

Central Valley Regional Water Quality Control Board
3/4 June 2026 Board Meeting

Response to Written Comments on
Tentative Waste Discharge Requirements for
City of Manteca
Wastewater Quality Control Facility
San Joaquin County

At a public hearing scheduled for 3/4 June 2026, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of tentative Waste Discharge Requirements (NPDES No. CA0081558) for the City of Manteca, Wastewater Quality Control Facility. This document contains responses to written comments received from interested persons and parties in response to the tentative Order. Written comments from interested parties were required to be received by the Central Valley Water Board by 30 April 2026 in order to receive full consideration. Comments were received prior to the deadline from:

1. City of Manteca (Discharger) (received 29 April 2026)
2. Central Valley Clean Water Association (CVCWA) (received 30 April 2026)
3. Jo Anne Kipps (Kipps) (received 30 April 2026)

Written comments from the above interested parties are summarized below, followed by the response of Central Valley Water Board staff.

DISCHARGER COMMENTS

DISCHARGER COMMENT #1 – Mixing Zone/Dilution Credit Study

Revise the reopener provision in Waste Discharge Requirements (WDR) section VI.C.1.k for the Mixing Zone/Dilution Credit Study to be applicable to other constituents besides ammonia.

RESPONSE:

Central Valley Water Board staff concur and have revised WDR section VI.C.1.k and corresponding rationale in Attachment F – Fact Sheet (Fact Sheet) so the Mixing Zone/Dilution Credit Study could apply to other constituents.

CVCWA COMMENTS

CVCWA COMMENT #1 – Whole Effluent Toxicity

Make revisions to the tentative Order related to whole effluent toxicity including:

- a. Revise WDR section VI.C.1.i to add “California” Supreme Court.
- b. The tentative Order contains a Reopener Provision to allow reopening the Order to add effluent limitations for acute and/or chronic whole effluent toxicity; however, the tentative Order already includes effluent limitations for chronic whole effluent toxicity. Remove WDR section VI.C.1.i.ii for reopening the permit to add whole effluent toxicity effluent limitations.
- c. Remove statements that the Regional Board must fully implement the Toxicity Provisions without acknowledgement of those methodologies that remain consistent with California law.

RESPONSE:

The Central Valley Water Board has the following responses to comments 1a-1c below:

- a. Central Valley Water Board staff concur and have added “California” to WDR section VI.C.1.i from the proposed Order.
- b. Central Valley Water Board staff concur and have removed WDR section VI.C.1.i.ii from the proposed Order and revised the corresponding rationale in Fact Sheet.
- c. Central Valley Water Board staff do not concur. The *State Policy for Water Quality Control: Toxicity Provisions* establishes numeric water quality objectives for acute and chronic toxicity in surface waters. These objectives serve as federal water quality standards. 40 Code of Federal Regulations section 122.44(d)(1)(vii)(A) requires that water quality-based effluent limits be derived from and comply with all applicable water quality standards. Water Code section 13263, subdivision (a), similarly requires that WDRs implement any relevant water quality control plans and take into consideration applicable water quality objectives. Water Code sections 13146 and 13247 likewise require the Central Valley Water Board to implement the water quality objectives and their implementation procedures. Evaluation of compliance with the numeric toxicity water quality objectives established in the Toxicity Provisions explicitly requires use of the test of significant toxicity (TST), a U.S. EPA-approved method for analysis of toxicity test data. Although there are other U.S. EPA-approved methods for assessing toxicity

generally, there is presently no other approved method for demonstrating compliance with the Toxicity Policy's numeric water quality objectives. If the California Supreme Court upholds the Fifth District Court of Appeal's decision in the 2025 *Camarillo* case, then there will be no legally appropriate method for implementing the numeric water quality objectives for toxicity unless or until a new method is approved by the U.S. EPA. Thus, no change is necessary or appropriate in response to this comment.

CVCWA COMMENT #2 – Salinity Triggers

The proposed Order contains both an electrical conductivity (EC) and a total dissolved solids (TDS) trigger; however, the EC trigger is appropriate for compliance with the Salt Control Program's (SCP) Alternative Permitting Approach. Remove WDR section IV.B.4 that describes the TDS trigger, and adjust the EC trigger to accommodate both land and surface water discharges, if necessary.

RESPONSE:

Central Valley Water Board staff concur and have removed WDR section IV.B.4 and updated the corresponding rationale in the Fact Sheet noting why the TDS trigger was removed in accordance with the Salt Control Program. Staff confirm that the EC trigger in the proposed Order is appropriately calculated to accommodate both land and surface water discharges.

CVCWA COMMENT #3 – Reasonable Potential Analysis Rationale for Salinity

The Discharger has selected and is in compliance with the SCP's Alternative Permitting Approach and is a participant in the Prioritization and Optimization (P&O) Study. The SCP does not require a reasonable potential analysis for P&O Study participants that are in compliance. The proposed Order includes a reasonable potential analysis for salinity. Revise or remove the reasonable potential analysis for salinity contained in Fact Sheet section IV.C.3.b.i.

RESPONSE:

Central Valley Water Board staff do not concur. The CV-SALTS Basin Plan Amendment (BPA) does not waive the requirement to conduct reasonable potential analyses for salinity but provides that dischargers in good standing with the P&O Study are deemed to be in compliance with effluent and receiving water limits for salinity. The BPA explicitly states that when a discharge is found to have reasonable potential for causing or contributing to an exceedance of a federally applicable water quality standard for salinity, "the Board may consider granting use of assimilative capacity by allowing for a

mixing zone and dilution credits” or “a salinity variance pursuant to the Salinity Variance Policy.”

The BPA says on page 24: *Requirements for Ensuring Reasonable Protection of Beneficial Uses* - Full participation in the P&O study as documented and confirmed by the lead entity overseeing the P&O Study shall be found by the Central Valley Water Board to provide for in lieu or alternative compliance to receiving water limits or effluent limits based on salinity. To determine reasonable potential, the Board maintains its discretion to conduct such analysis by using the approach set forth in U.S. EPA’s Technical Support Document for Water Quality-based Toxics Control, by using the approach set forth in the State Implementation Plan (SIP), or by using another approach that is consistent with applicable federal regulations. To the extent that the discharge in question is found to have reasonable potential for causing or contributing to a violation of an applicable salinity water quality objective pursuant to applicable federal regulations, the Board may consider granting use of assimilative capacity by allowing for a mixing zone and dilution credits. The permittee is also eligible for consideration of receiving a salinity variance pursuant to the Salinity Variance Policy.

CVCWA COMMENT #4 – Anti-backsliding Rationale for EC

Remove the first sentence of Fact Sheet section IV.D.3.b.ii that incorrectly refers to the EC trigger as “effluent limitations”.

RESPONSE:

Central Valley Water Board staff concur and has revised Fact Sheet section IV.D.3.b.ii to remove the reference of the EC trigger as an “effluent limitation”.

CVCWA COMMENT #5 – Nitrate Control Program

The Discharger is a participant in the Nitrate Control Program’s (NCP) Pathway B Management Zone Permitting Approach. The proposed Order contains little information on the NCP and how the Discharger’s participation may impact the proposed Order’s provisions. Add a reopener provision to the proposed Order to address potential changes as a result of the NCP.

RESPONSE:

Central Valley Water Board staff concur and have expanded on the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) reopener found in WDR section VI.C.1.g and corresponding rationale in the Fact Sheet to include the NCP.

KIPPS COMMENTS

KIPPS COMMENT #1 – Assessor Parcel Numbers (APNs)

Include the APNs of the treatment works and land application areas (LAAs) owned by the Discharger in the proposed Order.

RESPONSE:

Central Valley Water Board staff concur and have added the APNs for the Facility and LAAs to Table F-1 of the proposed Order.

KIPPS COMMENT #2 – Ponds

Ms. Kipps has the following comments related to the ponds operated at the Facility:

- a. Add information about each pond's construction area (acres), working depth (feet), working volume (million gallons), elevations (feet above mean sea level) of pond perimeter berm and bottom, and vertical separation distance (feet) from pond bottom and highest anticipated groundwater to the proposed Order.
- b. Add information about the Food Processing Pond (Pond 2) and the Secondary Effluent Equalization Pond (Pond 3) liners including installation year, liner material, thickness, hydraulic conductivity in centimeters per second, subbase preparation, warranted use life, inspection and repair history to the proposed Order.
- c. Add information about the Secondary Effluent Storage Pond (Pond 1) including percolation rate (in terms of feet per year, million gallons per year, and gallons per foot per day) and frequency of pond maintenance (drying out and removing sludge) to the proposed Order.
- d. Explain why the Secondary Effluent Storage Pond is continually in service when water is generally applied to the Land Application Areas (LAAs) from April to November.
- e. Consider adding a special study to the proposed Order to allow time to obtain the above information if needed.

RESPONSE:

The Central Valley Water Board has the following responses to comments 2a-2e below:

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- a. Central Valley Water Board staff concur and have added pond size and volume to the facility description in Fact Sheet section II.A of the proposed Order. Other requested pond information will be required in the next ROWD.
 - b. Central Valley Water Board staff concur and have added Pond 2 and Pond 3 liner information to the facility description in Fact Sheet section II.A of the proposed Order.
 - c. Central Valley Water Board staff partially concur. Percolation rates are not necessary since water quality data is available for monitoring location LND-001 and the groundwater. Pond maintenance information will be required in the next ROWD.
 - d. Central Valley Water Board staff clarify that Pond 1 may be operated as an emergency storage pond outside of the irrigation season, as needed, to store secondary or tertiary effluent flows during times of increased flow during wet weather and during construction or maintenance of the treatment works. Wastewater stored in Pond 1 can be routed to the headworks for retreatment. Information about other uses of Pond 1 has been added to the facility description in Fact Sheet section II.A of the proposed Order.
 - e. Central Valley Water Board staff confirm that the above information about the Facility ponds will be required with the next ROWD and a special study is not needed.

KIPPS COMMENT #3 – Land Application Area

Ms. Kipps has the following comments related to the LAAs:

- a. Elaborate on the future reduction of the LAA acreage and evaluate whether the reduction will be adequate to dispose of all wastewater from Eckert Cold Storage (Eckert) while maintaining compliance with land discharge specifications in the proposed Order regarding hydraulic loading, BOD loading, and total nitrogen loading.
- b. The proposed Order does not require flow monitoring for Pond 2's discharge to the LAAs so there is no data to document when the wastewater discharged to the LAAs is solely from Pond 2 or blended with Pond 1.
- c. Monitoring Location LND-001 is described as recycled water when it is technically industrial wastewater blended with undisinfected secondary effluent.

RESPONSE:

The Central Valley Water Board has the following responses to comments 3a-3c below:

- a. Central Valley Water Board staff clarify that the City of Manteca is currently seeking a contractor to develop the LAAs for commercial and residential use and plans to cease use of the LAAs for agricultural irrigation over the next 3 years. Eckert has been moving operations to their facility in Escalon, California, and the Discharger holds a contract to receive food processing wastewater from Eckert through the 2028 irrigation season. Since agricultural use of the LAAs and discharges from Eckert are scheduled to cease around the same time, the Discharger will be able to fully dispose of all industrial wastewater from Eckert and continue to meet land discharge specifications. The Discharger plans to discharge more wastewater to the San Joaquin River after use of the LAAs has ceased. A description of the plans to cease land disposal and industrial wastewater flows from Eckert have been added to the planned changes in Fact Sheet section II.E.
- b. Central Valley Water Board staff clarify that secondary effluent from Pond 1 may be discharged to the LAAs unblended, but industrial wastewater from Pond 2 is always blended with secondary effluent from Pond 1 before use for irrigation of the LAAs. The blend of industrial wastewater to secondary effluent ranges from 1:7 to 1:10. The Discharger monitors the flow from each pond and reports the total daily flow to the LAAs at Monitoring Location LND-001 in their Nutrient Management Plan (NMP) Annual Reports. Daily flow monitoring has been added to Monitoring Location LND-001 and the reporting requirement in MRP section X.D.A.6.a.ii has been modified to require reporting the flows from the Food Processing Pond (Pond 2) and Secondary Effluent Storage Pond (Pond 1) used to irrigate the LAAs.
- c. Central Valley Water Board staff concur with this clarification and have updated the description of LND-001 water throughout the proposed Order.

KIPPS COMMENT #4 – Facility Maps and Flow Schematic

Ms. Kipps has the following comments related to the Facility Maps and Flow Schematic:

- a. Include legible versions of Figures B-2 and B-3 in the proposed Order and label the ponds and LAAs on a scaled map.
- b. Confirm the acreage of the LAAs and include this information in the proposed Order.
- c. Include the flow path from Pond 2 on the Flow Schematic in Attachment C.

- d. Consider adding monitoring location labels from the Monitoring and Reporting Program (MRP) on the maps and flow schematic.

RESPONSE:

Central Valley Water Board staff concur and the Facility maps have been updated and monitoring locations maps have been added. An updated flow schematic will be submitted with the next ROWD.

KIPPS COMMENT #5 – Flood Risk

WDR section VI.C.4.c.viii contains Treatment Pond Operating Requirements to prevent inundation or washout due to floods with a 100-year return frequency. According to the Federal Emergency Management Agency (FEMA) flood maps shown below, parts of the Facility and the LAAs are within areas of flood hazard (see figure below). Characterize the flood risk of the Facility and LAAs according to the above FEMA flood map and revise WDR section VI.C.4.viii to apply all ponds (not just treatment ponds), the treatment works area, and the LAAs.

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, AE9
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee, See Notes, Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Storm Wall

OTHER FEATURES

- 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
- 17.4 Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/30/2026 at 8:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

RESPONSE:

Central Valley Water Board staff clarify that the Facility is designed to provide treatment for incoming wet weather and average dry weather flows, thereby protecting against inundation and washout. Staff concur and have revised the Flood Protection provision in WDR section VI.C.4.c.viii to require that all treatment facilities, including ponds, and LAAs shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

KIPPS COMMENT #6 – Industrial Wastewater Discharge

Ms. Kipps has the following comments related to the Eckert industrial wastewater discharge:

- a. The Discharger stores seasonal pretreated industrial discharge of vegetable food processing water from Eckert in Pond 2, where it receives aeration treatment. Industrial wastewater in Pond 2 blends with secondary effluent from Pond 1 before

discharge to the LAAs. Add monitoring to characterize the industrial wastewater discharged to Pond 2 for continuous flow monitoring and monthly biochemical oxygen demand (BOD), electrical conductivity (EC), total dissolved solids (TDS), fixed dissolved solids (FDS), chloride, sodium, and total nitrogen monitoring. If flow data is unavailable, disclose the average detention time in Pond 2 and estimate the BOD reduction provided in Pond 2 from surface aeration if possible.

- b. The proposed Order also requires the discharger to calculate the hydraulic loading of the LAAs but does not require flow monitoring to the LAAs at Monitoring Location LND-001 to determine the hydraulic loading. Add continuous flow monitoring to Monitoring Location LND-001 to the LAAs.

RESPONSE:

The Central Valley Water Board has the following responses to comment 6a and 6b below:

- a. Central Valley Water Board staff partially concur. The Discharger regulates discharges from Eckert into Pond 2 through a local ordinance wastewater discharge permit. The Discharger determines the necessary monitoring and requires Eckert to monitor for flow, pH, BOD, TDS, total nitrogen, TSS, FDS, and EC in the discharge to Pond 2 and requires BOD and TDS monitoring in Pond 2 on each day that wastewater is discharged from Eckert to Pond 2. Since data is available characterizing the industrial discharge to Pond 2, a requirement has been added to the Treatment Pond Monitoring in MRP section IX.C to submit Eckert's monitoring data with the annual eSMRs.
- b. Central Valley Water Board staff concur and have added daily flow monitoring to Monitoring Location LND-001 in response to comment 3b above.

KIPPS COMMENT #7 – Biochemical Oxygen Demand (BOD) Loading Rate

The proposed Order carries forward the Land Discharge Specification for BOD of a maximum daily mass loading of 300 pounds per acre per day (lb/ac/day) applied to each LAA based on the recommendation found in *Small and Decentralized Wastewater Management Systems* by Crites and Tchobanoglous. Ms. Kipps estimates that the average BOD loading rate to the LAAs is approximately 27 lb/ac and the Discharger can comply with a lower BOD loading rate. Consider lowering the BOD loading rate to 100 lbs/ac/day based on a cycle average to prevent mobilization of iron, manganese, and arsenic from elevated BOD loading.

RESPONSE:

Central Valley Water Board staff do not concur with reducing the BOD loading rate in the Land Discharge Specifications (WDRs Section IV.B). The BOD loading rate from *Small and Decentralized Wastewater Management Systems* by Crites and Tchobanoglous is recommended for industrial wastewater discharges and the Discharger has been able to comply with this loading rate, as mentioned in the comment. Since the Discharger receives wastewater from industrial discharges, the BOD loading rate is applicable and allows flexibility for discharging to land given the BOD variability from Eckert. Furthermore, as stated above, the Discharger will soon stop receiving industrial wastewater and discharging to land, so a reduction of the BOD loading rate is not necessary at this time. If discharge to land does not cease during the next permit term, the BOD loading rate can be reassessed during the next permit renewal alongside groundwater iron, manganese, and arsenic monitoring to determine if land discharges are mobilizing metals.

KIPPS COMMENT #8 – Groundwater Monitoring Wells

Add information about the Discharger's monitoring wells including construction date, elevation, depth, screen interval length and depth, and highest groundwater elevation to the proposed Order.

RESPONSE:

Central Valley Water Board staff concur and have added information about the newer monitoring wells (MW-4, MW-11, and MW-AW) to the Facility description in Fact Sheet section II.A of the proposed Order. Information for the older monitoring wells (MW-3, MW-5, and MW-9W) will be provided in the ROWD for the next permit renewal.

KIPPS COMMENT #9 – Pond 1, Secondary Effluent Storage Pond

Ms. Kipps has the following comments related to Pond 1:

- a. Page F-81 of the tentative Order states that Pond 1 will not result in an increase in pollutants or any additional degradation of the receiving water, yet page F-20 implies that groundwater impacts from Pond 1 seepage have not been determined. There is no monitoring well installed downgradient of Pond 1 to monitor the groundwater to determine the impacts of seepage of the secondary effluent discharged to Pond 1 before application to the LAAs. Explain the conflicting statements regarding Pond 1's impacts to groundwater and why existing data cannot be used to assess attenuation of percolation from Pond 1. If existing

monitoring is inadequate to assess this, require the Discharger to install a groundwater monitoring well downgradient of Pond 1.

- b. Add quarterly groundwater monitoring in all wells for arsenic, total organic carbon (TOC), bicarbonate alkalinity, hardness, calcium, and magnesium to monitor for organic overloading to the LAAs.
- c. Require the Discharger to enter groundwater monitoring data into electronic Self-Monitoring Reports (eSMRs) using the data entry tool so that data can be easily downloaded from eSMR Analytical Reports.

RESPONSE:

The Central Valley Water Board has the following responses to comments 9a-9c below:

- a. The Discharger clarified that an additional groundwater study was done in 2012 as required by the 2009 NPDES permit, documented by a report called *Evaluation of Best Practical Treatment or Control (BPTC) for Constituents of Concern to Groundwater Quality* (2012 Groundwater BPTC Report). This report noted that the 2005 change in source water quality (through replacement of high-salinity groundwater with lower-salinity surface water) and treatment facility operation (via implementation of nitrification and de-nitrification) have improved the quality of the effluent and hence the irrigation water with respect to salts and nitrate. Additionally, the 2025 LAA Annual Report notes that background water quality for TDS and nitrate is worsening from sources outside of the Discharger's control, while the water quality under the fields looks to be stable, with seasonal variations but no discernable trends otherwise. This information will be clarified in the Fact Sheet of the proposed Order. Given that the Discharger plans to eliminate land discharges over the next 3 years, it is not practical to require them to install another monitoring well downgradient of Pond 1 at this time. The Discharger clarifies that, once discharges to land cease, Pond 1 will be used for emergency storage but this will be evaluated and confirmed with the next ROWD and permit renewal. Information from the 2012 Groundwater BPTC Report has been added to Fact Sheet section V.B.
- b. Central Valley Water Board staff concur and have added once per quarter groundwater monitoring for dissolved arsenic and once per year groundwater monitoring for standard minerals to MRP Table E-8 of the proposed Order.
- c. MRP section X.B sets the requirements for self-monitoring report (SMR) format and submittal. The Discharger has been submitting the groundwater monitoring

data electronically as attachments to their quarterly eSMRs, as required by MRP section X.B.6. The Discharger also includes groundwater monitoring data within the NMP annual reports. Central Valley Water Board staff can re-evaluate this need at the next renewal if discharges to land are still occurring.

KIPPS COMMENT #10 – Groundwater Characterization

The Discharger conducted a groundwater characterization study of the City of Manteca and surrounding area, and submitted the findings in the *Background Hydrogeologic Characterization Report* (Background Report) conducted by Condor Earth Technologies, Inc. on 26 September 2006. The Background Report states groundwater quality downgradient of the Facility is poor for TDS, nitrate, and trace metals and that the Discharger cannot fully evaluate impacts to groundwater from LAAs without additional studies. There have been no additional studies to evaluate the groundwater impacts from the LAAs.

Require additional studies to assess monitoring network ability to monitor for compliance with groundwater limits and to characterize the groundwater for compliance with groundwater limits. Ms. Kipps recommends commencing these studies after two years of new groundwater monitoring data suggested in Comment 9b has been collected and completed at least 6 months before permit expiration so staff can review for next permit renewal.

RESPONSE:

Central Valley Water Board staff clarify that additional groundwater evaluation work was done after the 2006 Background Report, namely the 2012 Groundwater BPTC Report mentioned in response to Comment #9a above. The 2012 Groundwater BPTC Report was conducted after the Discharger eliminated their sludge drying beds and land application of biosolids, after the 2005 change in source water quality, and after the implementation of nitrification and de-nitrification at the Facility. The purpose of the BPTC evaluation was to systematically and comprehensively conduct a technical evaluation of each component of the treatment system to determine the best practicable treatment or control for each constituent of concern, and to ensure that land application of the Facility effluent is consistent with the State Water Resources Control Board (State Water Board) Resolution No. 68-16 (Antidegradation Policy). Additionally, metals concentrations in groundwater from the monitoring wells are included in the LAA Annual Reports.

If discharges to the LAAs do not fully cease over the next permit term, the Discharger will be required to submit a Land Application Area Assessment with the next ROWD

including an updated water balance, an assessment of the existing groundwater monitoring well network, and an assessment of hydraulic loading exceedances.

KIPPS COMMENT #11 – LAA pH Buffering Capacity

Clarify the statement in the permit that states the LAA vadose zone has little potential for buffering of extreme pH and describe any evidence to support this claim.

RESPONSE:

Central Valley Water Board staff have no other information regarding this statement and have removed it from the proposed Order.

KIPPS COMMENT #12 – Hydraulic Loading

The proposed Order includes Land Discharge Specifications for the water applied to the LAAs which includes the hydraulic loading specifications in WDR section IV.B.1 shown below:

- “1. **Hydraulic Loading.** The volume of recycled water applied to the use areas shall not exceed agronomic rates based on the vegetation grown, pre-discharge soil moisture conditions, and weather conditions. Hydraulic loading of recycled water and supplemental irrigation water (if any) shall be at agronomic rates designed to:
 - a. Maximize crop nutrient uptake.
 - b. Maximize breakdown of organic waste constituents in the root zone; and
 - c. Minimize the percolation of waste constituents below the root zone.”

Based on the Discharger’s 2024 and 2025 Nutrient Management Plan Annual Reports, Ms. Kipps calculated that the annual sum of excess applied wastewater was 94.8 million gallons (MG) and 100.4 MG, respectively and has exceeded the hydraulic loading specification.

Ms. Kipps has the following comments related to hydraulic loading:

- a. Revise the proposed Order to correct statements claiming hydraulic loadings to LAA fields do not exceed crop demand and disclose the magnitude of violations of this requirement in each field.

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- b. Describe the corrective actions performed or planned by the Discharger to address the hydraulic overloading.
 - c. If necessary, require a special study to address chronic excess hydraulic loading including a discussion of how hydraulic loading will change when LAA acreage decreases.

RESPONSE:

The Central Valley Water Board has the following responses to comments 13a-13c below:

- a. The Discharger acknowledges in their NMP Annual Reports the periods during which the LAAs received excess hydraulic loading. In the most recent 2025 NMP Report, the Discharger cites, “Based on characteristics of the various soil types found in the area, the intake rates for the City’s fields range from 1.5 in/hr to 3 in/hr. The maximum infiltration rate necessary to absorb the maximum daily irrigation water in 2025 was 0.62 in/hr. This indicates that the soil had the capacity to absorb all excess water shown in Table 4. It can thus be assumed that the amount of water in excess (i.e., which was neither taken up by crops, nor evaporated) percolated into the soil.”

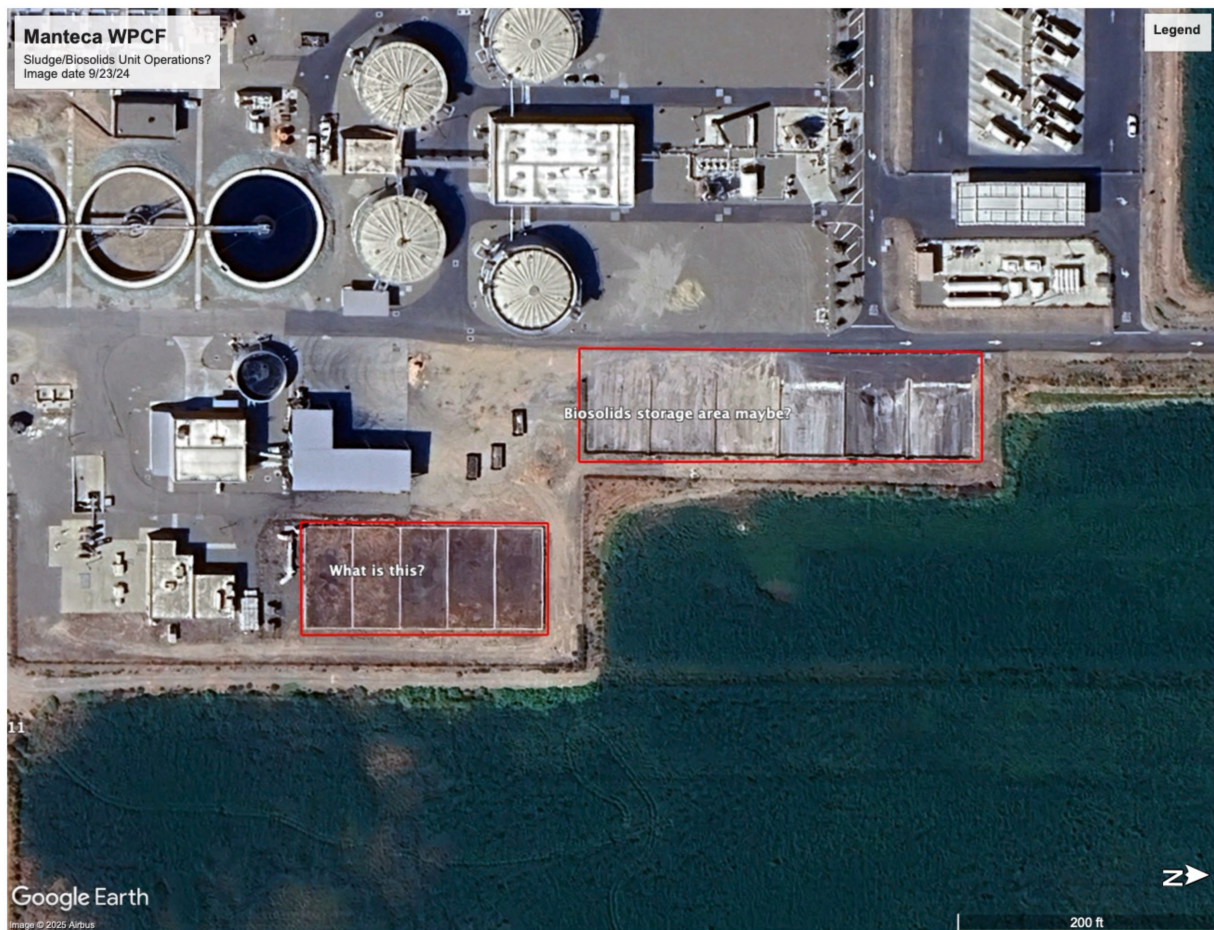
Central Valley Water Board staff concur with the comment and will revise the proposed Order to remove statements that the hydraulic loading was not exceeded. The magnitude of violations can be viewed in the annual NMP Annual Report tables titled “Estimated Excess Water Applied to the Agricultural Fields” (typically Table 4). The Discharger did confirm that there is no tail water at any of the LAAs and that soils in the area have high permeability and intake rates. A summary of the excess hydraulic loading has been added to Fact Sheet section IV.F.a.

- b. The Discharger includes a section in the NMP Annual Reports called “Violations, Corrective Actions, and Evaluation of Land Discharge Operations.” For the 2023, 2024, and 2025 annual reports, no corrective actions were noted; rather, this section describes the soil’s capacity to absorb the excess water and states that the BOD loading rates were in compliance with the maximum daily loading rate. While hydraulic overloading has occurred, constituent concentrations in the downgradient groundwater show no statistically significant trends indicating that the discharge is causing degradation beyond current conditions.

- c. The Discharger plans to reduce LAA acreage in conjunction with the reduction in land discharge volumes (see response to Kipps Comment #3.a). A requirement has been added to the LAA Annual Report to provide a status update on their reduced LAAs or ceased discharges to land. No additional technical evaluations will be required at this time, however if the Discharger is still discharging to land at the next permit renewal, they will be required to do a technical evaluation characterizing their hydraulic loading and impacts to groundwater quality as part of the Land Application Area Assessment due with their ROWD (see response to Kipps Comment #10)

KIPPS COMMENT #13 – Undisclosed Unit Operations

A Google Earth image shown below from 23 September 2024 shows areas of possible sludge drying beds or biosolids storage areas on the Facility property not identified on the Facility maps.



Identify the areas outlined in red on the Google Earth image.

RESPONSE:

Central Valley Water Board staff clarify that the lower left area outlined in the image is the biofilter chambers for the headworks of the Facility and the upper right area outlined in the image is concrete paved storage areas used for excess biosolids, if the main covered biosolids storage area (the sideways “L” shaped building in the image) is full prior to pickup and disposal by Synagro.