

Central Valley Regional Water Quality Control Board  
18 October 2024 Board Meeting

Response to Comments  
for  
City of Yuba City, Wastewater Treatment Facility  
Tentative Waste Discharge Requirements

The following are Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff responses to comments submitted by interested persons and parties regarding the tentative Waste Discharge Requirements (WDRs), National Pollutant Discharge Elimination System (NPDES) Permit CA0079260 renewal for the City of Yuba City (Discharger), Wastewater Treatment Facility (Facility) discharge to the Feather River.

The tentative NPDES Permit was issued for a 30-day public comment period on 26 June 2024 with comments due by 26 July 2024. The Central Valley Water Board received public comments regarding the tentative Permit by the due date from the Discharger and Jo Anne Kipps. Changes were made to the proposed Order 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.

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**DISCHARGER COMMENTS**

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**1. Discharge Prohibition at Discharge Point 004.**

The Discharger requests that the flow prohibition in section III.G of the tentative Order be revised to have an exception to discharge from Discharge Point 003 if maintenance Discharge Point 004 is needed.

**RESPONSE:** Staff concur. Section III.G and Fact Sheet section IV.A.7 have been revised, as shown below, in the proposed Order.

***Section III.G***

- G.** Discharge to the Feather River at Discharge Point 001 or Discharge Point 003 is prohibited when Discharge Point 004 is installed and fully operational, with the exception of Discharge Point 004 becoming non-functional or during periods of maintenance.

***Fact Sheet section IV.A.7***

- 7. Prohibition III.G (No Discharge to the Feather River at Discharge Point 001 and 003 when the new diffuser is installed and fully operational).**  
Once the Discharger has completed construction of the Relocated Diffuser at

Discharge Point 004, discharge at Discharge Point 001 and 003 would no longer be necessary, with the exception of Discharge Point 004 becoming non-functional or during periods of maintenance.

**2. Effluent Limitations – Compliance Determination.**

The Discharger acknowledges that the 0.2 milliliter per liter effluent limitation for settleable solids is a Maximum Daily Effluent Limitation (MDEL). The Discharger requests to add “MDEL” section VII.E.3 (Compliance Determination for Effluent Limitations) of the proposed Order for determining compliance and when multiple results are available.

**RESPONSE:** Staff concur. The language in section VII.E.3 is specific to effluent limitations with an average. The definition in Attachment A (Definitions) of the tentative Order for an MDEL is taken from the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP).

Section VII.E.3 was revised as shown below:

3. When determining compliance with an AMEL, MDEL, AWEL and more than one sample result is available in a month or week, respectively, the discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

**3. Acute Toxicity – Compliance Determination.**

The Discharger notes that the Acute Toxicity testing is subject to the TST requirements at the permit effective date and requests section VII.G of the proposed Order reflect the requirements.

**RESPONSE:** Staff concur. And updated section VII.G of the proposed Order as shown in part below:

**G. Whole Effluent Toxicity Effluent Limitations.** The discharge is subject to determination of “Pass” or “Fail” from acute (Effective 1 January 2025) and chronic (Effective 1 January 2030) whole effluent toxicity tests using the Test of Significant Toxicity (TST) [...]

**4. Chronic Toxicity Interim Effluent Limitation – Compliance Determination.**

The Discharger requests clarification on the use of “100/NOEC” or the “100/EC25” for determining compliance with the chronic toxicity interim effluent limitation in section VII.G of the tentative Order.

**RESPONSE:** Comment is noted. Section VII.G of the tentative Order was revised to correct the reference from “100/EC25” to “100/NOEC”. This section has been intended to be consistent the interim chronic toxicity effluent limitation of 50 TUc, which is in 100/NOEC.

**5. Monitoring and Reporting Program (MRP) - Effluent Monitoring - Dissolved Organic Carbon.**

The Discharger states that DOC does not have a 40 Code of Federal Regulations (CFR) part 136 approved method, and the Environmental Laboratory Accreditation Program (ELAP) does not offer certification for non-potable water.

**RESPONSE:** Noted. Standard Method 5310B is a 40 CFR part 136 approved method for total organic carbon that may be used for dissolved organic carbon. The dissolved organic carbon sample may be filtered in-field or in-lab using a 0.45-micron filter and has a 48-hour holding time (unpreserved). Staff recommends the Discharger communicate with its laboratory to determine the appropriate sampling techniques for dissolved organic carbon.

**6. MRP – Effluent Monitoring – Total Residual Chlorine.**

The Discharger requests revising the language for the chlorine residual effluent monitoring from section IV.3.h of MRP, Attachment E, to only be required at Discharge Points 001,003, and 004, consistent with section IV.A.1.h of the proposed Order.

**RESPONSE:** Central Valley Water Board Staff concur. The header to section IV.3.h of the MRP, Attachment E, was revised to be specific to Discharge Points 001, 003, and 004 as shown below:

- h. **Total Residual Chlorine. (For discharges to Discharge Points 001, 003, and 004).** Must be monitored using an analytical method that is sufficiently sensitive to measure at the permitted level of 0.01 mg/L.

Furthermore, staff revised and clarified compliance determination language for the total residual chlorine effluent limitations (section VII.D) to only be required at Discharge Points 001,003, and 004, consistent with section IV.A.1.h of the proposed Order, as shown below:

- D. Total Residual Chlorine Effluent Limitations (Discharge Points 001, 003, and 004) (Section IV.A.1.h).** Continuous monitoring analyzers for chlorine [..]

**7. MRP – Effluent Monitoring – Settleable Solids Effluent Monitoring.**

The Discharger requested revising language for the settleable solids effluent monitoring requirements to only monitor for settleable solids when discharging to Discharge Points 001, 003, or 004, consistent with section IV.A.1.l of the proposed Order.

**RESPONSE:** Staff concur. A new note was added to the MRP as section IV.A.3.q as shown below:

- q. **Settleable Solids.** Monitoring only required during effluent discharge to Discharge Points 001, 003, or 004.

**8. MRP – Effluent Monitoring – Total Coliform Monitoring.**

The Discharger requests that total coliform be monitored once per week when discharging to Discharge Point 002, consistent with previous Order R5-2019-0017-01.

**RESPONSE:** Staff concur. Revised MRP section IV.A.3.k is shown below:

- k. **Total Coliform Organisms.** When discharging to Discharge Point 002, the minimum sampling frequency shall be once per week. Samples for total coliform organisms may be collected at any point following disinfection.

**9. MRP – Whole Effluent Toxicity – Toxicity Calendar Month, Quarter, and Year.**  
The Discharger requested revising the Toxicity Calendar Month, Quarter, and Year in section V.A of the MRP consistent with the definitions from Attachment A.

**RESPONSE:** Staff concur in part. The definitions for toxicity calendar month, toxicity calendar quarter, and toxicity calendar year were removed from Attachment A – Definitions since they are general and do not correspond with the discharge specific definition section V.A of the MRP.

**10. MRP – Whole Effluent Toxicity – Toxicity Calendar Month.**

The Discharger requests revising the start date of the toxicity calendar month from the first day of the month to the third day of the month.

**RESPONSE:** Staff concur. The toxicity calendar month, calendar quarter, and calendar year in MRP section V.A.1 and toxicity calendar month in Table E-11 of MRP section X.B.3 were revised as is shown below:

*Revised MRP section V.A.1*

1. **Toxicity Calendar Month.** For acute toxicity, the toxicity calendar month begins from the initiation of the routine toxicity test (e.g., from January 1 to January 31, from June 15 to July 14, or from January 31 to February 27). For chronic toxicity, the toxicity calendar month **begins on 3rd of the month** (i.e., from 3 January to 2 February, from 3 February to 2 March, from 3 March to 2 April, etc.).
2. **Toxicity Calendar Quarter.** The toxicity calendar quarters **begin on 1 January, 1 April, 1 July, and 1 October** (i.e., from 1 January to 31 March, from 1 April to 30 June, from 1 July to 30 September, and 1 October to 31 December).
3. **Toxicity Calendar Year.** The toxicity calendar year **begins on 1 January** (1 January to 31 December), in years in which there are at least 15 days of discharge in at least one calendar quarter.

*Revised Table E-11 in MRP section X.B.3 (Only revised parts are shown)*

<b>Sampling Frequency</b>	<b>Monitoring Period Begins On</b>	<b>Monitoring Period</b>	<b>SMR Due Date</b>
1/Month	Permit effective date	1st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
1/Toxicity Calendar Month (Chronic Toxicity Only)	Permit effective date	3rd day of calendar month through 2nd day of the following calendar month	First day of second calendar month following month of chronic toxicity testing (e.g. Testing 3 January through 2 February is due 1 March)

**11. MRP – Whole Effluent Toxicity – Requirements for Interim Chronic Toxicity Effluent Limitation Testing.**

The Discharger requests revising MRP section V.C.2.a from "at least one week apart" to "test initiation dates shall be at least seven calendar days apart" for clarity when compliance case handler reviews SMRs.

**RESPONSE:** Staff concur, MRP section V.C.2.a is revised as shown below:

a. **Requirements for Interim Effluent Limitation Testing.**

During the routine monthly testing, if the result of the routine chronic toxicity testing event exhibits a result greater than 50 TUc (as 100/NOEC) **AND** a percent effect greater than 25 percent at 2 percent effluent, the Discharger has the option of conducting two additional compliance monitoring events and perform chronic toxicity testing using the species that exhibited toxicity in order to calculate a median. Optional compliance testing initiation dates shall be at least seven calendar days apart, and the final monitoring event shall be initiated no later than 6 weeks from the routine monitoring event that exhibited toxicity. See Compliance Determination section VII.F for procedures for calculating 6-week median.

**12. MRP – Whole Effluent Toxicity – Testing Notification Requirements.**

The Discharger requests revising MRP section V.E from *upon learning of the exceedance, but no later than 24-hours after receipt of the final test monitoring results* and replacing it with *within 2 business days after receipt of final laboratory report*.

**RESPONSE:** Staff concur, MRP section V.E is revised and is shown below:

- E. WET Testing Notification Requirements.** The Discharger shall notify the Central Valley Water Board of test results exceeding the acute and/or chronic toxicity effluent limitation (final and/or interim) within 2 business days after receipt of final laboratory report.

**13. MRP – Whole Effluent Toxicity – Toxicity Reduction Evaluations Notification.**

The Discharger requests replacing *Within 30 days of the test result that triggered the TRE* with *Within 30 days of receiving final lab report that triggered the TRE* in MRP section V.H.1.a, for clarity when compliance case handler reviews SMRs.

**RESPONSE:** Staff concur, MRP section H.1.a was revised and is shown below:

- a. **Preparation and Implementation of Detailed TRE Action Plan.**  
The Discharger shall conduct TREs in accordance with an approved TRE Work Plan per the section below, MRP section V.H.2.

Within 30 days of receiving the final laboratory report that triggered the TRE, the Discharger shall submit to the Executive Officer a TRE Action Plan, prepared 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:

**14. MRP – Receiving Water Monitoring – Dissolved Organic Carbon.**

The Discharger requests replacing dissolved organic carbon with total organic carbon due to dissolved organic carbon needing to be filtered in the field. The Discharger states that dissolved organic carbon is sub-contracted and sample collection date and courier pickup date can become challenging to remain compliant with the filtration hold time.

**RESPONSE:** Staff do not concur. Monitoring for dissolved organic carbon in the upstream receiving water is required for use in the calculation of the site-specific aluminum water quality objectives, per the United States Environmental Protection Agency (U.S. EPA) 2018 Recommended Aquatic Life Water Quality Criteria for Aluminum Technical Support Document (2018 Aluminum TSD).

As noted in the response to Discharger comment 5, standard Method 5310B is a 40 CFR 136 approved method for total organic carbon that may be used for dissolved organic carbon. The dissolved organic carbon sample may be filtered in-field or in-lab and has a 48-hour holding time (unpreserved). Staff recommends the Discharger communicate with its laboratory to determine the appropriate sampling techniques for dissolved organic carbon.

**15. MRP – Groundwater Monitoring – Dissolved Arsenic.**

The Discharger requests removing dissolved arsenic from the groundwater monitoring.

**RESPONSE:** Staff do not concur and retained dissolved arsenic monitoring in groundwater monitoring wells. Dissolved arsenic has been included in groundwater monitoring for recently adopted NPDES permits with significant and consistent hydraulic loading of ponds, which is similar to Yuba City's pond use. This is due to the potential of this type of disposal pond discharge to cause an increase in groundwater alkalinity and hardness, which in turn depletes the soil of oxygen and causes the mobilization of soil metals including iron, manganese, and arsenic that can then degrade the groundwater.

**16. MRP – Groundwater Monitoring – Total Nitrogen.**

The Discharger requests removing total nitrogen from the groundwater monitoring since nitrate, nitrite, and ammonia (all as nitrogen) are already being monitored.

**RESPONSE:** Staff concur. All forms of nitrogen are being monitored aside from Total Kjeldahl Nitrogen (TKN). Monitoring for ammonia, nitrate, and nitrite (all as nitrogen) ensures compliance with applicable water quality objectives. Total nitrogen was removed from MRP Table E-6

**17. MRP – Groundwater Monitoring – Minimum Sampling Frequency.**

The Discharger requests revising the minimum groundwater sampling frequency to 3 times per year from quarterly due to each monitoring event equating to approximately \$6,000 of staff time and- analytical laboratory costs.

**RESPONSE:** Staff concur in part. Quarterly sampling provides information on seasonal variations in groundwater quality, and sampling three times per year does not completely encapsulate seasonal variation. Conditions in the groundwater surrounding the ponds have many seasonal influences including recharge from the Feather River, precipitation, discharge to the ponds for maintenance, seasonal pumping for irrigation, etc. that may change over time. For example, downgradient wells from the ponds show increasing concentrations of nitrate (total as nitrogen), above the water quality objective of 10 mg/L.

Staff considered seasonal variation and cost of compliance by reducing the number of years from three to two in the proposed Order for the quarterly groundwater monitoring required before being able to demonstrate that the data ranges, averages, and standard deviations are similar for quarterly versus twice a year, as shown in the response to Discharger comment #19 below.

**18. MRP – Groundwater Monitoring – Purging for Monitoring.**

The Discharger requests MRP section VIII.B.2.b (Notes for requirements prior to groundwater monitoring) to include language that monitoring is not required if 3 well volumes cannot be purged due to the potential risk of depleting the well, provided that this circumstance is documented in the SMR.

**RESPONSE:** Staff concur in part. If the well cannot be purged 3 well volumes or cannot stabilize temperature, pH, and electrical conductivity before depleting the well, a sample will not be required but shall be documented in the SMR cover letter along with the field record for temperature, pH, and electrical conductivity at the specified well. MRP section VIII.B.2.b has been revised as follows:

- b. **Prior to sampling**, the groundwater elevations shall be measured, and the wells shall be purged of at least three well volumes or until temperature, pH, and electrical conductivity have stabilized. A sample is not required if 3 well volumes cannot be purged due to the potential risk of depleting the well, provided that this circumstance and the field record for the sample event for temperature, pH, and electrical conductivity concentrations is documented in the SMR. Depth to groundwater shall be measured to the nearest 0.01 feet.

**19. MRP – Groundwater - Minimum Sampling Frequency Reduction Note.**

The Discharger requests replacing the language in MRP section VIII.B.2.f (Notes for groundwater minimum sampling frequency reduction) to “*The discharger shall monitor the groundwater monitoring wells 3/year for two years beginning January 2025. Beginning January 2027, the discharger shall conduct monitoring 2/year only if effluent is directed to the disposal ponds for more than one day per semi-annual period.*” to refine the groundwater monitoring to still provide the necessary information, but reflective of the cost of compliance.

**RESPONSE:** Staff concur in part. Quarterly monitoring will be retained in the proposed Order from the tentative Order. As mentioned in the response to Discharger comment #17, staff considered cost of compliance and seasonal variation (quarterly sampling provides information on seasonal variations in groundwater quality, sampling three times per year does not provide seasonal variation) and reduced the number of years from three to two for the quarterly groundwater monitoring required before being able to demonstrate that the data ranges, averages, and standard deviations are similar for quarterly versus twice a year. The revised MRP section VIII.B.2.f is shown below:

- f. **Minimum Sampling Frequency.** For each constituent with a 1/Quarter minimum sampling frequency, if the Discharger can demonstrate, after two years of quarterly monitoring, that the data ranges, averages, and standard deviations are similar for quarterly versus twice a year, the minimum sample frequency can be reduced from quarterly (1/Quarter) to twice a year (2/Year).

**20. MRP – Groundwater Monitoring – Duration Between Routine Monitoring.**

The Discharger requests replacing the language in MRP section VIII.B.2.h (Notes for duration between routine groundwater monitoring) from 45 days to 15 days (for quarterly monitoring, 120 days to 45 days (semiannual monitoring), or 30 days (for a frequency of the requested 3 samples per year). The Discharge notes that weather is the biggest factor in scheduling the monitoring and that the added flexibility allows the Discharger to be proactive in anticipation of weather events.

**RESPONSE:** Staff do not concur. As mentioned in the above responses for Discharger Comments #17 and #19 for the reduction of groundwater monitoring, the proposed Order requires quarterly monitoring for 2 years then semiannual monitoring for the remaining 3 years if the Discharger can demonstrate that the data ranges, averages, and standard deviations are similar for quarterly versus twice a year. Fifteen days between quarterly monitoring does not provide seasonal separation (15 days equates to just over 2 weeks where there are typically 13 weeks in a quarter) and minimal to no variation in groundwater concentrations when there is minimal groundwater flow. Similarly, 45 days does not provide enough separation between semiannual samples to allow for seasonal variations to occur. Furthermore, MRP section VIII.B.1 includes language which does not require groundwater sampling due to conditions out of the Discharger’s control (e.g., access issues to wells due to conditions like impassable roads), being that the condition is documented in the self-monitoring report for the respective sampling period.



Therefore, the duration between routine monitoring events from the tentative Order has been retained in the proposed Order.

**21. MRP – Pyrethroids – Water Column Chemistry Monitoring Requirements.**

The Discharger requests clarification of the quality assurance/quality control (QA/QC) sample required as part of the pyrethroids water column chemistry monitoring.

**RESPONSE:** QA/QC samples submitted by other permittees have varied, but typically include Matrix Spikes, Matrix Spike Duplicates, Lab Control Samples, etc. and not duplicate samples submitted to separate laboratories. Pyrethroid Control Program staff determined that given what other permittees have already submitted, the Discharger can meet this requirement by submitting the QA/QC information provided by the laboratory that performed the sample analyses including but not limited to Matrix Spikes, Matrix Spike Duplicates, Lab Control Samples.

**22. MRP – Pyrethroids – Dissolved Organic Carbon and Total Organic Carbon.**

The Discharger requests revision of the sample type from a 24-hour composite sample to a grab for the receiving water pyrethroid pesticides monitoring from Table E-7 in MRP section IX.B. since collecting a 24-hour composite sample is not feasible from the receiving water.

**RESPONSE:** Staff concur. The sample type for dissolved organic carbon and total organic carbon was revised from 24-hour composite to grab in Table E-7 of the MRP as shown below (other parameters in Table E-7 not shown, only changes to dissolved organic carbon and total organic carbon):

Parameter	CAS Number	Units	Sample Type	Analytical Method	Reporting Level
Dissolved Organic Carbon (DOC)	--	mg/L	Grab	--	--
Total Organic Carbon (TOC)	--	mg/L	Grab	--	--

**23. MRP – Disposal Ponds – Increase in Monitoring.**

The Discharger seeks clarification regarding the necessity for increased monitoring at the disposal ponds, considering that monitoring for the same constituents is already being conducted at the effluent discharge points and the groundwater wells.

**RESPONSE:** The tentative Order adds two weekly observations (water present and discharge to pond) and quarterly monitoring for pH, ammonia (total as nitrogen), nitrate (total as nitrogen), total trihalomethanes, and standard minerals not included in Order R5-2019-0017-01. Chlorinated effluent discharged to the ponds is not returned to the Facility and will percolate to the groundwater typically flowing towards the direction of the Feather River. The chlorinated municipal effluent typically contains ammonia (total as nitrogen) in concentrations above 20 mg/L. Nitrate (total as nitrogen) concentrations were observed above the water quality objective in a downgradient well. Therefore, staff increased monitoring requirements at the disposal ponds to observe the effluent water chemistry over time and to determine impacts from the ponds on groundwater by being able to directly compare pond concentrations with groundwater concentrations. Effluent monitoring is not

representative of pond conditions because the large capacity of the six individual ponds allows for mixing of effluent within individual or across multiple ponds. Plus evaporation, precipitation, and other factors impact water chemistry within the ponds. Furthermore, since the Discharger is planning on discharging directly to the Feather River for the permit term except during periods of outfall maintenance, minimal to no pond monitoring should occur since it is only required when there is an extended period of discharge to the ponds.

#### **24. MRP – Disposal Ponds – Inlets.**

The Discharger requests a revision of the requirements for disposal pond monitoring as stipulated in MRP section IX.C.2.b, specifically regarding the pond inlet, given that the inlet to the disposal ponds is located in the center of each pond. Additionally, the Discharger requests modifying the dissolved oxygen sampling time requirement from *between 8:00 a.m. and 10:00 a.m.* to *before noon*. This request is based on the logistical challenges posed by the disposal ponds' location across the river from the Facility, the travel time and equipment preparation required, which make it nearly impossible to arrive at the disposal ponds for sampling at 8:00 a.m., and the practicality for the sampling crew to complete sampling by 10:00 a.m.

**RESPONSE:** Staff concur in part. Staff removed the inlet requirement, since the inlet is at the center of each pond, and revised the pond dissolved oxygen requirement from *between 6:00 a.m. and 11:00 a.m.* to allow a larger window of time to sample while still capturing the period when dissolved oxygen should be at its lowest concentration. The revised MRP section IX.C.2.b is shown below:

- b. **Dissolved Oxygen.** Samples shall be collected at a depth of one foot from each pond in use, between 6:00 a.m. and 11:00 a.m. (when dissolved oxygen concentrations are typically lowest). If there is insufficient pond depth to accurately measure the dissolved oxygen concentration, the Discharger shall include in its eSMR the pond depth and an explanation why dissolved oxygen monitoring was not performed.

#### **25. MRP – Disposal Ponds – Dissolved Oxygen.**

The Discharger requests the removal of the requirement in MRP section IX.C.2.b for corrective actions if the dissolved oxygen levels in the disposal ponds fall below 1 mg/L, as there are no feasible options to address this issue at the disposal ponds.

**RESPONSE:** Staff concur. There are no feasible options for the Discharger to address the issue at the disposal ponds. The revised MRP section IX.C.2 is shown in the response to Discharger comment #24.

#### **26. MRP – Effluent and Receiving Water Characterization Monitoring.**

The Discharger requests the revision of the sample type for dissolved organic carbon from a 24-hour composite to a grab sample in Table E-10, Effluent and Receiving Water Characterization Monitoring, of the MRP, for consistency with the sample types for dissolved organic carbon in the Effluent Monitoring and Receiving Water Monitoring sections of the MRP.

**RESPONSE:** Staff concur. The 24-Hour Composite sampling was not intended and staff revised the sample type for dissolved organic carbon to Grab in Table E-10 of the MRP as shown below:

CTR Number	Parameter	CAS Number	Units	Effluent Sample Type	Parameter Type
NL	Dissolved Organic Carbon (DOC)	DOC	mg/L	Grab	Nonconventional Parameters

**27. MRP – Monitoring Periods and Permit Effective Date.**

The Discharger requests clarification on how to conduct the *twice per year* and *once per year* monitoring with an effective date of 1 December 2024. Additionally, as a corrective measure, the Discharger requests the proposed Order be effective on 1 January 2025.

**RESPONSE:** Staff concur with the request to revise the effective date of the proposed Order to 1 January 2025 for monitoring simplicity. The effective date of the permit was updated throughout the proposed Order as well as the dates for the compliance schedule and due dates for the reports on MRP Table E-12, Technical Reports.

**28. Fact Sheet - Facility Description Update.**

The Discharger provided an update to the percentage of BOD loading to the Facility from Sunsweet Growers and requests the percentage in Fact Sheet section II.A.1 be changed from 50% to 30%.

**RESPONSE:** Staff concur with the update provided by the Discharger. The last paragraph (paragraph before Fact Sheet Section II.A.1.a) Fact Sheet section II.A.1 is updated as shown below:

The aeration process at the Facility was designed to handle high and variable biochemical oxygen demand (BOD) loadings from local food processing facilities, commercial facilities, and residential areas. Additionally, approximately 30 percent of the BOD loading to the Facility is from one significant industrial user (Sunsweet Growers) that discharges a nutritionally dilute industrial discharge.

**29. Fact Sheet – Pond Monitoring Rationale.**

The Discharger requests a revision to Fact Sheet section VII.E.2 to include alkalinity and remove total nitrogen, total organic carbon, dissolved iron, dissolved manganese, and dissolved arsenic.

**RESPONSE:** Staff concur, Fact Sheet section VII.E.2 was revised as shown below to be consistent with the disposal pond monitoring requirements.

**2. Pond Monitoring**

Treatment pond monitoring is required to ensure proper operation of the storage pond. Weekly monitoring for freeboard, odors, electrical conductivity, and dissolved oxygen and daily monitoring for odors has

been retained from Order R5-2019-0017-01. This Order includes monitoring for pH, nitrate (as nitrogen), hardness total (as CaCO<sub>3</sub>), alkalinity, total (as CaCO<sub>3</sub>), standard minerals, ammonia (as nitrogen), and total trihalomethanes for comparison to the local groundwater. Pond monitoring for these relevant parameters is required to characterize the ponds in relation to the groundwater concentrations.

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## JO ANNE KIPPS COMMENTS

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### 1. Elevated Levels of Ammonia.

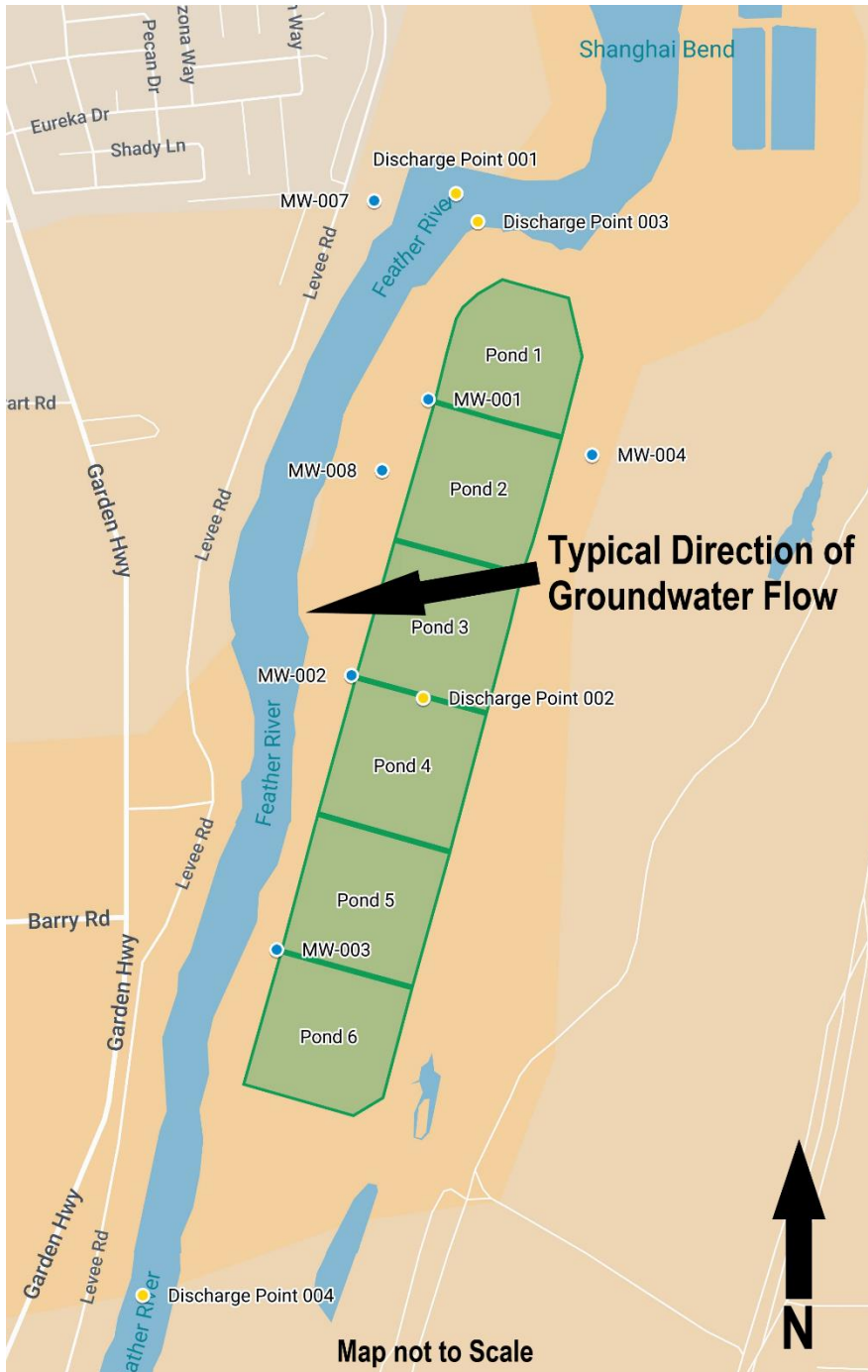
Ms. Kipps asks why Facility effluent still contains elevated levels of ammonia if the Discharger discontinued use of polyammonium phosphate in October 2022 and if Sunsweet Growers has a pretreatment system that adds ammonia to its discharge.

**RESPONSE:** The use of polyammonium phosphate at the Facility and wastewater from Sunsweet Growers are not the likely causes of the elevated ammonia concentrations in the Facility's effluent. As noted by Ms. Kipps, the effluent concentrations of ammonia have remained at the same levels even after discontinued use of polyammonium phosphate and during periods when Sunsweet Growers discharge does not occur year-round. The Discharger has pointed to several possible causes of the high levels of ammonia including improvements to the internal process of solids dewatering which made the dewatering process more efficient but in turn may have increased ammonia concentrations returned into the process and added to the effluent. Another possible cause for the increased ammonia concentrations is the need to keep ammonia concentrations higher in the effluent to maintain the presence of chloramines for the disinfection process to reach its optimum efficiency. Per the Discharger, the presence of chloramines was needed to maintain compliance with total coliform organisms effluent limitations. Another possible cause for increased ammonia concentrations is water conservation measures that result in an increase in ammonia concentrations by increasing the ratio of ammonia to water entering the collection system. Since the Discharger is uncertain as to the source or sources of the increased ammonia concentrations, the Central Valley Water Board is requiring an ammonia assessment report in the proposed Order to evaluate the increase in ammonia concentrations.

### 2. Disposal Ponds and Groundwater Monitoring Wells.

Ms. Kipps requests revision of Figure B-2 in Attachment B, *Detailed Map*, to include a north arrow, a scale (or indicate "not to scale"), and an arrow depicting groundwater flow direction in the disposal ponds vicinity indicating groundwater flow direction is typically towards the river.

**RESPONSE:** Staff concur and have updated Figure B-2 to include a north arrow, a note to indicate the figure is "not to scale", and an arrow depicting groundwater flow direction in the disposal ponds vicinity indicating groundwater flow direction as shown below:



**3. Groundwater Impacts from Ammonia and Nitrate.**

Ms. Kipps requests the Board consider requiring other NPDES permittees with significant land discharges to include similarly detailed hydrogeologic assessments (referencing the Hydrological Assessment in section VI.2.a of the Tentative Order) in their Reports of Waste Discharge for permit renewal.

**RESPONSE:** Comment is noted.

#### 4. Standard Minerals.

Ms. Kipps requests that the Attachment E, Monitoring and Reporting Program (MRP), be revised to specify dissolved iron and dissolved manganese in the Standard Minerals list.

**RESPONSE:** Staff concur and revised MRP sections VIII.B.2.e and IX.C.2.e, as shown below:

- e. **Standard minerals** shall include the following: boron, calcium, iron (dissolved), magnesium, potassium, sodium, chloride, manganese (dissolved), phosphorus, total alkalinity (including alkalinity series), and hardness, and include verification that the analysis is complete (i.e., cation/anion balance).

#### 5. Groundwater Reporting.

Ms. Kipps requests that the Attachment E, MRP, be revised to require the Discharger to enter individual monitoring results into eSMR for all constituents and parameters in accordance with eSMR data entry instruction, including individual groundwater monitoring results.

**RESPONSE:** MRP section X.B sets the requirements for self-monitoring report format and submittal. The Discharger has been submitting the groundwater reports as attachments as required by MRP section X.B.6. Permitting staff will work with the Discharger to submit groundwater data as a CIWQS Data File, similar to how the effluent and surface water data are reported.

#### 6. Technical Reports Submittals.

Ms. Kipps requests confirmation that the Discharger will be required to upload to eSMR the technical reports specified in the Ammonia Assessment and Hydrogeologic Assessment provisions.

**RESPONSE:** All technical reports from MRP Table E-12 will be required to be electronically submitted to CIWQS.

#### 7. Nitrogen Compounds

Ms. Kipps requests that the Tentative Order be revised to consistently cite numerical values presented for nitrogen compounds as nitrogen, as discussed in section III.E of Attachment F, Fact Sheet.

**RESPONSE:** Staff concur and revised the entire proposed Order and Attachments to refer to nitrogen compounds as nitrogen.

#### 8. Incorrect Abbreviation

Ms. Kipps notes that the Facility is abbreviated as WWTF throughout the document except in the Fact Sheet section III.E.1, where it is abbreviated as WWTP.

**RESPONSE:** Staff concur in part. Staff revised Fact Sheet section III.E.1, under Electrical Conductivity, to change “WWTP” to “Facility”, as shown below:

**Electrical Conductivity.** As shown in Figure F-3, electrical conductivity appears to be elevated in downgradient wells versus the upgradient wells based on

average concentrations, but the average concentrations between March 2014 and December 2022 are less than 700 µmhos/cm for all four downgradient wells. The elevated concentrations in the downgradient wells are to be expected considering the Facility's effluent concentrations typically ranged from 390 to 960 µmhos/cm and the average over the same date range is 676 µmhos/cm. The comparison of effluent to groundwater EC concentrations demonstrates that concentrations are very similar in downgradient wells as compared to the effluent.

## **9. Groundwater Electrical Conductivity.**

Ms. Kipps states that the term, "hydraulically overloaded," implies the hydraulic loading of effluent to the disposal ponds exceeds the ponds' disposal capacity by percolation and evaporation and that such overload conditions would be evident in effluent overtopping pond berms or localized groundwater mounding above the bottom of disposal ponds.

Ms. Kipps asks how the groundwater electrical conductivity data supports the conclusion that the discharge is not causing groundwater to be "hydraulically overloaded".

**RESPONSE:** Staff concur that the term, "hydraulically overloaded" was incorrectly used and has removed it from Fact Sheet section III.E, and is shown below:

Data from downgradient wells does indicate that electrical conductivity is increased over background concentrations; however, the downgradient concentrations are in line with the discharge concentrations to the ponds indicating that the groundwater is not increasing electrical conductivity beyond concentrations in the effluent discharged to the ponds.

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## **Staff Revisions**

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### **1. Grammatical and Typographical Corrections.**

Staff has made grammatical and typographical corrections to the proposed Order for clarity.

### **2. Receiving Water Temperature Limitations.**

Staff has made revisions to the receiving water temperature limitation (Section V.A.16 of the proposed Order) to specify which monitoring locations are to be used to determine compliance with the receiving water temperature limitation.

**16. Temperature.** The natural temperature to be increased by more than 5° Fahrenheit. Compliance to be determined based on the difference in temperature at:

- a. Monitoring Locations RSW-001 and RSW-002, if discharging to Discharge Points 001 or 003,
- b. Monitoring Locations RSW-003 and RSW-004, if discharging to Discharge Point 004.