution Prevention Plan (PPP) for Mercury in section VII.C.3.a of the Tentative Order only applies in the event that a compliance schedule is included in the Tentative Order for specific dischargers.
- c. **Mercury Compliance Schedule.** CVCWA also requests that the Central Valley Water Board confirm and clarify the necessity of including compliance schedules for the Cities of Lodi and/or Manteca in section VII.C.7.a. If a compliance schedule is not necessary for one or both entities, CVCWA requests revising section VII.C.7 accordingly or removing this provision in its entirety.

RESPONSE:

Delta Mercury Control Program Phase 2.

Central Valley Water Board staff concur and have revised section VII.C.1.b to the following:

- b. **Mercury.** The Basin Plans' Delta Mercury Control Program was designed to proceed in two phases. The Delta Mercury Control Program is in Phase 2, and the Central Valley Water Board is conducting a Phase 1 Delta Mercury Control Program Review that considers modification to the Delta Mercury Control Program. This Order may be reopened to address changes to the Delta Mercury Control Program.

Pollution Prevention Plan.

The need to include a PPP for any specific discharger will be evaluated based on inclusion of a compliance schedule in an issued NOA. Central Valley Water Board staff have revised the first sentence of section VII.C.3.a to the following to clarify the applicability of the PPP:

- a. **Pollution Prevention Plan (PPP) for Mercury.** Dischargers within the Sacramento-San Joaquin Delta shall implement a PPP for mercury in accordance with Water Code section 13263.3(d)(3), per the compliance schedule in this Order for methylmercury (section VII.C.7.a), if specified in the NOA.

Mercury Compliance Schedule

Similar to City of Lodi Comment 1, the proposed MGO was revised to include language that the applicability of a compliance schedule shall be as specified in the NOA.

25. Salinity Evaluation and Minimization Plan, Best Management Practices and Pollution Prevention

In Section b, CVCWA recommends replacing the third paragraph of section VII.C.3.b and the subsequent paragraph with the following to ensure consistency with the Basin Plan:

Furthermore, the Discharger shall evaluate the trend in the calendar annual average concentrations of effluent salinity for the prior five calendar years as part of the NOI application. If salinity trends in effluent are increasing for reasons other than conservation and drought, salt levels in the water supply source, and/or some appropriate increment of growth, the Discharger shall review and modify their SEMP, as appropriate.

Additionally, CVCWA suggests the NOI should be updated for consistency with this revision provision and other relevant CV-SALTS provisions.

RESPONSE: Central Valley Water Board staff do not concur with the requested revisions as the effluent limitations and triggers for salinity in the proposed MGO consider conservation and drought, salt levels in the water supply source, and/or some appropriate increment of growth. Current language to include an update to the Salinity Evaluation and Minimization Plan upon submittal of an NOI if there is an exceedance of the annual average effluent limit or trigger is necessary to evaluate ability to comply with effluent limits or triggers that already include these considerations.

26. Provisions - Construction, Operation and Maintenance Specifications

CVCWA requests clarification as to whether section VII.C.4.c.vii, which requires that dissolved oxygen be maintained at 1.0 mg/L in the top one foot of any wastewater treatment or storage pond for three consecutive weekly sampling events, is anticipated to cause compliance issues with any existing POTW enrolled in the MGO.

RESPONSE: The Central Valley Water Board does not anticipate compliance issues with the dissolved oxygen requirements for treatment ponds. Specifications for treatment ponds shall be specified as applicable in the NOA.

27. Provisions - Special Provisions for POTWs

Regarding Pretreatment Standards in section VII.C.5.a, CVCWA requests clarification as to why the timeframe for compliance with Code of Federal Regulations (CFR) 40, Part 403 has been shortened from 1 year to 6 months.

RESPONSE: Compliance 40 CFR, Part 403 was shortened inadvertently as this is the standard timeframe included for individual permits. Central Valley Water Board staff have revised section VII.C.5.a.i of the proposed MGO to include the 1-year timeframe as previously established in the MGO.

28. Provisions - Resource Recovery from Anaerobically Digestible Material

CVCWA contends that the Tentative Order changes the length of time that records are required to be kept from three years in the previous permit to five years. CVCWA is uncertain how this will apply and would like clarity of whether this is applicable moving forward or if it is applicable to records under the current order.

RESPONSE: Central Valley Water Board staff understands that the discrepancy in record retention may have an effect on compliance as written; therefore, the following sentence has been added to the end of section VII.C.5.c:

For Dischargers that were previously required to retain records for a minimum of three years, the five-year minimum record retention is applicable two years from the effective date of the NOA.

29. Insignificant Dischargers Exemption

CVCWA commented that the Tentative Order does not include all relevant exemption language per the Statewide Toxicity Provisions. The Tentative Order should include the exemption for insignificant discharges (section III.C.11.a of the Statewide Toxicity Provisions).

RESPONSE 29: The Central Valley Water Board concurs and have revised the Fact Sheet, section V.C.5.a of the proposed MGO to the follows:

- a. The Statewide Toxicity Provisions contain toxicity provisions, including numeric objectives for acute and chronic aquatic toxicity that are applicable to Dischargers enrolled under this General Order unless otherwise specified in the NOA.

As specified in the NOA, an exemption for insignificant dischargers may be implemented on a site-specific basis. If exempt from the Statewide Toxicity Provisions, toxicity water quality objectives shall be included in the NOA as receiving water limitations and routine monitoring shall be as specified in the NOA.

30. Toxicity Compliance Determination

- a. **TST Approach.** CVCWA commented that section VIII.K.2 of the Tentative Order is inconsistent with the TST approach as defined in the Statewide Toxicity Provisions.
- b. **Most Sensitive Species Identification.** CVCWA commented that section VIII.K.2.b.i of the Tentative Order refers to “the most sensitive species” and requests that the Tentative Order is revised to reflect that a discharger’s permit or NOA will identify the most sensitive species per the Statewide Toxicity Provisions.
- c. **MMEL Compliance Test and Toxicity Monitoring Frequencies.** CVCWA requested to revise sections VIII.K.2.a.ii and VIII.K.2.b.ii of the Tentative Order (shown in context below as proposed MGO sections VIII.K.1.b and VIII.K.2.b, respectively) to reflect that different monitoring frequencies are permitted under the Statewide Toxicity Provisions:
 - b. **Acute Whole Effluent Toxicity MMEL (Section V.A.1.c.i(b)).** If a routine acute whole effluent toxicity test using the TST statistical approach is a “fail” at the IWC, the Discharger shall conduct a maximum of two additional MMEL compliance tests during the toxicity calendar month. If the routine test and one of the additional MMEL compliance test results in a “fail” at the IWC, the Discharger will be deemed out of compliance with the MMEL.
 - ...
 - b. **Chronic Whole Effluent Toxicity MMEL (Section V.A.1.c.i(b)).** If the result of a routine chronic whole effluent toxicity test, using the TST statistical approach, is a “fail” at the IWC, the Discharger shall conduct a maximum of two additional MMEL compliance tests during the toxicity calendar month. If the routine test and one of the additional MMEL compliance test results in a “fail” at the IWC, the Discharger will be deemed out of compliance with the MMEL.

RESPONSE: Central Valley Water Board staff concur, in part, with the need for revisions.

TST Approach.

The first paragraph of section VIII.K (previously section VIII.K.2) of the proposed MGO was revised to the following to cite the Statewide Toxicity Provisions’ definition of the TST approach:

The discharge is subject to determination of “pass” or “fail” from acute and chronic whole effluent toxicity tests using the Test of Significant Toxicity (TST) statistical t-test approach described in Section IV.B.1.c of the Statewide Toxicity Provisions.

Most Sensitive Species Identification.

Section VIII.K.2.a (previously section VIII.K.2.b.i) was revised to the following to specify the most sensitive species as identified in the NOA:

- a. **Chronic Whole Effluent Toxicity MDEL (Section V.A.1.c.i(a)).** If the result of a routine chronic whole effluent toxicity test, using the TST statistical approach, is a “fail” at the IWC measured in the test and the percent effect for either sublethal or survival endpoint, whichever is the endpoint of the most sensitive species as identified in the NOA, is greater than or equal to 50 percent, the Discharger will be deemed out of compliance with the MDEL.

MMEL Compliance Test and Monitoring Frequencies.

Central Valley Water Board staff do not concur that revisions are necessary to sections VIII.K.1.b and VIII.K.2.b (previously sections VIII.K.2.a.ii and VIII.K.2.b.ii, respectively). The Statewide Toxicity Provisions specify that the MMEL compliance testing shall be initiated within the same calendar month in section III.C.4.b.iv, shown in part and as follows:

. . . The MMEL COMPLIANCE TESTS shall be initiated within the same CALENDAR MONTH that the first ROUTINE MONITORING test was initiated that resulted in the “fail” at the IWC. . . .

The toxicity calendar month is referenced in sections VIII.K.1.b and VIII.K.2.b to indicate the time frame in which compliance monitoring for the MMEL should be conducted, and these sections do not specify other routine monitoring frequencies are not able to be indicated in the NOA.

31. MRP Table E-3

- a. **Additional Analytes.** CVCWA contends that MRP Table E-3 contains a number of analytes that are more typically included in effluent characterization studies and requests clarification as to why these analytes are listed under effluent monitoring.
- b. **Major and Minor Discharger Sampling Frequency.** Table E-3 establishes minimum frequencies for major and minor dischargers. CVCWA requests clarification as to why Major and Minor dischargers now have the same sampling frequency for the majority of listed constituents, and the reason for reducing the frequency of monitoring to reflect a reasonable minimum sampling level for very small POTWs such as Hammonton Gold and some of the smaller sized POTWs that are over 5 million gallons per day (MGD).
- b. **Less Frequent Monitoring.** CVCWA requests that the MGO provide flexibility to relieve small dischargers of the cost and burden of frequent monitoring and recommends revising page E-7 to grant the Executive Officer discretion to establish more or less frequent monitoring requirements than stated in Table E-3, if and when appropriate.
- c. **Endrin Aldehyde.** CVCWA contends that endrin aldehyde monthly sampling requirement for Major Dischargers should not be monthly.

- d. **Persistent Chlorinated Hydrocarbon Pesticides.** CVCWA requests clarification as to the different sampling frequencies provided for persistent chlorinated hydrocarbon pesticides when listed in the aggregate as opposed to when such pesticides are listed separately in Table E-3. Persistent chlorinated hydrocarbon pesticides are listed as a group with monthly sampling requirements and listed individually with quarterly sampling requirements. CVCWA recommends revising Table E-3 to ensure consistency among the grouped and individually listed constituents.
- e. **ELAP-Approved Analytical Methods.** CVCWA requests that the Central Valley Water Board ensure that ELAP-approved analytical methods exist for all parameters included in an NOA. CVCWA requests the opportunity to discuss with the Central Valley Water Board how to resolve issues for any parameter that does not currently have an ELAP-approved methodology.
- f. **Peracetic Acid.** CVCWA requests clarification as to the requirement for daily monitoring for peracetic acid in Table E-3. It is not clear to CVCWA whether this parameter is applicable to a subset of dischargers, but CVCWA requests that the Board clarify the rationale for including this parameter and the basis for requiring daily monitoring.

RESPONSE:

Additional Analytes.

If reasonable potential exists, effluent monitoring will be required. Similar to NOAs that have been issued under the existing MGO, only applicable constituents from Table E-3 will be required as specified in the NOA.

Major and Minor Discharger Sampling Frequency.

The proposed MGO includes the addition of California Toxics Rule constituents for which the minimum sampling frequency would be once per quarter for either a Major or Minor discharge. As the majority of these are the same, the Central Valley Water Board has revised Table E-3 to include one column for minimum sampling frequencies for all dischargers with the authority for the Executive Officer to specify more frequent monitoring as applicable and appropriate in the NOA. See Staff Revision 3.

Less Frequent Monitoring.

Central Valley Water Board do not concur that the proposed MGO is revised to allow less frequent monitoring requirements than as specified in the MGO. The MGO must establish minimum monitoring frequencies to be specified in the NOA and the specified frequencies in the proposed MGO with the exception of those revised by Staff Revision 3 are already the minimum requirements for dischargers.

Endrin Aldehyde.

Central Valley Water Board staff concur, in part, as endrin aldehyde monthly monitoring could apply if reasonable potential did exist; however, Central Valley Water Board staff also concur that a less frequent monitoring requirement may be

necessary. Therefore, the monitoring frequency of endrin aldehyde in Table E-3 of the proposed MGO was revised to quarterly monitoring. See Staff Revision 3.

Persistent Chlorinated Hydrocarbon Pesticides.

Central Valley Water Board staff have included persistent chlorinated hydrocarbon pesticides as a group and as individual monitored constituents to be specified in the NOA if applicable on a group or individual basis. To be consistent, the minimum sampling frequency for persistent chlorinated hydrocarbon pesticide in the proposed MGO has been revised to quarterly. See Staff Revision 3.

ELAP-Approved Analytical Methods.

Central Valley Water Board staff appreciate CVCWA bringing attention to the issue of ELAP method certification and the potential need for the Central Valley Water Board to request methods to be certified by ELAP. Central Valley Water Board staff will continue to work with CVCWA on the issue of ELAP certification of analytical methods.

Peracetic Acid Monitoring.

Central Valley Water Board staff concur that peracetic acid is not necessary to the proposed MGO; therefore, it has been removed from Table E-3.

32. Definitions

CVCWA commented on the inclusion or omission of the following definitions in Attachment A:

- Monthly Median: CVCWA questioned whether this definition was intentionally removed.
- Instream Waste Concentration (IWC): CVCWA commented that this should be defined.
- Test of Significant Toxicity (TST) – CVCWA commented that this definition is inconsistent with the Statewide Toxicity Provisions.

RESPONSE: Central Valley Water Board staff concur, in part, as the definition for IWC should be defined and the definition for the TST should be consistent with the Statewide Toxicity Provisions. The definition for “WET Median Monthly Effluent Limit (MMEL)” is included in the proposed MGO. Therefore, Central Valley Water Board staff have revised Attachment A of the proposed MGO to include the following definitions:

Instream Waste Concentration (IWC)

The concentration of effluent in the receiving water after mixing as determined by the Central Valley Water Board. For purposes of aquatic toxicity testing, the IWC shall be determined as described in Section III.C.1. of the Statewide Toxicity Provisions. For assessing whether receiving waters meet the numeric water quality objectives, the undiluted ambient water shall be used as the IWC in the Test of Significant Toxicity (TST) as indicated in Section IV.B.1.c of the Statewide Toxicity Provisions.

...

Test of Significant Toxicity (TST)

A statistical approach used to analyze aquatic toxicity test data, as described in Section IV.B.1.c of the Statewide Toxicity Provisions.

33. Screening Levels for Toxicity

CVCWA contends that an acute toxicity effluent limitation, per the Statewide Toxicity Provisions, is not needed in the MGO and requests the MGO be updated to reflect this.

RESPONSE: Central Valley Water Board staff do not concur that dischargers under the proposed MGO would be exempt from the applicability of an acute toxicity effluent limitation. Per the Statewide Toxicity Provisions, a chronic aquatic toxicity test is generally protective of both chronic and acute aquatic toxicity. Based on the Statewide Toxicity Provisions, generally, an acute toxicity effluent limitation will not be applicable; however, that does not preclude the applicability of an acute toxicity effluent limitation if reasonable potential exists.

34. Sanitary Sewer System Waste Discharge Requirements Order.

CVCWA contends that Fact Sheet, section IV.C.10 should be updated as the State Water Board has issued new Sanitary Sewer System Waste Discharge Requirements Order WQ 2022-0103-DWQ that will become effective 5 June 2023.

RESPONSE: Central Valley Water Board staff concur and have revised Fact Sheet, section IV.C.10 to the following:

10. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The State Water Board adopted the General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order (WQ 2022-0103-DWQ) on 6 December 2023. The General Order requires public agencies that own or operate sanitary sewer systems with greater than 1 mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

The Discharger is subject to the requirements of, and must comply with, State Water Board Order WQ 2022-0103-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems and any subsequent order.

35. Minor Edits.

a. **Total Coliform Organisms.** CVCWA requests the reference to specifications for Total Coliform Organisms in section V.C.1.d is revised from “V.A.1.ii” to “V.A.1.a.ii.(c)”.

- b. **Recycled Water.** CVCWA recommends replacing the use of “reclaimed” and “reclamation” with “recycled” and “recycled water” throughout the Tentative Order.
- c. **Radioactivity Receiving Water Limitation.** CVCWA recommends revising the receiving water limitation for radionuclides in section VI.A.11.a to remove “nor” at the end of the sentence as follows:
 - Radionuclides to be present in concentrations that are harmful or deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- d. **Temperature Receiving Water Limitation.** CVCWA commented that the monthly average temperature for May is 69° Fahrenheit (°F) in the Basin Plan whereas the Tentative Order it is 68°F. CVCWA requested to revise the Tentative Order to reflect the Basin Plan.
- e. **Groundwater Limitations.** CVCWA recommends revising the language for Groundwater Limitations in section VI.B.1, shown in part as follows, for clarity:
 - . . . shall not cause the underlying groundwater to contain waste constituents greater than background quality or applicable [sic] groundwater quality objectives, whichever is greater.
- f. **Land Discharge of Effluent.** CVCWA requests that the use of the term “wastewater” in sections V.B.1.b.vi and V.B.1.b.vii is changed to “effluent” as it is not the appropriate term for treated wastewater.
- g. **Pyrethroid Management Plan, Best Management Practices and Pollution Prevention.** CVCWA recommends revising the first sentence of the first paragraph of section VII.C.3.c to specify Central Valley Water board staff notification of the exceedance as follows:
 - c. **Pyrethroid Management Plan.** If the Pyrethroid Pesticides Water Column Chemistry Monitoring, as specified in the NOA, results in an exceedance of any acute and/or chronic pyrethroid numeric trigger in Table 4-2 of the Basin Plan, the Discharger shall develop and submit a Pyrethroid Management Plan to the Central Valley Water Board, per the requirements described in Section 4.2.2.4.12 of the Basin Plan, within one year from the date that an exceedance is either identified by the Discharger or Central Valley Water Board staff identifies and notifies the Discharger.

RESPONSE: Central Valley Water Board staff concur with the proposed revisions and have revised the proposed MGO to reflect the requested changes, with minor grammatical corrections.

JO ANNE KIPPS COMMENTS

1. Specific Facility Comments Related to Land Discharge.

Ms. Kipps notes the land discharge specifications in the proposed MGO appear suitable for some facilities, including without limitation, Atwater Regional Wastewater Treatment Facility, Cascade Shores Wastewater Treatment Plant, Mariposa Wastewater Treatment Plant, Hangtown Creek Water Reclamation Facility, and Thunder Valley Casino Wastewater Treatment Plant. However, Ms. Kipps expresses concern about the existing MGO NOA for Willows Wastewater Treatment Plant and separate Waste Discharge Requirements Orders that cover land discharges for the City of Lodi White Slough Water Pollution Control Facility, Galt Wastewater Treatment Plant and Reclamation Facility, and Modesto Water Quality Control Facility.

RESPONSE: Comments on the adequacy of separate WDRs issued to enrolled facilities or previously issued NOAs under the existing MGO are beyond the scope of this proceeding. Comments noted for the record and no changes to the proposed MGO were included.

2. Threat to Water Quality and Complexity Ratings.

Ms. Kipps requests the Response to Comments describe the reasoning behind the threat to water quality and complexity ratings for the twenty facilities enrolled under the MGO, include justification in future NOAs, and discuss whether it includes potential threats to groundwater.

RESPONSE: Water quality threat and complexity ratings in NPDES permits are particular to the treatment facility and surface water discharge. Unlike other programs within the Central Valley Water Board, a particular threat and complexity rating does not require the Central Valley Water Board Executive Officer to provide notice and comment period for a Notice of Applicability (NOA) or prevent the Executive Officer from doing so. Also, they do not affect the applicable annual fees (the fees are based on design flow of the facility), dictate any permit requirements, or affect any other legal requirements. Central Valley Water Board staff do agree that during the NOA enrollment or renewal process that the water quality threat and complexity ratings should be reviewed and updated if necessary to best match the surface water discharge with their respective definitions based on the current facility and surface water discharge.

3. Notice of Applicability Public Comment Period.

Ms. Kipps requests a 30-day public comment period for all tentative NOAs.

RESPONSE: Central Valley Water Board staff do not concur. The MGO was subject to a 30-day public comment period. NOAs enrolling discharges under the MGO are not subject to public noticing requirements. However, the Central Valley Water Board previously discussed granting a public review period at the hearing for the existing MGO based on comments received requesting a public review period and committed to a 15-day public review period to allow interested parties to provide comments. Additionally, if determined necessary by the Central Valley Water Board

Executive Officer, a hearing for a specific NOA can be scheduled if the comments are significant enough to warrant a hearing. These procedures are specified in the [NPDES Individual Permit/Municipal General Order Flow Chart](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2017-0085_flowchart.pdf) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2017-0085_flowchart.pdf). A public review period shorter than 30 days was implemented since the MGO itself was previously subject to a 30-day public review period and NOAs are implementing the already publicly reviewed MGO and are significantly shorter, more focused documents than an individual permit. Therefore, staff are not recommending changes to the public review period; however, the Central Valley Water Board strives to be proactive in outreach to interested persons and disadvantaged communities. Upon request, the Central Valley Water Board will include Ms. Kipps on noticing for all tentative NOAs issued under the MGO or specific facilities of interest. The Central Valley Water Board can also extend the 15-day public noticing period if a request is made by an interested person who is able to substantiate the need for additional time for review of the tentative NOA.

Board staff have made the following revisions to Finding III.H to make it more consistent with the Flow Chart and remove any implication that a board hearing is the only appropriate public comment period for surface water discharges:

Notification of Interested Parties and Consideration of Public Comments for Individual NOAs. It is the intent of this General Order that the public comment period for this General Order shall be adequate for the enrollments under this Order. The Central Valley Water Board's current practice is to provide 15 days public notice of tentative NOAs, although it is not required. The Executive Officer may issue a NOA after considering any public comments. If the Executive Officer determines that a public hearing is appropriate, the Central Valley Water Board, in a public meeting, will hear and consider all comments pertaining to the tentative NOA.

4. Revisions to the Notice of Intent, Flow Schematic, and Facility Site Maps.

Ms. Kipps requested revisions to the Notice of Intent to require flow schematics to be legible and annotated and to include:

- Flows to and from emergency storage ponds
- Flows for the treatment and storage of sludge and sludge-derived liquids
- Flows of leachate and storm water runoff from areas used to temporarily store dried sludge
- Storm water flow when routed to facility impoundments also serving as emergency wastewater storage

Ms. Kipps also requested that the Notice of Intent is revised to require a scaled site map of the facility that includes the following:

- All known property lines

- All known domestic, industrial and irrigation wells onsite and within 100 feet of the facilities property boundary lines
- Wastewater treatment system components (e.g., sumps, surface impoundments used for treatment and storage and for emergency storage, etc.)
- Sludge treatment system components (e.g., stabilization lagoons, drying beds, dried sludge storage areas)
- Facility storm water management components
- All onsite monitoring locations, including groundwater monitoring wells referenced in the NOAs MRP.

Additionally, Ms. Kipps requested the NOI is revised to contain the following information:

- Dimensional data for each surface impoundment and surface used for waste treatment and storage
- Characterization of the quality of waste released, estimate of the annual hydraulic loading of wastewater or sludge, and approximate annual waste constituent loadings to groundwater
- Characteristics, conditions, and design of liners, if applicable
- Soil classifications and estimated permeabilities
- Groundwater characterization
- Antidegradation analysis for potential release of sewage and sludge waste to groundwater

RESPONSE: Central Valley Water Board staff concur with the supplemental or clarifying NOI requests provided by Ms. Kipps that are related to regulation of surface water discharges or needed for groundwater characterization. Example suggestions to the NOI application that are applicable to discharges to surface water include additional flow schematic information and a more detailed facility site map. Central Valley Water Board staff have revised Attachment B, section 3 of the proposed MGO, shown in part, to the following:

- Facility location site map. The Facility location site map should include the following:
 - The location of the Facility
 - The treatment system
 - Discharge points
 - The receiving water
 - Groundwater monitoring wells, if applicable

- Flow schematic diagram. The flow schematic diagram must be legible and annotated with all treatment components from the influent through to the point of discharge and including flows to and from emergency storage ponds and storage of sludge.

Central Valley Water Board staff do not concur with including groundwater related information beyond groundwater well information in the MGO NOI requirements that can be used to determine if there are impacts to groundwater. Information related to property lines, soil classification, irrigation well locations, sludge loading to groundwater, pond dimensions, etc. do not pertain to the regulation of a surface water discharge and are not required for groundwater characterization. This and similar information will not affect surface water limitations, monitoring requirements, or prohibitions applied through the MGO. Therefore, Central Valley Water Board staff are not including these types of requirements in the NOI application for the MGO.

Separately, if Central Valley Water Board staff determines that the operation of the sludge or stormwater facilities are impacting groundwater through analysis of groundwater data, compliance and enforcement inspections, or other means, then additional regulatory requirements may be appropriate to address the impacts.

5. Land Discharge.

Ms. Kipps provided multiple comments related to unlined ponds and sludge storage and disposal. She expressed concerns as follows:

- a. **Site-Specific Groundwater Limitations.** Land discharge specifications or NOAs should address specific constituents of concern. The permit language suggests that NOAs will establish site-specific groundwater limitations.
- b. **Prohibition of Unlined Ponds.** Inadequately designed or maintained ponds can cause groundwater degradation in violation of the Antidegradation Policy. The proposed Order should prohibit the use of unlined ponds, the proposed Order should include Land Discharge Specifications, or NOAs should address specific constituents of concern. The permit language suggests that NOAs will establish site-specific groundwater limitations eligibility criteria for facilities that have impacted groundwater and include design and pond performance requirements for lined ponds and periodic liner testing. Best practicable treatment or control (BPTC) for liners for wastewater treatment and storage ponds should be a hydraulic conductivity standard of 1×10^{-6} centimeters per second.
- c. **Sludge Handling.** The use of unlined or inadequately lined sludge lagoons, drying beds, and dried sludge storage areas does not reflect best practicable treatment or control and that groundwater degradation would occur in this case, which is not of the maximum benefit to the people of the State. Unless the discharger provides technical justification to indicate otherwise, BPTC for municipal wastewater sludge should include fully contained storage and stabilization; mechanical dewatering; concrete-lined sludge drying beds and dried sludge storage area; and the collection and return to the treatment works of all liquid wastes generated from sludge treatment (e.g., anaerobic digester supernatant, settling tank decant, belt press filtrate, centrifuge centrate, and leachate and storm water from dried sludge storage areas).

- d. **Emergency Storage Ponds.** The MGO should restrict the frequency and duration of sewage discharges to unlined emergency storage ponds, or require return of impounded sewage to the facility for treatment.
- e. **Title 27.** The Title 27 sewage exemption specially excludes discharges of “residual sludges and solid waste,” the disposal of which is subject to Title 27 prescriptive standards.

RESPONSE:

Site-Specific Groundwater Limitations.

Central Valley Water Board staff do not concur with Ms. Kipps regarding the need for establishment of site-specific groundwater limitations in the MGO. The proposed groundwater limitations in section VI.B of the Waste Discharge Requirements, are designed to establish all applicable groundwater limitations by stating that “*release of waste constituents from any storage, treatment, or disposal component associated with the facility, shall not cause the underlying groundwater to contain waste constituents greater than background quality or water quality objectives, whichever is greater*”. Instead of specifying one or more site-specific limitations, the limitation in section VI.B of the Waste Discharge Requirements implements all the applicable limitations.

Prohibition of Unlined Ponds.

Central Valley Water Board staff do not concur that unlined basins or ponds should be completely prohibited from use in the MGO since the MGO allows for specific monitoring for unlined basins and ponds, plus monitoring of monitoring wells. Monitoring for unlined basins and ponds is included in the Monitoring and Reporting Program, section IX.B.1.b, Table E-9 Pond Monitoring Requirements. Monitoring from monitoring wells is included in the Monitoring and Reporting Program, section VIII.B.3, Table E-8 Groundwater Monitoring Requirements.

The MGO was designed to create an efficiency for permitting of facilities with high quality effluent that can meet discharge limitations at the point of discharge to surface water, without the aid of dilution. Because the majority of the facilities currently enrolled in the existing MGO or planned for enrollment in the future are tertiary treatment facilities, there is minimal need for long-term usage of lined or unlined basins or ponds for treatment. The use of lined and unlined basins and ponds is typically short-term storage of wastewater from inflow and infiltration from storm events, holding partially treated wastewater during plant upsets or routine maintenance, for example when cleaning UV channels. All of these events are short-term in duration, typically seven days or less and the water is stored for only the time necessary until it can be completely treated to make sure the effluent discharge meets all applicable limits and prohibitions.

For these reasons, reporting for unlined ponds is not required until the basin or pond has been in use for more than seven days to encourage short-term use by the operator and conduct monitoring only when long-term usage could result in impacts to groundwater. For any facility that requires long-term use of an unlined basin or

pond, regulation of the facility through additional or separate regulatory requirements, such as waste discharge requirements or a Water Code section 13267 monitoring and reporting order, will be warranted. As detailed below, Section I.B.6 has been revised to include eligibility criteria for enrollment under the MGO and discusses the potential need for additional regulatory requirements for unlined facilities.

Central Valley Water Board staff concur that additional discussion of applicable antidegradation requirements is warranted. Therefore, staff have revised section V.D.4.b. of the Fact Sheet as follows:

The State Antidegradation Policy requires the Board to issue waste discharge requirements that maintain the high quality of those waters unless it finds that any degradation of water quality (1) will be consistent with maximum benefit to the people of the state; (2) will not unreasonably affect present or probable future beneficial uses of such water; and (3) will not result in water quality less than prescribed in water quality control plans or policies. In addition, the waste discharge requirements must require that discharges to high quality waters are subject to the best practicable treatment or control necessary to assure that no pollution or nuisance will occur and the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

Given the significant variation in conditions over the broad geographic scope covered by this General Order, application of the antidegradation requirements must account for the fact that at least some of the groundwaters into which discharges will occur are high quality waters for some constituents. This General Order specifies that effluent flow prohibitions specified in the Notice of Applicability shall not exceed the permitted flow rates in a Discharger's individual NPDES permit or Notice of Applicability in the absence of an approved antidegradation analysis. For Dischargers not requesting an increase in flow, this General Order will not allow for an increase in flow or mass of pollutants to the groundwater. The Order requires compliance with applicable groundwater limitations or background concentrations where the discharge could have the reasonable potential to cause or contribute to an exceedance of groundwater limitations or background concentrations. This General Order also includes land application requirements for certain facilities, specific monitoring requirements, pond operating specifications, sludge and biosolid specifications, and compliance with the CV SALTS Basin Plan Amendment. To the extent site-specific requirements or monitoring are necessary—such as for facilities with unlined ponds, basins, sludge lagoons, sludge drying beds, or sludge storage areas that are planned for long-term use—these will be addressed through additional regulatory requirements. Compliance with the General Order requirements will result in the use of best practicable treatment or control to prevent impacts to groundwater. To the extent there is limited degradation of high-quality waters despite implementation of these requirements, the limited degradation is consistent with the maximum benefit to the people of the state. Accordingly, the permitted discharge is consistent with State Water Board Resolution No. 68-16.

For new Dischargers and existing Dischargers requesting an increase in flow from those specified in their individual NPDES permit or existing Notice of Applicability under the Municipal General Order, the Notice of Intent (Attachment B) requires an antidegradation analysis meeting the requirements of State Water Board Resolution No. 68-16, "Statement of Policy With Respect to Maintaining High Quality of Waters in California," to be addressed in the Notice of Applicability. A Notice of Applicability will not be issued to a Discharger if the discharge is not consistent with antidegradation requirements.

Sludge Handling.

Central Valley Water Board staff do not concur that additional MGO requirements are necessary. The MGO requires best practicable treatment or control through wastewater treatment requirements and prohibitions, meeting groundwater limitations, implementing the CV SALTS Basin Plan Amendment, and requiring monitoring and reporting of facility data to ensure that any resultant degradation is minimized to the extent feasible and practicable. The MGO is not designed to regulate the long-term use of unlined or inadequately lined sludge lagoons, drying beds, and dried sludge storage areas that cannot comply with groundwater limitations. As detailed below, Section I.B.6 includes eligibility criteria for enrollment under the MGO and discusses the potential need for additional regulatory requirements for unlined facilities.

Emergency Storage Ponds.

Central Valley Water Board staff concur in part with restricting the frequency and duration of sewage discharges to unlined emergency storage ponds, or requiring return of impounded sewage to the facility for treatment. The MGO encourages short-term usage of unlined ponds by providing a seven-day grace period for monitoring requirements when using an unlined basin or pond. However, in situations where the Discharger requires the usage of an emergency pond for more than seven days, it would still be able to protect surface water from raw or partially treated wastewater discharges by continuing to use the unlined emergency storage pond(s) without being in direct violation of their permit. Furthermore, most of the facilities currently enrolled under the MGO have lined emergency storage basins or ponds.

However, in cases where an unlined pond, basin, sludge lagoon, sludge drying beds, or sludge storage area are planned for long-term use, the following eligibility criteria for enrollment under the MGO has been added to section I.B of the WDRs section as item 6:

6. Facilities that use unlined basins or ponds beyond incidental, emergency, or short-term facility maintenance (e.g., diversion during UV channel maintenance or facility upset) or operate unlined sludge lagoons, unlined sludge drying beds, or unlined dried sludge storage areas (unlined is considered to have a hydraulic conductivity standard of less than 1×10^{-6} centimeters per second) as part of their wastewater treatment process must obtain or be in the process of obtaining additional regulatory requirements

that address operation, maintenance, monitoring, and other specific requirements for operating the unlined treatment process to be enrolled in this Order.

Title 27.

The provision in California Code of Regulations, title 27, section 20090, subdivision (a) regarding residual sludges and solid waste refers to the permanent disposal of residual sludges and solid waste; these wastes do not become “residual” until treatment, including any necessary temporary storage, is complete. In addition, subdivision (b) exempts wastewater discharges to groundwater from sludge lagoons, drying beds, and temporary storage of dried sludge that meet the conditions of that exemption. Lined sludge drying beds are also exempt from Title 27 under section 20090, subdivision (i), which exempts fully enclosed facilities including concrete-lined storage.

6. Pond Monitoring.

Ms. Kipps commented that Table E-9 Pond Monitoring Requirements identifies several constituents as “total”, whereas the standard mineral list includes these same constituents without the “total” qualifier. Ms. Kipps suggested revising the table to delete the following constituents due to redundancy: boron, calcium, chloride, iron, magnesium, phosphorus, potassium, sodium, total alkalinity, and hardness. Also, the table includes fluoride, which seems to be included in error.

RESPONSE: Central Valley Water Board staff concur, in part. Parameters that are specified to be monitored shall be identified in the NOA. Upon issuance, the need for the complete standard minerals analysis or individual constituents will be specified in the NOA; therefore, inclusion of standard minerals in the proposed MGO in addition to the individual constituents is not duplicative. For clarity, Board staff have revised Table E-9 Pond Monitoring to the following to include “Manganese, Total” and the total qualifier as Ms. Kipps noted:

Table E-9. Pond Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling
Dissolved Oxygen	mg/L	Grab	1/Quarter
pH	standard units	Grab	1/Quarter
Odors	--	Grab	1/Month
Freeboard	Tenths of feet	Measured	1/Week
Pond Elevation	Tenths of feet	Measured	1/Week
Storage Reservoir Volume	Millions of gallons	Measured	1/Week
Boron, Total	µg/L	Grab	1/Quarter
Calcium, Total	mg/L	Grab	1/Quarter
Iron, Total	µg/L	Grab	1/Quarter
Manganese, Total	µg/L	Grab	1/Quarter
Magnesium, Total	mg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling
Potassium, Total	mg/L	Grab	1/Quarter
Sodium, Total	mg/L	Grab	1/Quarter
Bromide	mg/L	Grab	1/Quarter
Chloride, Total	mg/L	Grab	1/Quarter
Fluoride, Total	mg/L	Grab	1/Quarter
Phosphorus, Total	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Electrical Conductivity @ 25°C	µg/L	Grab	1/Quarter
Standard Minerals	mg/L	Grab	1/Quarter
Total Alkalinity	mg/L as Calcium Carbonate (CaCO ₃)	Grab	1/Quarter
Total Hardness	mg/L as CaCO ₃	Grab	1/Quarter

7. Minor Edits.

Ms. Kipps provided the following editorial suggestions:

- a. **Discharge Prohibition IV.C.** Remove redundant Prohibition IV.C.4.c.iii by modifying Prohibition IV.C to read “Neither the discharge nor its treatment and storage shall cause pollution or create a nuisance as defined in section 13050 of the Water Code.”
- b. **Provision VII.C.4.c.** For clarity consider revising to Treatment/Storage Ponds or Treatment Storage Pond Construction, Operation and Maintenance Requirements.

RESPONSE:

Discharge Prohibition IV.C

Central Valley Water Board staff concur with adding “cause pollution” to the proposed text. Special Provision VII.C.4.c.iii is specific to treatment/storage pond operating requirements, while Prohibition IV.C is generally applicable to all discharges. Both have been retained for clarity, and Provision IV.C has been revised to the following:

Neither the discharge nor its treatment shall cause pollution or create a nuisance as defined in section 13050 of the Water Code.

Section V.A.3 of the Fact Sheet has also been revised to the following to reflect this change:

3. **Prohibition IV.C (No controllable condition shall cause pollution or create a nuisance).** This prohibition is based on Water Code section 13263, the definitions in Water Code section 13050, and Clean Water Act

requirements to meet water quality standards. The Basin Plan prohibits conditions that create a nuisance or adversely affect beneficial uses.

Provision VII.C.4.c.

Central Valley Water Board staff concur and have revised Provision VII.C.4.c of the proposed MGO, shown in part, to the following:

c. Treatment/Storage Ponds. . . .

STAFF REVISIONS

1. General Order Application Requirements

Board staff made the following changes for clarity to General Order application:

- a. **General Order Application.** Remove Section II.A.1.b through e and insert the following:
 - b. A signed Notice of Intent (Attachment B).
 - c. Discharger information in Attachment B on official letterhead as follows:
 - i. Discharger information in section 2.
 - ii. Facility Information in section 3.
 - ii. Pretreatment program information in section 4, if applicable.
 - d. The [Salt Control Program Notice of Intent](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/forms_temps_guide/salt_noi_form.pdf) (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/forms_temps_guide/salt_noi_form.pdf), if a Salt Control Program Notice of Intent has not been submitted previously.
- b. **Attachment B – Notice of Intent.** Change the first sentence of the first paragraph on page B-1 to the following:

To obtain coverage under this General Order, which also serves as the National Pollutant Discharge Elimination System (NPDES) Permit, the Discharger must submit a complete Notice of Intent including the following applicable requirements on official letterhead.

2. Storm Water Detention Basin Operating Specifications

Board staff made the following revisions to include Stormwater Detention Basin Operating Specifications:

- a. **Storm Water Detention Basin Operating Specifications.** Add the following Storm Water Detention Basin Operating Specifications as section VII.C.4.d:

- d. **Storm Water Detention Basin Operating Specifications.** The NOA shall specify the following applicable operating specifications storm water detention basins not regulated under a separate Order:
 - i. The discharge of storm water to detention basins shall not cause or contribute to violations of groundwater limitations included in section VI.B. of this Order and as specified in the NOA.
 - ii. Storm water detention basins shall be managed to prevent breeding of mosquitoes. In particular,
 - (a) An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - (b) Weeds shall be minimized.
 - (c) Dead algae, vegetation, and debris shall not accumulate on the water surface.
- b. **Storm Water Requirements.** Remove Attachment F, section IV.C.9 and replace with the following:
 - 9. **Storm Water Requirements.** U.S. EPA promulgated federal regulations for storm water on 16 November 1990 in 40 C.F.R. parts 122, 123, and 124. The NPDES Industrial Storm Water Program regulates storm water discharges from wastewater treatment facilities. Wastewater treatment plants are applicable industries under the storm water program and are obligated to comply with the federal regulations. The State Water Board does not require wastewater treatment facilities with design flows less than 1 MGD to obtain coverage under the Water Quality Order 2014-0057-DWQ, NPDES General Permit No. CAS000001, General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial Storm Water General Permit). The Industrial Storm Water General Permit also does not require facilities to obtain coverage if discharges of storm water are regulated under another individual or general NPDES permit adopted by the State Water Board or Regional Water Board (Finding I.B.20). This General Order includes storm water detention basin operating specifications for Dischargers that use storm water detention basins not regulated under a separate Order. This Order does not authorize discharges of storm water to waters of the United States.

3. Effluent Monitoring Frequency.

Board staff revised Table E-3 Effluent Monitoring to the following to specify monitoring frequencies that pertain to both Major and Minor Dischargers.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	1/Week
Biochemical Oxygen Demand (5-day @ 20°C)	Percent removal	Calculate	1/Month
Total Suspended Solids	mg/L	24-hr Composite	1/Week
Total Suspended Solids	Percent Removal	Calculate	1/Month
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Month
Ammonia Nitrogen, Total (as N)	lbs/day	Calculate	1/Month
Dissolved Oxygen	mg/L	Grab	2/Month
Dissolved Organic Carbon	mg/L	Grab	1/Quarter
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Quarter
pH	standard units	Grab	1/Week
Temperature	°F	Grab	1/Week
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter
Total Dissolved Solids	mg/L	Grab	1/Quarter
Total Coliform Organisms	MPN/100m L	Grab	1/Week
Un-ionized Ammonia Nitrogen, Total as Nitrogen (N)	mg/L	Grab	1/Month
Chlorine, Total Residual	mg/L	Meter	Continuous
Chlorine, Total Residual	mg/L	Grab	1/Day
Foaming Agents (MBAS)	µg/L	Grab	1/Quarter
Aluminum, Total	µg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Fluoride, Total	µg/L	Grab	1/Quarter
Iron, Total	µg/L	Grab	1/Quarter
Manganese, Total	µg/L	Grab	1/Quarter
Mercury, Methyl	µg/L	Grab	1/Quarter
Molybdenum	µg/L	Grab	1/Quarter
Nitrate Nitrogen, Total (as N)	mg/L	Grab	1/Month
Nitrite Nitrogen (as N)	mg/L	Grab	1/Month
Nitrate plus Nitrite (as N)	mg/L	Grab	1/Month
Nitrogen, Total (as N)	mg/L	Grab	1/Week
Persistent Chlorinated Hydrocarbon Pesticides	µg/L	Grab	1/Quarter
Phosphorus, Total (as P)	mg/L	Grab	1/Month

Parameter	Units	Sample Type	Minimum Sampling Frequency
Tributyltin	µg/L	Grab	1/Quarter
Alachlor	µg/L	Grab	1/Quarter
Atrazine	µg/L	Grab	1/Quarter
Bentazon	µg/L	Grab	1/Quarter
Carbofuran	µg/L	Grab	1/Quarter
Chlorpyrifos	µg/L	Grab	1/Year
2,4-D	µg/L	Grab	1/Quarter
2,4,5-TP (Silvex)	µg/L	Grab	1/Quarter
Dalapon	µg/L	Grab	1/Quarter
Diazinon	µg/L	Grab	1/Year
Di(2-ethylhexyl)adipate	µg/L	Grab	1/Quarter
Dinoseb	µg/L	Grab	1/Quarter
Diquat	µg/L	Grab	1/Quarter
Endothal	µg/L	Grab	1/Quarter
Ethylene Dibromide (EDB)	µg/L	Grab	1/Quarter
Methoxychlor	µg/L	Grab	1/Quarter
Molinate (Ordram)	µg/L	Grab	1/Quarter
Oxamyl	µg/L	Grab	1/Quarter
Picloram	µg/L	Grab	1/Quarter
Simazine (Princep)	µg/L	Grab	1/Quarter
Thiobencarb	µg/L	Grab	1/Quarter
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	µg/L	Grab	1/Quarter
1,2-Dichloroethene (cis and trans DCE)	µg/L	Grab	1/Quarter
1,2-Dibromo-3-Chloropropane (DBCP)	µg/L	Grab	1/Quarter
1,2,3-Trichloropropane (TCP)	µg/L	Grab	1/Quarter
1,3-Butadiene	µg/L	Grab	1/Quarter
1,3-Dichloropropene (cis and trans)	µg/L	Grab	1/Quarter
2-Butanone (Methyl ethyl ketone or MEK)	µg/L	Grab	1/Quarter
2-Chloroethylvinyl ether	µg/L	Grab	1/Quarter
2-Hexanone (Methyl n-butyl ketone)	µg/L	Grab	1/Quarter
3-Methyl-4-Chlorophenol	µg/L	Grab	1/Quarter
Acetone	µg/L	Grab	1/Quarter
Carbon Disulfide	µg/L	Grab	1/Quarter
Chloromethane (Methyl chloride)	µg/L	Grab	1/Quarter
MTBE (Methyl tertiary butyl ether)	µg/L	Grab	1/Quarter
Stoddard Solvent	µg/L	Grab	1/Quarter
Styrene	µg/L	Grab	1/Quarter
Trichlorofluoromethane (Freon 11)	µg/L	Grab	1/Quarter
Xylenes	µg/L	Grab	1/Quarter
Antimony, Total	µg/L	Grab	1/Quarter
Arsenic, Total	µg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling Frequency
Beryllium, Total	µg/L	Grab	1/Quarter
Cadmium, Total	µg/L	Grab	1/Quarter
Chromium (III)	µg/L	Grab	1/Quarter
Chromium (VI)	µg/L	Grab	1/Quarter
Copper, Total	µg/L	Grab	1/Quarter
Lead, Total	µg/L	Grab	1/Quarter
Mercury, Total	µg/L	Grab	1/Year
Nickel, Total	µg/L	Grab	1/Quarter
Selenium, Total	µg/L	Grab	1/Quarter
Silver, Total	µg/L	Grab	1/Quarter
Thallium, Total	µg/L	Grab	1/Quarter
Zinc, Total	µg/L	Grab	1/Quarter
Cyanide, Total (as CN)	µg/L	Grab	1/Quarter
Asbestos	MFL	Grab	1/Quarter
2,3,7,8-TCDD	µg/L	Grab	1/Quarter
Acrolein	µg/L	Grab	1/Quarter
Acrylonitrile	µg/L	Grab	1/Quarter
Benzene	µg/L	Grab	1/Quarter
Bromoform	µg/L	Grab	1/Quarter
Carbon Tetrachloride (Freon 10)	µg/L	Grab	1/Quarter
Chlorobenzene	µg/L	Grab	1/Quarter
Chlorodibromomethane	µg/L	Grab	1/Month
Chloroethane	µg/L	Grab	1/Quarter
2-Chloroethylvinyl Ether	µg/L	Grab	1/Quarter
Chloroform	µg/L	Grab	1/Quarter
Dichlorobromomethane	µg/L	Grab	1/Quarter
1,1-Dichloroethane (DCA)	µg/L	Grab	1/Quarter
1,2-Dichloroethane (DCA)	µg/L	Grab	1/Quarter
1,1-Dichloroethylene (DCE)	µg/L	Grab	1/Quarter
1,2-Dichloropropane	µg/L	Grab	1/Quarter
1,3-Dichloropropylene	µg/L	Grab	1/Quarter
Ethylbenzene	µg/L	Grab	1/Quarter
Methyl Bromide (Bromomethane)	µg/L	Grab	1/Quarter
Methyl Chloride (Chloromethane)	µg/L	Grab	1/Quarter
Methylene Chloride (Dichloromethane)	µg/L	Grab	1/Quarter
1,1,2,2-Tetrachloroethane	µg/L	Grab	1/Quarter
Tetrachloroethylene (PCE)	µg/L	Grab	1/Quarter
Toluene	µg/L	Grab	1/Quarter
1,2-Trans-Dichloroethylene (DCE)	µg/L	Grab	1/Quarter
1,1,1-Trichloroethane (TCA)	µg/L	Grab	1/Quarter
1,1,2-Trichloroethane (TCA)	µg/L	Grab	1/Quarter
Trichloroethylene (TCE)	µg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling Frequency
Vinyl Chloride (Chloroethene)	µg/L	Grab	1/Quarter
2-Chlorophenol	µg/L	Grab	1/Quarter
2,4-Dichlorophenol	µg/L	Grab	1/Quarter
2,4-Dimethylphenol	µg/L	Grab	1/Quarter
2-Methyl-4,6-Dinitrophenol	µg/L	Grab	1/Quarter
2,4-Dinitrophenol	µg/L	Grab	1/Quarter
2-Nitrophenol	µg/L	Grab	1/Quarter
4-Nitrophenol	µg/L	Grab	1/Quarter
3-Methyl-4-Chlorophenol	µg/L	Grab	1/Quarter
Pentachlorophenol (PCP)	µg/L	Grab	1/Quarter
Phenol	µg/L	Grab	1/Quarter
2,4,6-Trichlorophenol	µg/L	Grab	1/Quarter
Acenaphthene	µg/L	Grab	1/Quarter
Acenaphthylene	µg/L	Grab	1/Quarter
Anthracene	µg/L	Grab	1/Quarter
Benzidine	µg/L	Grab	1/Quarter
Benzo(a)Anthracene	µg/L	Grab	1/Quarter
Benzo(a)Pyrene	µg/L	Grab	1/Quarter
Benzo(b)Fluoranthene	µg/L	Grab	1/Quarter
Benzo(ghi)Perylene	µg/L	Grab	1/Quarter
Benzo(k)Fluoranthene	µg/L	Grab	1/Quarter
Bis(2-Chloroethoxy)Methane	µg/L	Grab	1/Quarter
Bis(2-Chloroethyl)Ether	µg/L	Grab	1/Quarter
Bis(2-Chloroisopropyl)Ether	µg/L	Grab	1/Quarter
Bis(2-Ethylhexyl)Phthalate	µg/L	Grab	1/Quarter
4-Bromophenyl Phenyl Ether	µg/L	Grab	1/Quarter
Butylbenzyl Phthalate	µg/L	Grab	1/Quarter
2-Chloronaphthalene	µg/L	Grab	1/Quarter
4-Chlorophenyl Phenyl Ether	µg/L	Grab	1/Quarter
Chrysene	µg/L	Grab	1/Quarter
Dibenzo(a,h)Anthracene	µg/L	Grab	1/Quarter
1,2-Dichlorobenzene	µg/L	Grab	1/Quarter
1,3-Dichlorobenzene	µg/L	Grab	1/Quarter
1,4-Dichlorobenzene	µg/L	Grab	1/Quarter
3,3-Dichlorobenzidine	µg/L	Grab	1/Quarter
Diethyl Phthalate	µg/L	Grab	1/Quarter
Dimethyl Phthalate	µg/L	Grab	1/Quarter
Di-n-Butyl Phthalate	µg/L	Grab	1/Quarter
2,4-Dinitrotoluene	µg/L	Grab	1/Quarter
2,6-Dinitrotoluene	µg/L	Grab	1/Quarter
Di-n-Octyl Phthalate	µg/L	Grab	1/Quarter
1,2-Diphenylhydrazine	µg/L	Grab	1/Quarter

Parameter	Units	Sample Type	Minimum Sampling Frequency
Fluoranthene	µg/L	Grab	1/Quarter
Fluorene	µg/L	Grab	1/Quarter
Hexachlorobenzene	µg/L	Grab	1/Quarter
Hexachlorobutadiene	µg/L	Grab	1/Quarter
Hexachlorocyclopentadiene	µg/L	Grab	1/Quarter
Hexachloroethane	µg/L	Grab	1/Quarter
Indeno(1,2,3-cd)Pyrene	µg/L	Grab	1/Quarter
Isophorone	µg/L	Grab	1/Quarter
Naphthalene	µg/L	Grab	1/Quarter
Nitrobenzene	µg/L	Grab	1/Quarter
N-Nitrosodimethylamine	µg/L	Grab	1/Quarter
N-Nitrosodi-n-Propylamine	µg/L	Grab	1/Quarter
N-Nitrosodiphenylamine	µg/L	Grab	1/Quarter
Phenanthrene	µg/L	Grab	1/Quarter
Pyrene	µg/L	Grab	1/Quarter
1,2,4-Trichlorobenzene	µg/L	Grab	1/Quarter
Aldrin	µg/L	Grab	1/Quarter
alpha-BHC (benzene hexachloride)	µg/L	Grab	1/Quarter
beta-BHC (benzene hexachloride)	µg/L	Grab	1/Quarter
gamma-BHC (benzene hexachloride or lindane)	µg/L	Grab	1/Quarter
delta-BHC (benzene hexachloride)	µg/L	Grab	1/Quarter
Chlordane	µg/L	Grab	1/Quarter
4,4'-DDT	µg/L	Grab	1/Quarter
4,4'-DDE	µg/L	Grab	1/Quarter
4,4'-DDD	µg/L	Grab	1/Quarter
Dieldrin	µg/L	Grab	1/Quarter
alpha-Endosulfan	µg/L	Grab	1/Quarter
beta-Endosulfan	µg/L	Grab	1/Quarter
Endosulfan Sulfate	µg/L	Grab	1/Quarter
Endrin	µg/L	Grab	1/Quarter
Endrin Aldehyde	µg/L	Grab	1/Quarter
Heptachlor	µg/L	Grab	1/Quarter
Heptachlor Epoxide	µg/L	Grab	1/Quarter
Polychlorinated Biphenyls (PCBs)	µg/L	Grab	1/Quarter
Toxaphene	µg/L	Grab	1/Quarter

4. Statewide Toxicity Provisions.

Board staff made the following changes due to the final approval of the Statewide Toxicity Provisions:

- a. **Water Quality-Based Effluent Limitations for Other Constituents of Concern.** Revise section V.A.1.c.i through V.A.1.c.ii to the following:

i. **Acute Whole Effluent Toxicity (WET)**

- (a) **Acute WET MDEL.** No acute aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste Concentration (IWC) AND a percent effect greater than or equal to 50 percent.
- (b) **Acute WET Median Monthly Effluent Limitation (MMEL).** No more than one acute aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC.

ii. **Chronic WET**

If the most sensitive species is *Ceriodaphnia dubia*, a chronic WET MMEL will apply **beginning 1 January 2024**, as specified in the NOA. **Prior to 1 January 2024**, if the most sensitive species is *Ceriodaphnia dubia*, a chronic WET median monthly effluent target (MMET) will apply in lieu of a chronic WET MMEL, as specified in the MRP of NOA.

(a) **Chronic Whole Effluent Toxicity MDEL**

- (1) **If the most sensitive species toxicity test includes the survival endpoint for *Pimephales promelas* or *Ceriodaphnia dubia***, no chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the IWC for the sub-lethal endpoint measured in the test AND a percent effect for the survival endpoint greater than or equal to 50 percent.
- (2) **If the most sensitive species toxicity test does not include the survival endpoint**, no chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the IWC for the sub-lethal endpoint measured in the test AND a percent effect for that sub-lethal endpoint greater than or equal to 50 percent.

(b) **Chronic Whole Effluent Toxicity MMEL**

- (1) No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC for any endpoint.

b. **Receiving Water Limitations.** Add sections VI.A.17.b and VI.A.17.c below section VI.A.17.a as follows:

- b. **Acute Toxicity.** The acute aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.80, where the following null hypothesis, H_0 , shall be used:

H_0 : Mean response (ambient water) $\leq 0.80 \cdot$ mean response (control)

And where the following alternative hypothesis, H_a , shall be used:

Ha: Mean response (ambient water) > 0.80 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting acute aquatic toxicity testing and rejecting this null hypothesis in accordance with the TST statistical approach. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the acute aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a “fail”) is equivalent to an exceedance of the acute aquatic toxicity water quality objective.

- c. **Chronic Toxicity.** The chronic aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.75, where the following null hypothesis, Ho, shall be used:

Ho: Mean response (ambient water) \leq 0.75 • mean response (control)

And where the following alternative hypothesis, Ha, shall be used:

Ha: Mean response (ambient water) > 0.75 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing and rejecting this null hypothesis in accordance with the Test of Significant Toxicity (TST) statistical approach described in the Statewide Toxicity Provisions Section IV.B.1.c. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the chronic aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a “fail”) is equivalent to an exceedance of the chronic aquatic toxicity water quality objective.

- c. **Compliance Determination.** Revise section VIII.K to the following:

K. Whole Effluent Toxicity Effluent Limitations or Triggers.

The discharge is subject to determination of “pass” or “fail” from acute and chronic whole effluent toxicity tests using the Test of Significant Toxicity (TST) statistical t-test approach described in Section IV.B.1.c of the Statewide Toxicity Provisions.

The null hypothesis (Ho) for the TST statistical approach is:

Mean discharge Instream Waste Concentration (IWC) response \leq Regulatory Management Decision (RMD) x Mean control response, where the chronic RMD = 0.75 and the acute RMD = 0.80.

A test result that rejects this null hypothesis is reported as “pass.” A test result that does not reject this null hypothesis is reported as “fail.”

The relative “Percent Effect” at the discharge IWC is defined and reported as:

Percent Effect = ((Mean control response – Mean discharge IWC response) / Mean control response) x 100.

This is a t-test (formally Student’s t-Test), a statistical analysis comparing two sets of replicate observations, i.e., a control and IWC. The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC differs from the control, the test result is “pass” or “fail”). The Welch’s t-test employed by the TST statistical approach is an adaptation of Student’s t-test and is used with two samples having unequal variances.

1. Acute Whole Effluent Toxicity

- a. **Acute Whole Effluent Toxicity MDEL (Section V.A.1.c.i(a)).** If the result of a routine acute whole effluent toxicity test, using the TST statistical approach, is a “fail” at the IWC for the survival endpoint measured in the test and the percent effect for the survival endpoint is greater than or equal to 50 percent, the Discharger will be deemed out of compliance with the MDEL.
- b. **Acute Whole Effluent Toxicity MMEL (Section V.A.1.c.i(b)).** If a routine acute whole effluent toxicity test using the TST statistical approach is a “fail” at the IWC, the Discharger shall conduct a maximum of two additional MMEL compliance tests during the toxicity calendar month. If the routine test and one of the additional MMEL compliance test results in a “fail” at the IWC, the Discharger will be deemed out of compliance with the MMEL.

2. Chronic Whole Effluent Toxicity

- a. **Chronic Whole Effluent Toxicity MDEL (Section V.A.1.c.i(a)).** If the result of a routine chronic whole effluent toxicity test, using the TST statistical approach, is a “fail” at the IWC measured in the test and the percent effect for either sublethal or survival endpoint, whichever is the endpoint of the most sensitive species as identified in the NOA, is greater than or equal to 50 percent, the Discharger will be deemed out of compliance with the MDEL.
- b. **Chronic Whole Effluent Toxicity MMEL (Section V.A.1.c.i(b)).** If the result of a routine chronic whole effluent toxicity test, using the TST statistical approach, is a “fail” at the IWC, the Discharger shall conduct a maximum of two additional MMEL compliance tests during the toxicity calendar month. If the routine test and one of the

additional MMEL compliance test results in a “fail” at the IWC, the Discharger will be deemed out of compliance with the MMEL.

- d. **Attachment C, Toxicity.** Revise Attachment C, section VI to the following:

VI. TOXICITY

A. Screening for Acute Toxicity

1. If acute toxicity testing is required and any of the acute aquatic toxicity tests result in a “fail” at the IWC or any of the acute aquatic toxicity tests have a percent effect at the IWC greater than 10 percent, then the discharge has reasonable potential for acute toxicity and numeric acute toxicity effluent limitations will be included in the NOA.

B. Screening for Chronic Toxicity

1. The Central Valley Water Board will evaluate whole effluent chronic toxicity testing results for dischargers that are less than 5 MGD and not required to have a pretreatment program. If there are one or more fails under the TST approach or the percent effect exceeds 10 percent at the IWC, then the discharge has reasonable potential for chronic toxicity and numeric chronic toxicity effluent limitations will be included in the NOA.

- e. **MRP, Whole Effluent Toxicity Testing.** Revise MRP, section V.A through V.B to the following:

V. Whole Effluent Toxicity Testing Requirements

A. Acute Toxicity Testing

The Discharger shall meet the following acute toxicity testing requirements as specified in the NOA:

1. **Instream Waste Concentration (IWC) for Acute Toxicity.** The acute toxicity IWC is 100 percent effluent.
2. **Routine Monitoring Frequency.** Major and minor Dischargers that demonstrate reasonable potential for acute aquatic toxicity shall perform routine acute toxicity testing once per toxicity calendar quarter where there is expected to be at least 15 days of discharge to the receiving water, concurrent with effluent ammonia sampling. The Executive Officer may specify alternate monitoring frequencies in the Notice of Applicability.
3. **Toxicity Calendar Month**
 - a. **For less frequent than monthly,** the toxicity calendar month is defined as the period of time beginning on the day

of the initiation of the routine monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, from June 15 to July 14, or from January 31 to February 27).

- b. **For monthly routine monitoring**, the toxicity calendar month is defined as either:
 - i. The period of time beginning on the 1st day of the month to the last day of the same month (e.g., from June 1 to June 30); or
 - ii. The period of time beginning on the day of the month as specified in the NOA to the day before the corresponding day of the next month if the corresponding day exists (e.g., from June 15 to July 14).
4. **Acute Toxicity MMEL Compliance Testing.** If a routine acute toxicity monitoring test results in a “fail” at the IWC, then a maximum of two acute toxicity MMEL compliance tests shall be completed. The acute toxicity MMEL compliance tests shall be initiated within the same toxicity calendar month that the routine monitoring acute toxicity test was initiated that resulted in the “fail” at the IWC. If the first acute toxicity MMEL compliance test results in a “fail” at the IWC, then the second acute toxicity MMEL compliance test is unnecessary and is waived.
5. **Sample Types.** Each Discharger may use flow-through or static renewal testing. For static renewal testing, the samples shall be flow proportional 24-hour composites or grab samples, as specified in the Notice of Applicability, and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at Monitoring Location EFF-001 or as specified in the Notice of Applicability.
6. **Test Species.** The test species shall be fathead minnows (*Pimephales promelas*) or rainbow trout (*Oncorhynchus mykiss*), as specified in the Notice of Applicability.
7. **Methods.** The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition or methods identified in the Code of Federal Regulations, title 40, part 136, or other U.S. EPA-approved methods. Temperature, total residual chlorine, and pH shall be recorded at the time of sample collection. No

pH adjustment may be made unless approved by the Executive Officer.

8. **Test Failure.** If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must conduct a replacement test as soon as possible, as specified in subsection A.9, below.
9. **Replacement Test.** When a required toxicity test for routine monitoring or MMEL compliance tests is not completed, a new toxicity test to replace the toxicity test that was not completed shall be initiated as soon as possible. The new toxicity test shall replace the routine monitoring or MMEL compliance tests, as applicable, for the calendar month in which the toxicity test that was not completed was required to be initiated, even if the new toxicity test is initiated in a subsequent month. The new toxicity test for routine monitoring or MMEL compliance tests, as applicable, and any MMEL compliance tests required to be conducted due to the results of the new toxicity test shall be used to determine compliance with the effluent limitations for the calendar month in which the toxicity test that was not completed was required to be initiated. The new toxicity test and any MMEL compliance tests required to be conducted due to the results of the new toxicity test shall not be used.

If it is determined that any specific monitoring event was not initiated in the required time period due to circumstances outside of the Discharger's control that were not preventable with the reasonable exercise of care, the Discharger is not required to initiate the specific monitoring event in the required time period if the Discharger promptly initiates, and ultimately completes a replacement test.

B. Chronic Toxicity Testing

The Discharger shall meet the following chronic toxicity testing requirements as specified in the NOA:

1. **Instream Waste Concentration (IWC) for Chronic Toxicity.**
The chronic toxicity IWC is 100 percent effluent.
2. **Routine Monitoring Frequency.**
 - a. **Applicable to Discharges Less Than or Equal to 1 MGD.**
The Discharger shall perform routine chronic toxicity testing **twice per toxicity calendar year** in years in which there is

expected to be at least 15 days of discharge to the receiving water in at least one toxicity calendar quarter.

- b. **Applicable to Discharges Greater Than 1 MGD and Less Than 5 MGD.** The Discharger shall perform routine chronic toxicity testing **once per toxicity calendar quarter** in quarters in which there is expected to be at least 15 days of discharge to the receiving water. While the Discharger is conducting a toxicity reduction evaluation the routine monitoring may be reduced to two (2) tests per toxicity calendar year.
- c. **Applicable to Discharges Greater Than or Equal to 5 MGD.** The Discharger shall perform routine chronic toxicity testing **once per toxicity calendar month** in months in which there is expected to be at least 15 days of discharge to the receiving water. While the Discharger is conducting a Toxicity Reduction Evaluation the routine monitoring may be reduced to two (2) tests per toxicity calendar year.
- d. **Reduction In Routine Monitoring.** Routine monitoring frequency may be reduced if the following conditions during the prior five consecutive years are met:
 - i. The Chronic Toxicity MDEL and MMEL, if applicable, have not been violated; and
 - ii. The toxicity requirements as specified in this MRP and the NOA have been followed; and
 - iii. A minimum of ten chronic aquatic toxicity tests have been conducted at the IWC or at a concentration of effluent higher than the IWC, all chronic aquatic toxicity test data are analyzed or reanalyzed using the TST, and no chronic aquatic toxicity test resulted in a “fail” at the IWC or, if the aquatic toxicity test was not conducted at the IWC, at a concentration of effluent higher than the IWC.

3. Toxicity Calendar Month.

- a. **For monitoring frequency less than monthly,** the toxicity calendar month is defined as the period of time beginning on the day of the initiation of the routine monitoring to the day before the corresponding day of the next month if the corresponding day exists, or if not to the last day of the next month (e.g., from January 1 to January 31, from June 15 to July 14, or from January 31 to February 27).

- b. **For monthly routine monitoring**, the toxicity calendar month, as specified in the NOA, is defined as either:
 - i. The period of time beginning on the 1st day of the month to the last day of the same month (e.g., from June 1 to June 30); or
 - ii. The period of time beginning on the day of the month as specified in the NOA to the day before the corresponding day of the next month if the corresponding day exists (e.g., from June 15 to July 14).
- 4. **Chronic Toxicity MMEL Compliance Testing or MMET Testing.** If a routine chronic toxicity monitoring test results in a “fail” at the IWC, then a maximum of two chronic toxicity MMEL compliance tests or MMET tests, as specified in the NOA, shall be completed. The chronic toxicity MMEL compliance tests or MMET tests shall be initiated within the same toxicity calendar month that the routine monitoring chronic toxicity test was initiated that resulted in the “fail” at the IWC. If the first chronic toxicity MMEL compliance test or MMET test results in a “fail” at the IWC, then the second chronic toxicity MMEL compliance test or MMET test is unnecessary and is waived.
- 5. **Additional Routine Monitoring Tests for TRE Determination**
 - a. **Applicable to Discharges With Numeric Chronic Toxicity Limits and Routine Monitoring Less Frequent Than Monthly.** In order to determine if a TRE is necessary, an additional routine monitoring test is required when there is one violation of the chronic toxicity MDEL or MMEL, but not two violations in a single toxicity calendar month. This additional routine monitoring test is not required if the Discharger is already conducting a TRE. This additional routine monitoring test shall be initiated within two weeks after the toxicity calendar month in which the MMEL or MDEL violation occurred. The toxicity calendar month of the violation and the toxicity calendar month of the additional routine monitoring shall be considered “successive toxicity calendar months” for purposes of determining whether a TRE is required. This additional routine monitoring test is also used for compliance purposes, and could result in the need to conduct MMEL compliance testing per Section V.B.4 above.

- b. **Applicable to Discharges Without Numeric Chronic Toxicity Limits and Routine Monitoring Less Frequent Than Monthly.** In order to determine if a TRE is necessary, an additional routine monitoring test is required when one chronic toxicity MDET or MMET is not met, but not two in a single toxicity calendar month. The toxicity calendar month in which the MMET or MDET was not met and the toxicity calendar month of the additional routine monitoring shall be considered “successive toxicity calendar months” for purposes of determining whether a TRE is required. This additional routine monitoring test could result in the need to conduct MMET tests per Section V.B.4 above.
6. **Sample Volumes.** Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
7. **Test Species.** Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The Discharger shall conduct chronic toxicity tests with one of the following species that is the most sensitive, as specified in the NOA:
- a. The cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test);
 - b. The fathead minnow, *Pimephales promelas* (larval survival and growth test); and
 - c. The green alga, *Pseudokirchneriella subcapitata* (growth test).

If the Discharger is required to conduct three-species chronic toxicity tests to determine the most sensitive species, the results for the test species that is specified to be the most sensitive species in accordance with a rotating single species testing schedule as specified in the NOA may be used to determine compliance with the applicable chronic toxicity effluent limitation or trigger.

The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most

sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

8. **Test Methods.** Discharger shall conduct the chronic toxicity tests on effluent samples at the instream waste concentration for the discharge in accordance with species and test methods in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R02/013, 2002; Table IA, 40 C.F.R. part 136).
9. **Dilution and Control Water.** Dilution water and control water shall be prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used. A receiving water control or laboratory water control may be used as the diluent.
10. **Test Failure.** If the effluent chronic toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method in EPA/821-R-02-013, the Discharger must conduct a Replacement Test as soon as possible, as specified in subsection B.11, below.
11. **Replacement Test.** When a required toxicity test for routine monitoring, MMET tests, or MMEL compliance tests is not completed, a new toxicity test to replace the toxicity test that was not completed shall be initiated as soon as possible. The new toxicity test shall replace the routine monitoring, MMET tests, or MMEL compliance tests, as applicable, for the calendar month in which the toxicity test that was not completed was required to be initiated, even if the new toxicity test is initiated in a subsequent month. The new toxicity test for routine monitoring, MMET tests, or MMEL compliance tests, as applicable, and any MMET tests or MMEL compliance tests required to be conducted due to the results of the new toxicity test shall be used to determine compliance with the effluent

limitations for the calendar month in which the toxicity test that was not completed was required to be initiated. The new toxicity test and any MMET tests or MMEL compliance tests required to be conducted due to the results of the new toxicity test shall not be used.

If it is determined that any specific monitoring event was not initiated in the required time period due to circumstances outside of the Discharger's control that were not preventable with the reasonable exercise of care, the Discharger is not required to initiate the specific monitoring event in the required time period if the Discharger promptly initiates, and ultimately completes a replacement test.

- f. **MRP, Quality Assurance and Additional Requirements.** Revise MRP, section V.C and V.C.1 to the following:

C. **Quality Assurance and Additional Requirements.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are below.

1. The discharge is subject to determination of "pass" or "fail" from an acute toxicity test or a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in Section IV.B.1.c of the Statewide Toxicity Provisions.

- g. **MRP, WET Testing Reporting Requirements.** Revise MRP, section V.E to the following:

E. **WET Testing Reporting Requirements.**

Each Discharger shall submit the full laboratory report for all toxicity testing and, if applicable, progress reports on TRE investigations, as attachments to CIWQS for the reporting period (e.g., monthly, quarterly, semi-annually or annually) and provide the data (i.e., "pass"/"fail") in the PET tool for uploading into CIWQS. The laboratory report shall include:

1. The valid toxicity test results for the TST statistical approach, reported as "pass" or "fail" and "Percent Effect" at the IWC for the discharge, the dates of sample collection and initiation of each toxicity test, all results for effluent parameters monitored concurrently with the toxicity test(s).
2. The statistical analysis used in Section IV.B.1.c of the Statewide Toxicity Provisions.
3. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.

- h. **MRP, Most Sensitive Species Screening.** Revise MRP, section V.E to the following:

F. Most Sensitive Species Screening

The species sensitivity screening or rescreening to re-evaluate the most sensitive species shall be conducted as follows and specified in the NOA and the results submitted with the Notice of Intent.

1. **Frequency of Testing for Species Sensitivity Screening.** If the Discharger has not conducted a species sensitivity screening in the past 15 years, issuance or re-issuance of the NOA is to address toxicity, or the effluent used in the species sensitivity screening is no longer representative of the effluent, the species sensitivity screening shall be conducted with the following frequencies, as specified in the NOA:
 - a. **Applicable to Continuous Dischargers.** Species sensitivity screening for chronic toxicity shall include, at a minimum, chronic WET testing for four consecutive toxicity calendar quarters using the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*). The tests shall be performed at an IWC of 100 percent effluent.
 - b. **Applicable to Non-Continuous Dischargers.** Species sensitivity screening for chronic toxicity shall include, at a minimum, chronic WET testing conducted quarterly for 1-year in each quarter in which there is expected to be at least 15 days of discharge using the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*). If the discharge occurs in one quarter for the year, two sets of testing shall be conducted within the same quarter. The tests shall be performed at an IWC of 100 percent effluent.
2. **Determination of Most Sensitive Species.** The Central Valley Water Board will determine the most sensitive species from the water flea (*Ceriodaphnia dubia*), fathead minnow (*Pimephales promelas*), and green alga (*Pseudokirchneriella subcapitata*) using the following procedure. If a single test in the species sensitivity screening testing results in a “fail” using the TST statistical approach, then the species used in that test shall be established as the most sensitive species. If there is more than a single test that results in a “fail”, then of the species with results of a “fail”, the species that exhibits the highest percent effect shall be established as the most sensitive species. If none of the tests in the species sensitivity screening results in a “fail”, but at least one of the species exhibits a percent effect greater than 10

percent, then the single species that exhibits the highest percent effect shall be established as the most sensitive species. In all other circumstances, the Executive Officer shall have discretion to determine which single species is the most sensitive considering the test results from the species sensitivity screening.

The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. The most sensitive species shall be used for chronic toxicity testing for the remainder of the permit term. A Discharger may use the four most recent tests conducted prior to receiving a NOA for use in determining the most sensitive species, if the tests were conducted in a manner sufficient to make such determination.

If the most sensitive species is not able to be determined from the species sensitivity screening discussed above, the Discharger shall rotate the test species as the most sensitive species every toxicity calendar year as follows and specified in the NOA:

- a. *Ceriodaphnia dubia* (survival and reproduction test) for the remainder of the toxicity calendar year the NOA is issued;
- b. *Pimephales promelas* (larval survival and growth test) for the entire toxicity calendar year following the toxicity calendar year the NOA is issued;
- c. *Pseudokirchnerella subcapitata* (growth test) for the entire toxicity calendar year of the second year following the toxicity calendar year the NOA is issued; and
- d. Cycling back to *Ceriodaphnia dubia* (survival and reproduction test) after *Pseudokirchnerella subcapitata* (growth test) and through the same rotation.

If a single test exhibits toxicity, demonstrated by a test that results in a “fail” using the TST statistical approach, then the species used in that test shall be established as the most sensitive species until the next NOA reissuance.

- i. **MRP, Toxicity Reduction Evaluations.** Revise MRP, section V.G, V.G.1, and V.G.2 to the following:

G. Toxicity Reduction Evaluations (TRE)

Reports for TREs or a Toxicity Evaluation Study shall be submitted in accordance with the schedule contained in the Discharger’s approved TRE Workplan, or as amended by the Discharger’s TRE Action Plan.

1. TRE Targets (Applicable to Dischargers Without Chronic Toxicity Effluent Limitations)

- a. **Chronic Whole Effluent Toxicity Median Monthly Effluent Target (MMET).** No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC for any endpoint.

- b. **Chronic Whole Effluent Toxicity Maximum Daily Effluent Target (MDET)**

- i. **If the most sensitive species is the water flea (*Ceriodaphnia dubia*) or fathead minnow (*Pimephales promelas*)**

No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the IWC for the sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

- ii. **If the most sensitive species is Green alga (*Pseudokirchneriella subcapitata*)**

No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the IWC for the sub-lethal endpoint measured in the test and a percent effect for the sub-lethal endpoint greater than or equal to 50 percent.

2. **TRE Implementation. For Dischargers with chronic toxicity effluent limitations,** the Discharger is required to initiate a TRE when there is any combination of two or more chronic toxicity MDEL or MMEL violations within a single toxicity calendar month or within two successive toxicity calendar months. **For Dischargers with chronic toxicity effluent triggers,** the Discharger is required to initiate a TRE when there is any combination of two or more chronic toxicity MDETs

or MMETs that are not met within a single toxicity calendar month or within two successive toxicity calendar months. In addition, **for all Dischargers**, if other information indicates toxicity (e.g., results of additional monitoring, results of monitoring at a higher concentration than the IWC, fish kills, intermittent recurring toxicity), the Central Valley Water Board may require a TRE. A TRE may also be required when there is no effluent available to complete a routine monitoring test, MMET compliance test, or MMEL compliance test.

a. **Preparation and Implementation of Detailed TRE Action Plan.**

The Discharger shall conduct TREs in accordance with an approved TRE Work Plan. **Within 30 days** of the test result that triggered the TRE, the Discharger shall submit to the Executive Officer a TRE Action Plan per the Discharger's approved TRE Work Plan. The TRE Action Plan shall include the following information, and comply with additional conditions set by the Executive Officer:

- i. Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
- ii. Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
- iii. A schedule for these actions, progress reports, and the final report.

b. The Central Valley Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

j. **Fact Sheet, State Implementation Policy.** Revise the last two sentences of Attachment F, section IV.C.3 to the following:

Requirements of this General Order implement the Statewide Toxicity Provisions, which supersede section 4 of the SIP.

k. **Fact Sheet, Whole Effluent Toxicity.** Revise Attachment F, section V.C.5 to the following:

5. Whole Effluent Toxicity (WET)

The Statewide Toxicity Provisions contain toxicity provisions, including numeric objectives for acute and chronic aquatic toxicity that are applicable to Dischargers enrolled under this General Order unless otherwise specified in the NOA.

As specified in the NOA, an exemption for insignificant dischargers may be implemented on a site-specific basis. If exempt from the Statewide Toxicity Provisions, toxicity water quality objectives shall be included in the NOA as receiving water limitations and routine monitoring shall be as specified in the NOA.

- a. **Acute Toxicity.** The acute aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.80, where the following null hypothesis, H_0 , shall be used:

H_0 : Mean response (ambient water) \leq 0.80 • mean response (control)

And where the following alternative hypothesis, H_a , shall be used:

H_a : Mean response (ambient water) $>$ 0.80 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting acute aquatic toxicity testing and rejecting this null hypothesis in accordance with the TST statistical approach. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the acute aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a “fail”) is equivalent to an exceedance of the acute aquatic toxicity water quality objective.

- i. **RPA.** This General Order is for municipal wastewater dischargers that meet criteria at the point of discharge to surface water; therefore, no dilution has been granted for acute whole effluent toxicity, and the instream waste concentration (IWC) is 100 percent effluent. If chronic toxicity testing is determined by the Central Valley Water Board to not be adequately protective of acute toxicity (e.g. - fish kills or intermittent recurring toxicity) and the Discharger is required to conduct acute whole effluent toxicity testing, the Central Valley Water Board will conduct the RPA for acute toxicity by reviewing acute whole effluent toxicity test data submitted by the Discharger. If the review of acute whole effluent toxicity data results in at least one test result that fails the Test of Significant Toxicity (TST), then the discharge has reasonable potential to cause or contribute to an exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, and water quality-based effluent limits for acute toxicity are required under this General Order, which shall be specified in the Notice of Applicability.

- ii. **WQBELs.** If the Discharger has reasonable potential to cause or contribute to an instream exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, as determined by section V.C.5.a.i above, this General Order requires the following effluent limitations, as specified in the Notice of Applicability:
 - (a) **Acute Whole Effluent Toxicity MDEL.** No acute aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste Concentration (IWC) and a percent effect greater than or equal to 50 percent.
 - (b) **Acute Whole Effluent Toxicity MMEL.** No more than one acute aquatic toxicity tests with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the Instream Waste Concentration (IWC).
- b. **Chronic Toxicity.** The chronic aquatic toxicity water quality objective is expressed as a null hypothesis and an alternative hypothesis with a regulatory management decision (RMD) of 0.75, where the following null hypothesis, H_0 , shall be used:

H_0 : Mean response (ambient water) \leq 0.75 • mean response (control)

And where the following alternative hypothesis, H_a , shall be used:

H_a : Mean response (ambient water) $>$ 0.75 • mean response (control)

Attainment of the water quality objective is demonstrated by conducting chronic aquatic toxicity testing and rejecting this null hypothesis in accordance with the Test of Significant Toxicity (TST) statistical approach described in Section III.B.3 of the Statewide Toxicity Provisions. When the null hypothesis is rejected, the alternative hypothesis is accepted in its place, and there is no exceedance of the chronic aquatic toxicity water quality objective. Failing to reject the null hypothesis (referred to as a “fail”) is equivalent to an exceedance of the chronic aquatic toxicity water quality objective.

- i. **RPA.** This General Order is for municipal wastewater dischargers that meet criteria at the point of discharge to surface water; therefore, no dilution has been granted for chronic whole effluent toxicity, and the instream waste concentration (IWC) for chronic toxicity testing is 100 percent effluent.

For Dischargers with an average dry weather flow less than 5 MGD or Dischargers that are not required to have a pretreatment

program, the Central Valley Water Board will conduct the RPA for chronic toxicity by reviewing chronic whole effluent toxicity test data submitted by the Discharger at an instream waste concentration of 100% or as specified in this General Order. If the review of the chronic whole effluent toxicity test data results in at least one test that fails the Test of Significant Toxicity (TST) or has a percent effect of greater than 10 percent at the IWC, then the discharge has a reasonable potential to cause or contribute to an exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives and water quality-based effluent limits for chronic toxicity are required under this General Order, which shall be specified in the Notice of Applicability.

For Dischargers with an average dry weather flow greater than or equal to 5 MGD and required to have a pretreatment program by the terms of 40 C.F.R. § 403.8(a), per the Statewide Toxicity Provisions a reasonable potential analysis for chronic toxicity is not required and water quality-based effluent limits for chronic toxicity are required under this General Order, which shall be specified in the Notice of Applicability.

- ii. **WQBELs.** If the Discharger has reasonable potential to cause or contribute to an instream exceedance of the Statewide Toxicity Provisions aquatic toxicity numeric objectives, as determined by section V.C.5.b.i above, this General Order requires the following effluent limitations, as specified in the Notice of Applicability:
 - (a) **Chronic Whole Effluent Toxicity Median Monthly Effluent Limitation (MMEL).** No more than one chronic aquatic toxicity test with the most sensitive species initiated in a toxicity calendar month shall result in a “fail” at the IWC for any endpoint.
 - (b) **Chronic Whole Effluent Toxicity Maximum Daily Effluent Limitation (MDEL).**
 - (1) **Most Sensitive Species Includes the Survival Endpoint.** No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste Concentration (IWC) for the sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.
 - (2) **Most Sensitive Species Does Not Include the Survival Endpoint.** No chronic aquatic toxicity test with the most sensitive species shall result in a “fail” at the Instream Waste

Concentration (IWC) for the sub-lethal endpoint measured in the test and a percent effect for the survival endpoint greater than or equal to 50 percent.

- j. **Fact Sheet, Reopener Provisions.** Remove Attachment F, section VII.B.1.b and re-number the subsequent section as necessary.
- l. **Fact Sheet, Whole Effluent Toxicity Testing Requirements.** Renumber section VIII.D.5 of Attachment F to VIII.D.4 and revise sections VIII.D.2 through VIII.D.4 to the following:

- 2. **Chronic Toxicity.** Chronic whole effluent toxicity testing is required to demonstrate compliance with the MDEL, MMEL, or MMET, as specified in the NOA. The frequency of testing shall be specified in the NOA from the Executive Officer.
- 3. **Sensitive Species Screening.** The most sensitive species to be used for chronic toxicity testing shall be determined in accordance with the process outlined in MRP, section V.F.1.

- a. Discharger shall perform rescreening to re-evaluate the most sensitive species if the effluent used in the species sensitivity screening is no longer representative of the effluent, a species sensitivity screening has not been performed in the last 15 years, or if issuance or reissuance is to address toxicity.

For rescreening, if the first two species sensitivity re-screening events result in no change in the most sensitive species, the Discharger may cease the species sensitive re-screening testing and the most sensitive species will remain unchanged.

- 4. **Toxicity Reduction Evaluation (TRE).** The Monitoring and Reporting Program of this Order requires chronic WET testing to demonstrate compliance with numeric chronic toxicity effluent limitation, as specified in the NOA. The Discharger is required to initiate a TRE as outlined in Attachment E, section V.G. In addition, if other information indicates toxicity (e.g., results of additional monitoring, fish kills, intermittent recurring toxicity), the Central Valley Water Board may require a TRE. A TRE may also be required when there is no effluent available to complete a routine monitoring test, MMET test, or MMEL compliance test, as applicable.

5. City of Colfax Monitoring.

Monitoring of the cut-off wall and dam seepage for the City of Colfax, Wastewater Treatment Plant is no longer necessary in the proposed MGO. Board staff made the following changes to reflect the removal of this monitoring:

- a. **Table E-1.** Remove the last two rows of Table E-1 – Monitoring Station Locations.
- b. **Attachment E, Groundwater Seepage Monitoring.** Remove MRP, section IX.C and renumber the subsequent sections as necessary.

6. Assembly Bill 2108 Findings

Board staff revised Attachment F, section IX.A.1.b to the following:

Consistent with Water Code section 189.7, the Central Valley Water Board has conducted outreach in disadvantaged and tribal communities that may be affected by the updates to this General Order.

7. Treatment/Storage Pond Operating Requirements

Board staff revised Waste Discharge Requirements section VII.C.4.c.vii, first sentence to the following:

- vii. If the NOA does not include odor monitoring requirements, then as a means of discerning compliance with specification vi above, as specified in the NOA, the dissolved oxygen (DO) content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive weekly sampling events.

8. Water Column Toxicity Monitoring Requirements

Board staff revised Attachment E, section IX.G.2, paragraph three, first sentence to the following:

Quarterly monitoring shall be conducted for one year concurrent with the Pyrethroid Pesticides Water Column Chemistry Monitoring (see section IX.H of this MRP for specific dates) as specified in the NOA.