

**REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION BOARD MEETING
11/12 DECEMBER 2025**

**RESPONSE TO WRITTEN COMMENTS FOR THE
CITY OF MODESTO REGIONAL WATER RECYCLING FACILITY – SUTTER CAMPUS
CITY OF MODESTO REGIONAL WATER RECYCLING FACILITY –
JENNINGS CAMPUS
STANISLAUS COUNTY
TENTATIVE WASTE DISCHARGE REQUIREMENTS**

At a public hearing scheduled for 11/12 December 2025, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of waste discharge requirements (WDRs) for the City of Modesto (Discharger) Regional Water Recycling Facility for the Sutter and Jennings Campuses in Stanislaus County. This document contains responses to written comments regarding the tentative WDRs circulated on 11 April 2025. Written comments were required by public notice to be received by the Central Valley Water Board by 13 May 2025 to receive full consideration. Comments were received prior to the deadline from:

1. The City of Modesto (Discharger)
2. Central Valley Clean Water Association (CVCWA)
3. Jo Anne Kipps

Written comments are summarized below, followed by responses from Central Valley Water Board staff. In addition, staff have made changes to the tentative WDRs and Monitoring and Reporting Program (MRP) in response to the comments.

DISCHARGER COMMENTS

Changes, corrections, and updates proposed by the Discharger on the Tentative WDRs and MRP were generally made as proposed for Comments 6, 7, 8, 11, 13, 14, 16, 17 through 42, including all Editorial Comments.

COMMENT 1: Clarify and revise groundwater limitations to be consistent with Antidegradation Findings. Clarifications and modifications are requested for the Groundwater Limitations section and the Monitoring and Reporting Program (MRP).

RESPONSE:

Groundwater Limitations. The groundwater limitations language was modified to include the phrase *or background groundwater quality, whichever is greater*.

WDRs adopted by the Central Valley Water Board must implement the applicable portions of the Central Valley Water Board's Water Quality Control Plans (i.e., Basin Plans). (Wat. Code, § 13263(a).) As stated in Findings 101 and 102, these WDRs implement the Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (SSJR Basin Plan), which includes, at section 3.2.4, a narrative water quality objective stating, "Ground waters shall not contain taste- or

odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.” Accordingly, Groundwater Limitation K.2 requires that the Facility’s discharges not cause or contribute to groundwater containing taste or odor-producing constituents in concentrations that cause nuisance or adversely affect beneficial uses. The Board acknowledges that the narrative objective for taste- and odor-producing constituents has some overlap with the narrative objective for chemical constituents, which incorporates the Maximum Contaminants Levels (MCLs) specified in California Code of Regulations, title 22 (Title 22). However, this does not justify removal of the taste and odor narrative objective from these WDRs because it is possible that certain taste- and odor-causing constituents that are not captured in Title 22’s MCLs, or for which numeric water quality objectives have not been established, could still be discharged from this facility.

It is the Discharger’s responsibility to show compliance with the groundwater limitations; therefore, the text describing how compliance would be demonstrated was not added to the Order or MRP.

MRP Section I.B. The majority of the requested changes were made to the MRP. Groundwater monitoring wells proposed for abandonment shall remain in the MRP and are required to be sampled until submittal of the Groundwater Monitoring Well Installation and Abandonment Workplan. Upon submittal, the wells proposed to be abandoned are no longer required to be monitored and sampled. Text clarifying these requirements have been added to the WDRs (Provision M.2.a) and MRP.

MRP Section III.N.8.e. It is the Discharger’s responsibility to provide information supporting compliance with the groundwater limitations. The method used to show compliance is up to the Discharger. The evaluation methods used and supporting information are required to be submitted as part of the Annual Monitoring Reports. No changes were made.

COMMENT 2: Delay Adoption of Tentative WDRs and MRP to October 2025.

RESPONSE: The tentative WDRs are now scheduled for proposed adoption at the December 2025 Board meeting.

COMMENT 3: Combine all requirements related to the Sutter Campus Drying Beds relocation under Provision M.2.e. and provide more time to allow for installation of groundwater monitoring wells.

RESPONSE: Prior Provision M.2.d has been deleted because the requirements for groundwater monitoring wells for the Sutter Campus were added to prior Provision M.2.e (now Provision M.2.e).

The timeline proposed in the comments for the sludge drying beds at the Sutter Campus have been added to revised Provision M.2.e, as requested.

COMMENT 4: Revise the discussion of the composting facility in Finding 27 and Discharge Prohibitions B.5 and remove Provision M.2.g.

RESPONSE: Agreed. Based on several discussions with the Discharger and the Title 27 Permitting Unit, compost issues will be addressed by the Title 27 program.

Edits have been made to prior Finding 27 (current Finding 33) and Discharge Prohibition B.5, and prior Provision M.2.g has been removed.

A requirement has been added to the MRP (Annual Monitoring Report Requirements, Section III.N) for the submittal of a copy of the Discharger's Annual Pretreatment Report required under the NPDES program (NPDES Permit No. CAG585001).

COMMENT 5: Include conditional language for Valley Water Collaborative Management Zone Implementation Plan (MZIP) requirements in Provisions M.9 and M.10 to allow for a potential change in the selected Nitrate Pathway.

RESPONSE: The Discharger may request in the future to change from Pathway B to Pathway A, as described in the Basin Plan's description of the Nitrate Control Program. The Tentative WDRs were drafted based on the current selected pathway. If in the future, Pathway A is selected and approved, a review of the current WDRs will be conducted at that time to determine if revisions to the WDRs are required. No changes to the text were made.

COMMENT 9: Include language in Finding 35 that acknowledges monitoring of land application areas in Table 9.

RESPONSE: The land application areas were resurveyed and the information, which included revised water balances, was submitted to the Central Valley Water Board on 17 November 2025. The revised acreage has been incorporated into the tentative WDRs and the revised water balances support a 4,600 MG total annual flow limit and a monthly average daily flow of 25.2 MGD.

COMMENT 10: Revise facility name to "City of Modesto Regional Recycled Water Facility – Sutter Campus/Jennings Campus".

RESPONSE: The proposed name change was adopted at the August Board Meeting. The Tentative WDRs and MRP were updated to include the revised name change.

COMMENT 12: Revise discussion of MW-9 location and proposed monitoring well network changes.

RESPONSE: The changes regarding MW-9 were made. The statement regarding the installation of additional wells was not added to the text because the Order does not require the installation of additional wells. If the Discharger chooses to install additional wells to further characterize groundwater conditions, the MRP requires all new wells to be incorporated into the monitoring program.

COMMENT 15: Revise nitrate monitoring requirements

RESPONSE: Standard monitoring requirements are for nitrate as nitrogen and is consistent with other similar WDRs. No changes were made.

CVCWA COMMENTS

COMMENT A: Basis for Water Quality Objectives (WQOs) and Goals

RESPONSE: The following text was added to the Order to clarify the use of WQOs for comparison purposes only: WQOs presented in data tables through the Order are provided solely for comparison purposes. Their inclusion is intended to offer context for evaluating constituent concentrations in the effluent or other monitoring data. However, the inclusion of WQOs in these tables does not constitute the establishment of groundwater limitations or compliance thresholds under this Order. They are not enforceable limits, but rather screening benchmarks intended to support data interpretation and inform risk evaluation.

COMMENT B: Applicable secondary Maximum Contaminant Levels (MCLs)

RESPONSE: The WQOs included in the Tentative Order are correct as presented. The lowest concentrations are used for comparison purposes and are not set as groundwater compliance limits (see RTC A).

COMMENT C: Groundwater limitations.

RESPONSE: See response to Discharger's comment #1 above.

COMMENT D: Groundwater monitoring well installation work plan.

RESPONSE: The timeline included in Provision M.2.d (currently Provision M.2.e) was agreed upon in discussions with the City of Modesto based on the Discharger's funding requirements. No changes were made.

COMMENT E: Tentative Monitoring and Reporting Program

RESPONSE: The phrase *In addition* was added per the comment.

COMMENT F: Salinity action level.

RESPONSE: All references to "action limit" were changed to action level. The Tentative WDRs use WQOs in the Findings and Information Sheet for comparison purposes only to determine if potential impacts to groundwater could occur. The only groundwater limitations established in the Tentative Order are presented in section Groundwater Limitations K.

COMMENT G: Nitrate Control Program

RESPONSE: The Discharger has selected Pathway B for the Nitrate Control Program and has enrolled in the Valley Water Collaborative. The Tentative WDRs were drafted based on the Discharger's selected pathway. Dischargers subject to the Nitrate Control Program may request to change their permitting pathway.. If the Discharger chooses to change pathways, the WDRs will be evaluated at that time to determine if revisions to the Order are required based on the changed pathway.

COMMENT H: Environmental Laboratory Accreditation Program (ELAP) Regulations

RESPONSE: The two general references made to the 1991 standard provisions in sections I.C and Section III were removed from the MRP. The MRP states that laboratory analytical procedures shall be those that are approved for use by the EPA or ELAP.

JO ANNE KIPPS COMMENTS

COMMENT 1: Prohibitions regarding discharges to ponds of fixed film reactor (FFR) waste solids, tertiary plant WAS, and LAA tailwater:

RESPONSE: The Central Valley Water Board declines to prohibit the discharge of FFR solids, waste activated sludge (WAS), or tailwater. These discharges have been a component of the Facility's treatment system design since the Facility began operating. With the exception of dissolved metals in groundwater, which is addressed separately, monitoring data confirm that degradation has reached steady-state conditions. The continued discharge of these materials is both justified and appropriate at this time. The Antidegradation analysis establishes that limited degradation is allowable provided the Discharger implements the Best Practicable Treatment or Control (BPTC) measures specified in Finding 130, and that such limited degradation is consistent with the maximum benefit to the people of the State of California

Provision M.2.d (currently Provision M.2.e) requires the Discharger to relocate the drying beds from the Sutter Campus to the Jennings Campus.

COMMENT 2: A provision requiring the Discharger to complete sludge removal work by five years.

RESPONSE: The Board declines to require sludge removal within five years because it the Discharger's responsibility to determine the manner in which it complies with its WDRs. (See Wat. Code, § 13360.) However, a provision was added the WDRs (Provision M.2.j; currently M.2.k)) requiring the submittal of a Sludge Cleanout Plan that describes how the sludge removal will be conducted and controlled at such times as the Discharger determines that sludge cleanout is necessary or appropriate.

COMMENT 3 a, b, and c: Recommended specifications for wastewater and effluent storage ponds, along with a compliance schedule not to exceed 15 years.

RESPONSE: 3.a. The Board declines to impose Title 27-based requirements for the storage ponds as these ponds do not fall within the scope of Title 27 and these requirements are not reasonably necessary to assure compliance with the WDRs. The nature of waste treated at this Facility does not justify the financial burden that redesigning the entire system would place on disadvantage communities that rely on this service. A requirement that the Discharger to meet 5 feet of separation and install liners would be both technically infeasible and economically unjustifiable and would result in a disproportionate financial impact on the disadvantaged communities that rely on this Facility for services.

3.b. Provision M.2.g (currently M.2.h) requires the Discharger to submit a plan that describes the status of the flood plain designation and what measures will be implemented to address the berms and levees at the Jennings Campus. No changes were made to the Tentative Order.

3.c. It is technically infeasible to require the Discharger to line all ponds to meet a hydraulic conductivity standard.

COMMENT 4: Specifications for future sludge surface impoundments based on Title 27.

RESPONSE: Provisions M.2.d-f (currently M.2.e-g) address the relocation of the sludge drying beds. Design details for the new drying beds will be reviewed and evaluated once the required *Jennings Campus Sludge Drying Beds Work Plan* is submitted. Title 27-based requirements may be imposed, as necessary and appropriate, on a case-by-case basis.

COMMENT 5: Specifications for a proposed 15-acre working surface for further drying and temporary stockpiling dewatered digested sludge (sludge cake).

RESPONSE: Provision M.2.d (currently M.2.e) sufficiently addresses the existing and upcoming sludge drying bed issues. No changes were made to the text.

COMMENT 6: Specification for Modesto Ranch.

RESPONSE: 6.a. The Board declines to set a monthly average limit on Can Seg wastewater diversions to Modesto Ranch. A BOD₅ loading limit is sufficient at this time for the protection of groundwater. A provision was added to require the Discharger to specifically evaluate iron, manganese, arsenic, and molybdenum in groundwater (Provision M.2.h; currently M.2.i).

6.b Requiring the use of GIS software for tracking daily values across each land application area (LAA) field would be inconsistent with other WDRs issued for similar facilities and is not reasonably necessary at this time. The Order is intended to establish performance standards and monitoring requirements, not prescribe specific tools or technologies for achieving compliance. Mandating GIS software would impose an unnecessary and potentially burdensome requirement that is not supported by precedent or necessary for effective oversight.

6.c WDRs do not typically prescribe specific soil gas concentrations, especially at subsurface depths, unless directly tied to a demonstrable risk to groundwater or surface water. Mandating a specific oxygen level at a fixed depth introduces a level of geochemical control that is not supported by the regulatory framework of Title 27 or the Water Code. This requirement is not found in other WDRs issued across the state. Most WDRs rely on performance-based standards, such as nutrient loading limits, hydraulic loading rates, and setback distances, not prescriptive subsurface oxygen thresholds. Introducing such a condition would create regulatory inconsistency and confusion, especially for similarly situated dischargers.

There is no clear scientific or regulatory basis for requiring a 20% oxygen threshold at three feet below ground. Soil oxygen levels fluctuate naturally due to moisture, microbial activity, and soil type. Enforcing a fixed oxygen concentration could lead

to unnecessary soil modification practices (e.g., forced aeration or tilling) that may disrupt soil structure, increase erosion risk, and impose undue costs on dischargers without proven environmental benefit. In addition, measuring oxygen at three feet depths across an entire LAA is technically difficult, costly, and not standard practice. The phrase “effective by five years” is unclear, which adds to the impracticality of enforcement. Furthermore, artificially increasing oxygen levels could accelerate organic matter decomposition and reduce soil carbon storage, potentially undermining sustainability goals.

The Order allows the Discharger flexibility in selecting appropriate methods to determine compliance. As long as the Discharger can demonstrate accurate and reliable tracking of rainfall, irrigation volumes, and constituent concentrations and loadings, the choice of software or data management system should remain at their discretion. This approach aligns with the principle of performance-based regulation and ensures consistency with other WDRs issued by the Regional Board. No changes were made.

For the following comments, “F” refers to the specific finding included in the Tentative WDRs.

COMMENT F1: Revise 2nd sentence to delete second reference to biosolids management.

RESPONSE: The requested change was made.

COMMENT F5: Identify the tertiary plant capacity BNR/Tertiary Effluent Treatment System as currently 14.9 MGD, and revise 3rd sentence: “The Facility’s *industrial* pretreatment program and discharge to the San Joaquin River *are is* regulated under....”

RESPONSE: The requested change was made.

COMMENT F6: Revise to indicate the MRP associated with WDR 99-112 was revised in 2018.

RESPONSE: The requested change was made.

COMMENT 11.a: Revise the 2nd and 3rd sentences: “~~The screened wastewater~~ *Primary effluent* is then directed to the Jennings Campus for further treatment. **Stored anaerobically digested sludge is discharged to** ~~Screened biosolids are dried in on-site drying beds and land applied at the Modesto Ranch.~~”

RESPONSE: The finding was revised as follows based on comments from the Discharger: **Sutter Campus. Influent to the WQCF enters the Sutter Campus (Attachment B) for screening and solids removal. The screened wastewater is then directed to the Jennings Campus for further treatment. Solids removed from the wastewater are treated with anaerobic digestion and then dried in on-site drying beds and land applied at the Modesto Ranch.**

COMMENT 11.b: Revise item (2): “the Biological Nutrient Removal (BNR)/Tertiary Effluent Treatment System, **which produces tertiary effluent that is treated** ~~treats the wastewater to secondary and tertiary standards~~ using ultraviolet (UV) disinfection **and**

discharged to surface waters of the United States under an two NPDES permits.”
~~NPDES permit for discharges to surface waters.~~

RESPONSE: Changes were made to the finding based on comments and discussions with the Discharger as follows: ***Jennings Campus. Wastewater at the Jennings Campus is treated by two treatment trains: (1) the Secondary Effluent Treatment System, which treats the wastewater to secondary undisinfected standards for land application, and (2) the Biological Nutrient Removal (BNR)/Tertiary Effluent Treatment System, which treats the wastewater to disinfected tertiary standards for discharges to surface waters under an NPDES permit. Treated wastewater from the Secondary Effluent Treatment System may be sent to a pond system for storage prior to use as irrigation water for the Modesto Ranch.***

COMMENT F11.b: Revise to describe the Secondary Effluent Treatment System as consisting of three Fixed Film Reactors and a partially-aerated Recirculation Channel surrounding three facultative treatment ponds.

RESPONSE: In discussions with the Discharger and staff's evaluation of this comment, sufficient details are provided in the finding as presented. No changes were made.

COMMENT 11.c: Please confirm the accuracy of the 2,458-acre value identified for the Modesto Ranch LAA and, as necessary, revise the tentative order accordingly.

RESPONSE: When the Tentative WDRs were issued for public comment, the Discharger was planning to resurvey the LAA acreage. The resurvey was completed and revised acreages and revised water balances were submitted to the Central Valley Water Board on 17 November 2025. The revised information was incorporated into the Tentative WDRs.

COMMENT F12: Please revise this finding to identify the major industrial dischargers to the Can Seg trunk line as including E. & J. Gallo Winery, Nestle, Frito-Lay, Del Monte Foods, Inc., Stanislaus Food Products, and Crystal Creamery (affiliated with Foster Farms). Alternatively, please explain why the tentative order should not disclose this information.

RESPONSE The entities discharging waste to the Facility are not discharging to the environment, which would require independent authorization via separate WDRs or a waiver of WDRs, they are discharging to a treatment facility. The Facility is responsible for managing its influent sources in a manner that ensures compliance with its WDRs and other applicable laws and regulations. Naming the influent sources will not substantively change this Order and may lead to future inaccuracies (as influent sources change over time) and potential confusion about those sources' responsibilities under this Order. Therefore, references to industrial dischargers to the Can Seg line are not included in the Tentative Order.

COMMENT F13: Replace 2nd sentence: The Sutter Campus provides preliminary treatment (screening, grit removal), primary clarification, anaerobic digestion of primary clarifier sludge, and anaerobic digester sludge storage and dewatering.

RESPONSE: The finding was modified as follows based on discussions with the Discharger: *The Sutter Campus has four separate influent trunks (the West trunk, Sutter trunk, River trunk, and Cannery Segregation [Can Seg] Line) that convey domestic and industrial wastewater to the plant. Treatment at the Sutter Campus includes influent screening, grit removal, primary clarification, and anaerobic biosolids digestion and drying.*

COMMENT F16: To characterize the change in municipal water supply quality from use, especially industrial use, include one or more findings identifying the sources of municipal water supplies within the Facility's service area (i.e., groundwater wells and surface water supplied by Modesto Irrigation District), and characterizing its overall quality using data in eSMR Analytical Reports for, at a minimum, EC, TDS, sodium, chloride, potassium, Fe, Mn, and As.

RESPONSE: Findings 10 and 11 from the 2021 Tentative Order were added to this Tentative Order.

COMMENT F18: Consider moving this explanatory preface from Solids Disposal Specification K and incorporating it in this finding. Alternatively, revise this finding to employ the same definitions.

RESPONSE: The term "digested" was added to the text and the text in Solids Disposal Specification K was left as originally presented.

COMMENT F20: Revise to identify the current number of sludge beds in use for dewatering anaerobic digester sludge, indicate there are ten beds near the river, refer to the RWD's Figure 12 and identify which bed is dedicated to handling stormwater basin spoils and which beds were historically used to store (or dewater) the contents of an anaerobic digester during cleaning operations. Also, confirm that digester contents were actually returned to the digester after being temporarily stored in drying beds.

RESPONSE: Sufficient details were included in the Tentative Order. The entire sludge drying bed area, regardless of the specific use of each bed, will be evaluated, characterized, and decommissioned. New, lined drying beds will be constructed at the Jennings Campus. Provisions M.2.e-g provides information on the requirements associated with the decommissioning and relocation of the drying beds.

COMMENT F26: Revise 3rd sentence: ~~"Effluent is pumped through the FFRs, from where it~~ *Effluent from the FFRs* is typically directed to the *partially*-aerated Recirculation Channel..."

RESPONSE: The text was modified as requested with the exception of the word *partially* because the channel is aerated.

COMMENT F27: Revise finding to recap the Compost GO's NOA's description of the compost facility's discharge of compost leachate and stormwater runoff to the Recirculation Channel and, if time allows, include a table summarizing reported quarterly flow volumes for the past two years.

The Discharger cannot or will not dedicate sufficient resources to complete necessary improvements to its compost facility to comply with the Compost GO's containment

standards. This track record suggests that the Discharger cannot or will not will provide sufficient resources to voluntarily design, construct, operate, and maintain its proposed solids handling facilities (aerobic sludge lagoon and sludge cake drying beds) in a manner that “minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order” (Solids Disposal Specification L.3).

RESPONSE: Since the issuance of the Tentative Order, the Discharger provided additional information regarding the adjacent composting operation. The finding was revised as follows:

A composting facility owned and operated by the City of Modesto is located on City-owned property adjacent to the Modesto Ranch and is regulated under a separate permit (General Waste Discharge Requirements for Composting Operations, 2015-0121-DWQ-R5S003, and any future changes). The Facility has been accepting runoff-related discharges from the compost site into the Jennings Campus treatment ponds since 1997.

Discharges from the composting facility to the treatment plant have been ongoing for over 25 years. The volume and quality of wastewater from the composting operations are reflected in the overall flows and effluent characteristics discharged to the LAAs. All relevant considerations related to the compost facility have been previously addressed, and no outstanding issues are required to be addressed under this Tentative Order. As this Order does not regulate the composting facility directly, any future concerns or regulatory actions pertaining to that operation will be addressed through the composting facility's separate permit.

COMMENT F29: Revise Table 5 (and elsewhere) to identify estimated percolation rates for all ponds range from 8 to 11 in/mo and, to improve readability, add a column for freeboard. Also disclose what these rates mean in terms of the volume of pond percolate entering groundwater (and eventually the San Joaquin River). Ideally, include an estimate the discharge's contribution to river flow during worst-case low-flow conditions.

RESPONSE: The column on prior Table 5 (current Table 6) referring to the percolation rates for each pond was deleted and the following text was adding to the finding: *Estimated percolation rates from the ponds, channels, and reservoirs range from approximately 8 to 11 inches/month.*

The freeboard levels shown in prior Table 5 are the levels used for the surface areas included in the water balances.

COMMENT F30: Revise Table 6 to include a row for Total Nitrogen.

RESPONSE: Total nitrogen was added to the table.

COMMENT F32.b: Revise to describe how this mixing is accomplished.

RESPONSE: The Can Seg process water and the treated domestic effluent are mixed prior to discharging to the LAAs in a mixing box.

COMMENT F33: Revise to include a finding characterizing annual flows of secondary recycled water to the Modesto Ranch, and another characterizing total annual flows to the

Modesto Ranch in terms of MG and acre-feet. Use these volumes along with the irrigated acreage to estimate the discharge's overall hydraulic loading to the Modesto Ranch in terms of inches per year. Also, consider including a table that summarizes the Facility's inflows and outflows based on reported flow monitoring data. The resulting data should reveal the percentage of Facility influent flow lost annually to percolation and evaporation.

RESPONSE: A table was added as Finding 41 that presents annual flow volumes to the LAAs.

COMMENT F35: Revise to characterize drainage discharge flow and confirm whether it is also diverted to the storage ponds. Revise MRP to require continuous flow monitoring of drainage when diverted to irrigation forebay / storage ponds and when discharged to the San Joaquin River, and periodic quality monitoring – monthly for EC, total nitrogen, and chemical oxygen demand (COD); quarterly for TDS, Fe, Mn, and As; and, annually for standard minerals).

RESPONSE: The discharge of any water to the San Joaquin River is not permitted under this Order. Finding 56 has been revised to remove any reference to storm water discharging to the river.

COMMENT F35: If diverted drainage is discharged to storage ponds, how does this operational change affect the Discharger's ability to consistently comply with effluent storage requirements? Dischargers typically obtain an NPDES permit for discharging to surface waters of the U.S dewatered groundwater containing pollutants in concentrations that may affect surface water quality. Explain why the river discharge of groundwater containing pollutants attributable to the discharge is not regulated by an NPDES discharge permit?

RESPONSE: The finding referencing discharges to the San Joaquin River has been deleted. Discharges to surface water under this Order is prohibited, unless expressly authorized under another permit.

COMMENT F37. Consider revising to prohibit the discharge of pollutant-free water to Facility unit operations, particularly its secondary treatment ponds. Or provide technical justification for the Discharger's use of what is essentially snowmelt from the Tuolumne River watershed to dilute wastewater undergoing treatment in unlined surface impoundments.

RESPONSE: The Tentative Order does not regulate the Discharger's irrigation water supply, except as it pertains to (1) the volume and quality of water discharged to the LAAs, and (2) the capacity of the ponds, as determined by freeboard requirements. Supplemental irrigation water, whether applied directly to the LAAs or commingled with effluent prior to discharge, should not adversely affect groundwater quality in a manner that would impair or diminish beneficial uses.

COMMENT F39: Revise to explain how the Discharger's practice of discharging tailwater to the storage ponds does not interfere with the Discharger's ability to comply with effluent storage requirements. If the tentative order authorizes this discharge, revise the MRP to require monitoring this discharge for flow and quality (monthly for EC, total nitrogen, and chemical oxygen demand (COD); quarterly for TDS, Fe, Mn, and As; and, annually for standard minerals).

RESPONSE: The tailwater return system does not interfere with the effluent storage requirements. All effluent, including tailwater, is permitted to be stored and/or recirculated through the pond system. To address capacity issues in the ponds, the Discharger is required to maintain a minimum of 2 feet of freeboard in all ponds. In addition, the tailwater returned to the system, commingled with the existing wastewater in the ponds, and eventually discharged back to the LAAs is required to meet the effluent limits prior to discharging (or re-discharging) to the LAAs.

COMMENT F44: Confirm whether the Discharger factors in soil NO₃-N in its crop demand estimates. Revise MRP to re-establish the current revised MRP's soil monitoring requirements, include NO₃-N, ammonia as nitrogen, and TKN, and calculated values for PAN within the root zone (four feet).

RESPONSE: As described in the Annual Monitoring Reports, the Discharger factors in soil nitrogen as nitrate in the crop demand estimates. The MRP was revised to include a Cropping and Irrigation Annual Monitoring Report and Plan.

COMMENT F45: Biosolids statement.

RESPONSE: Comment noted.

COMMENT F47 & F48: Revise tentative order and MRP to require the use of GIS software to track loadings of irrigation water (each type), biosolids, and pond solids. I encourage management to allow staff to take a training course on use of GIS software.

RESPONSE: The proposed requirement to utilize GIS software for tracking loadings of irrigation water, biosolids, and pond solids will not be incorporated into the Tentative Order (see response to comments 6.b and 6.c).

COMMENT F49: Revise the tentative order following receipt of revised water balances that reflect current discharge conditions, including the apparent significant decrease in available effluent storage capacity due to solids accumulations and use of diverted tailwater/intercepted groundwater. Alternatively, include a provision requiring the Discharger submit revised water balances by 60 days following order adoption. Or, explain why the Board should accept the values from water balance calculations based on assumptions that do not reflect the current discharge flows, let alone the tentative order's maximum effluent flow limitations of 5,300 MG total annual flow and 25 MGD monthly average daily irrigation flow including Can Seg flows diverted directly to LAA fields.

Revise last sentence: "...which are more accurate than plant available nitrogen (PAN) *pan evaporation* rates for large pond systems."

RESPONSE: Revised water balances were submitted on 17 November 2025 and were prepared, signed, and stamped by two licensed Professional Engineers (P.E.), who are legally accountable for the accuracy and reliability of the assumptions and calculations presented. The Central Valley Water Board staff's role is to review the inputs and assumptions for reasonableness and consistency with site conditions; not to independently recalculate or revise the water balance. The approach reflects established engineering practices and regulatory approaches.

COMMENT F50 & F51: These ponds apparently have significant solids accumulations. Until these solids are removed, any water impounded in the treatment ponds will create

percolate containing sludge-derived waste constituents in a mass or concentration that violate groundwater limitations. Revise to prohibit the discharge of all supplemental irrigation water to treatment ponds or provide technical justification that this practice will not exacerbate an ongoing condition of unreasonable groundwater degradation.

RESPONSE: Groundwater conditions were evaluated at the Facility. The Order requires the Discharger to conduct a groundwater assessment to specifically evaluate arsenic, iron, manganese, and molybdenum. As of the issuance of the Tentative Order, the Discharger is in compliance with the Salt and Nitrate Control Programs, which address salts and nitrogen concerns in groundwater.

COMMENT F52: Does the Discharger use soil monitoring data to determine residual nitrogen from previous applications or rely on design assumptions regarding the decomposition of nitrogen in applied biosolids?

RESPONSE: The Discharger relies on design assumptions and is required to show all assumptions and calculations.

COMMENT F54.a: The Discharger is apparently lax at conducting its compost discharge. Chances are, it may take the same lax approach to the design, construction, operation, and maintenance of its proposed sludge cake drying area. To ensure the leachate discharge from this area is effective at minimizing the infiltration into soil of sludge cake leachate or stormwater runoff to levels reflective of BPTC, the tentative order should establish a hydraulic conductivity standard for the drying pad equivalent to compost pads specified in the Compost GO (i.e., 1×10^{-5} cm/s).

How does staff interpret the high potassium values in MW-9? When the Discharger operated its composting operation in the area slated for the sludge cake drying surface, did it routinely accept and incorporate winery waste solids in its compost windrows? Does the Discharger accept winery waste solids in its current composting operation?

RESPONSE: As required in the Tentative Order, the Discharger shall submit a *Sludge Drying Beds Work Plan* for the Jennings Campus and the review of the construction details will occur at that time.

The potassium in groundwater is likely the result of on-going discharges from the Facility and possibly neighboring operations. The Discharger has never accepted winery waste solids or any solids from the compost operation. Additional information regarding the compost operations can be found in the General Waste Discharge Requirements for Composting Operations, 2015-0121-DWQ-R5S003.

COMMENT 54.b: The discharge of WAS and FFR waste solids to the facultative ponds should never have been authorized in the first place, especially since the sludge digester pits infringe into groundwater. The tentative order needs to address this problem firmly by establishing a compliance schedule for ceasing this discharge. That is why it needs a prohibition for the discharge of all sludge and waste solids to wastewater treatment ponds.

RESPONSE: The Central Valley Water Board acknowledges the concern regarding potential groundwater impacts associated with the discharge of solids and sludge to treatment ponds. Groundwater monitoring data indicate elevated concentrations of certain constituents in upgradient wells, suggesting regional influences. Available

evidence also indicates that the discharge of wastewater and biosolids have likely contributed to observed concentrations in downgradient wells.

The Order addresses these concerns through a comprehensive regulatory framework that includes groundwater limitations, effluent and loading limits, the requirement to implement BPTC measures, required participation and compliance with the Salt and Nitrate Control Programs, and continued monitoring. In addition, the Order requires the Discharger to conduct further evaluation of metals in groundwater to better characterize potential impacts and implement mitigation strategies.

The discharge of solids to treatment ponds is a common and accepted practice in pond-based systems, particularly where anaerobic digestion and solids settling are integral to the treatment process. This approach is supported by technical guidance, including U.S. EPA documentation, which recognizes facultative lagoons and similar systems as appropriate for solids stabilization. Prohibiting solids discharge to treatment ponds would necessitate a fundamental redesign of the facility, impose substantial economic burden and are not considered reasonable or practicable under the Best Practicable Treatment or Control standards, and would be inconsistent with WDRs issued for comparable systems.

In light of these considerations, continued discharge of solids to treatment ponds under the conditions specified in the Order is deemed appropriate and in the public's best interest.

COMMENT F54.c: Due to seasonally shallow groundwater conditions, the use of surface impoundments for municipal wastewater and effluent storage is problematic and requires BPTC implementation if only to not worsen an existing condition of arsenic pollution created by organic overloading. This is especially true if the Discharger envisions treating Can Seg flows in unlined treatment ponds. That is why the tentative order needs to require all treatment ponds be equipped with a liner with a hydraulic conductivity standard of at least 1×10^{-6} cm/s and to maintain a five-foot vertical separation distance between pond invert and highest seasonal groundwater.

RESPONSE: See response to comment 3.a.

COMMENT F55: This finding refers to the information sheet for a description of proposed changes to the Facility's groundwater monitoring well network.

RESPONSE: Comment noted.

COMMENT F60: Board discharge files are replete with examples of groundwater degradation and pollution from sludge discharges to unlined lagoons and drying beds. Request enforcement staff initiate work to draft a cleanup and abatement order for the sludge bed discharge that requires (1) implementation of groundwater monitoring wells to identify the horizontal and vertical extent of degradation and, once the sludge handling facilities are relocated to the Jennings Campus, (2) an investigation of drying bed soils to determine the vertical extent of sludge-derived waste constituents in the soil profile and removal and proper disposal of all impacted soil. Revise finding to disclose the likely groundwater impacts from the use of unlined sludge drying beds and to announce that a separate enforcement order will be issued to address this issue.

RESPONSE: Provision M.2.d (currently M.2.e) requires the Discharger to address the sludge drying beds at the Sutter Campus. Evaluation of the actions proposed in the sludge drying beds decommissioning work plan will be evaluated by Central Valley Water Board compliance staff upon submittal of the work plan.

COMMENT F61 & F63: The tentative order finds the Discharger's treatment ponds subject to inundation or washout due to floods of 100-year recurrence, and refers to an evaluation of levees owned by a third party (Reclamation District 2091). Until such an evaluation is complete and the treatment pond's exterior berms raised to levels necessary to ensure 100-year flood protection, explain why this discharge should not be regulated as if it were a potentially direct discharge of pollutants to the San Joaquin River.

RESPONSE: The discharge regulated under this Order is not a point source discharge to a surface water. The potential that wastes may be discharged to surface waters (or anywhere outside the facility) as the result of a once-per-one-hundred-years flood does not change that determination. Provision M.2.d (currently M.2.e) requires that the Discharger address the sludge drying beds at the Sutter Campus. Central Valley Water Board staff will conduct a thorough evaluation of the proposed actions upon receipt of the sludge drying beds decommissioning work plan to ensure consistency with regulatory requirements and protection of water quality.

Efforts to achieve reaccreditation of the levees or providing flood protection this site are being evaluated as part of the master plan process will help mitigate the potential for future flooding.

COMMENT F62: This finding indicates DWR's Division of Dam Safety regulates the storage pond berms, in part, because the volume of water contained in the ponds exceeds 50 acre-feet (16 MG). The volume of all ponds exceeds this value.

RESPONSE: Provision M.2.g (currently M.2.h) was revised to include the phrase *in conjunction with DWR's Dam Safety requirements*.

COMMENT F65: Decades of sludge leachate percolating through soils with these characteristics has very likely created a condition of groundwater pollution that requires formal enforcement. Revise the tentative order to disclose this.

RESPONSE: The impacts to groundwater from the sludge drying beds at the Sutter Campus are described in Finding 120. Discharges to the sludge drying beds will no longer be permitted after 1 July 2036.

COMMENT F66: Explain why pond percolation rates of 8 to 11 ft/year are possible in soils that have permeabilities that are "relatively slow." Relative to what?

RESPONSE: The identification of soil types in the area are for the undisturbed and native vadose zone soils. The soils immediately beneath the ponds are likely distributed and possibly non-native soils as a result of the construction of the ponds. Therefore, the permeabilities of the native soils and disturbed soils would not likely be the same. Native undisturbed soils in this area have a "relatively slow" percolation rate when compared to disturbed soils directly beneath the ponds.

COMMENT F69: Revise to identify the reference for the finding that ambient or background groundwater does not meet the WQO for NO₃-N.

RESPONSE: Nitrate as nitrogen groundwater conditions in the area are based on the Discharger's evaluation of groundwater samples collected in 2022 and the location of the Sutter Campus within a Priority 1 Basin under the Nitrate Control Program. The Antidegradation analysis was revised to identify groundwater at the Sutter Campus as high-quality water with respect to nitrate as nitrogen. The Order requires the Discharger to decommission the drying beds (see Provision M.2.d; currently M.2.e) and continue participation in the Salt and Nitrate Control Programs.

COMMENT F71: Insert after 1st sentence: *The intrusion of deeper saline groundwater into shallow groundwater has not impacted all groundwater underlying the Discharger property and appears to be localized in the northern portion of the Modesto Ranch.*

RESPONSE: As stated in the Order, this finding is based on the Turlock Groundwater Basin Groundwater Management Plan. No changes to the text were made.

COMMENT F74: The tentative order appears to gloss over the impacts to groundwater from the pond percolate discharge, which clearly has caused or contributed to groundwater pollution for As, Fe, and Mn. These WQO exceedances disqualify the discharge from exemption from Title 27 prescriptive standards. Also, the tentative order does not adequately address the elevated levels of Total Coliform Organisms (TCO) in groundwater upgradient and downgradient of the ponds. Often, TCO hits in groundwater are one-of and attributable to defective monitoring wells or sampling contamination. However, it appears that TCO degradation is a water quality problem in area groundwater. This problem is exacerbated by the pond percolate discharge to groundwater up to 8 to 11 ft/yr of undisinfected municipal wastewater.

RESPONSE: Groundwater monitoring data indicate that metals have impacted groundwater quality and the Discharger is required conduct further investigation. Provision M.2.h (currently M.2.i) requires the Discharger to conduct an *Arsenic, Iron, Manganese, and Molybdenum in Groundwater Assessment Workplan*.

Although total coliform concentrations in groundwater beneath the Facility exceed the WQO, similar concentrations are present in upgradient groundwater, indicating that the source is not solely attributable to the domestic wastewater treatment system. Potential contributors include regional upgradient sources, avian activity in the vicinity of the wastewater ponds, and the presence of undisinfected wastewater in the ponds. Groundwater monitoring data indicate stable, steady-state conditions over time with respect to total coliform, indicating the influence of BPTCs may be helping to limit further degradation and the system is operating consistently. Finding 128 regarding total coliform was revised to clarify this issue and the Groundwater Limitations were updated to include the WQO for TCO, which was previously omitted by mistake.

COMMENT F75: Revise to acknowledge shallow groundwater passing through MW-7 is of high quality for Fe and Mn, and groundwater passing through MW-10 is of high quality for Fe. This evidence should be sufficient for staff to revisit its conclusion that all upgradient groundwater is, essentially polluted for Fe and Mn and otherwise not subject to BPTC as required by the Antidegradation Policy.

RESPONSE: The Antidegradation analysis was revised to identify groundwater as high-quality water for all constituents of concern presented on current Table 18. BPTCs for the protection of groundwater to justify allowing discharges from this Facility are included in Finding 130. Arsenic, iron, manganese, and molybdenum in groundwater require further evaluation (Provision M.2.h; currently M.2.i).

COMMENT F78: Because Field #2 is no longer part of the Modesto Ranch, MW-9 should not be identified as a Modesto Ranch downgradient well. Revise table to include a summary of MW-13 results.

RESPONSE: The requested changes were made to the Order.

COMMENT F79: Revise to acknowledge that upgradient groundwater monitored in two of the four shallow wells is of high quality for Fe and Mn.

RESPONSE: See response to Comment F75.

COMMENT F80: In other words, the magnitude of degradation and pollution of groundwater caused or contributed by the Modesto Ranch discharge has apparently reached steady-state conditions.

RESPONSE: Text was revised to refer to “steady-state conditions”.

COMMENT F83: Refer to the cited evaluation for odor source(s) at the Sutter Campus and revise accordingly.

RESPONSE: The source of information is the *Odor, Corrosion, and UVT Evaluation*, submitted to the Central Valley Water Board on 25 Feb 2025, as stated in the Order. The text does not require revision.

COMMENT F116: The threat to groundwater caused by the sludge bed discharge will not be eliminated until soil contaminated with sludge-derived waste constituents is removed and the drying bed area is equipped with a low-permeable cover layer. The Discharger is unlikely to initiate this work voluntarily, hence the need for a cleanup and abatement order. In order to start collecting groundwater monitoring data in a timely manner for this work, the tentative order needs to require the Discharger to implement groundwater monitoring at the Sutter Campus.

Unless staff can cite a credible reference documenting nitrate pollution in groundwater upgradient from the Sutter Campus, revise to omit the finding’s conclusion that area groundwater is not of high quality for nitrate. And, revise tentative order to require the Discharger to implement groundwater monitoring at the Sutter Campus within two years of order adoption. Alternatively, provide technical evidence demonstrating that the potential water quality impacts from the decades-long sludge discharge adjacent to the Tuolumne River are not serious enough to require groundwater monitoring as a BPTC measure

RESPONSE: Provision M.2.d (currently M.2.e) requires the Discharger to submit a detailed work plan outlining the actions to decommission the sludge drying beds. The adequacy of the proposed actions and the level of effort will be assessed upon submission.

The Antidegradation Analysis has been updated to designate groundwater as high-quality with respect to the constituents listed in current Table 18. In accordance with Provision M.2.d (currently M.2.e), the Discharger will only be required to install groundwater monitoring wells if the sludge drying beds remain in place beyond 31 December 2031. Complete removal of the beds and any affected soil will eliminate potential risks to water quality in the Tuolumne River and groundwater.

COMMENT F118: Include *total coliform organisms* as a waste constituent the discharge that may cause or contribute to TCO exceedances in groundwater.

RESPONSE: Total coliform was added to current Table 18 and evaluated as part of the Antidegradation analysis.

COMMENT F119: Revise to exclude MW-1 as a downgradient well and revise analysis approach to distinguish between the pond percolate discharge and LAA discharge. Alternatively, provide technical justification for (a) using an apparent cross-gradient well to represent downgradient conditions and (b) presenting an antidegradation analysis that does not accurately reflect the current discharge.

RESPONSE: MW-1 is identified as a cross-gradient well in Table 12. The data from this well was used as a downgradient well as part of a general analysis of up-gradient compared to down-gradient groundwater quality because the monitoring well is located adjacent to Storage Pond #2. While it may be located cross-gradient based on the general groundwater flow direction of west-southwest, during the wet-season the gradient is flat. Therefore, capturing the MW-1 data under the downgradient data analysis is appropriate. In addition, removing these data from the downgradient evaluation results in an insignificant change in conditions and does impact the interpretation of the data, site conditions, and groundwater impacts in the Tentative Order.

COMMENT F120: Revise to conclude background groundwater in certain upgradient wells is of high quality for Fe and Mn and, as such, is subject to the BPTC requirements of the Antidegradation Policy.

RESPONSE: See response to Comment F75.

COMMENT F121: To optimize soil treatment, re-applications of wastewater to LAA fields should not occur until soil oxygen recovers to at least 90% atmospheric levels. To ensure this happens, revise to include a LAA Specification establishing a numerical limit of 90% for free oxygen in soil within the root zone effective prior to each waste application. Revise the MRP to require the Discharger to monitor soil oxygen in each field prior to waste applications in at least three representative locations to a depth of at least three feet.

RESPONSE: The requested revisions, establishing a numerical soil oxygen threshold, and requiring pre-application monitoring at multiple depths, are not included in the Order because the limited potential regulatory value of these measures are outweighed by the potential burden on the Discharger and its rate-payers and the fact that these measures are not required of other similarly situated facilities. While soil oxygen levels can influence treatment efficacy in LAAs, the proposed specification and monitoring protocol are not standard practice in WDRs for similar facilities. Requiring routine soil oxygen monitoring at multiple depths and locations prior to each application would introduce significant operational complexity

and cost without clear evidence of added benefit to groundwater protection. Should future data or site-specific conditions indicate that soil oxygen is a limiting factor in treatment performance or poses a risk to water quality, the Central Valley Water Board may revisit the need for additional controls through a revision to the MRP or enforcement action. No changes were made.

COMMENT F122: To be clear, the tentative order authorizes the Discharger to continue polluting groundwater for As and to worsen apparent existing Fe and Mn degradation to pollution levels that threaten beneficial uses.

RESPONSE: Provisions were added to the Order to require the Discharger to conduct *Arsenic, Iron, Manganese, and Molybdenum in Groundwater Assessment Workplan and Groundwater Compliance Assessment Report* (see Provisions M.2.h and M.2.i; currently M.2.i and M.2.j).

COMMENT F123: Item a refers to “biosolids effluent volume” but does not define what is meant by that phrase. Item b identifies the treatment of sludge in unlined treatment ponds as BPTC. It is not. If anything, it is cause for formal enforcement. Item k lists nitrogen sources to LAA fields but does not include residual soil nitrogen from past waste applications. This finding should also include soil and groundwater monitoring and, if staff agrees, also the use of Geographical Information System (GIS) software for tracking water and waste applications to individual LAA fields.

RESPONSE: The phrases *effluent volume* was deleted from 130.a (prior 123.a) and *treatment ponds* was deleted from 130.b (prior 123.b). The Discharger currently accounts for the previous year of biosolids application in terms of organic nitrogen when calculating plant available nitrogen. A Cropping and Irrigation Annual Monitoring Report and Plan was added to the MRP and requires “Calculations for PAN shall consider mineralized organic nitrogen from previous cycle applications.” The MRP has not been revised to add specific requirements for soil monitoring. As for the use of GIS software, see response to comments 6.b and 6.c.

COMMENT F124: For starters, the degradation could have been prevented had the Discharger replaced its treatment ponds with conventional treatment technology. Degradation of high-quality groundwater caused by a discharger’s failure to implement BPTC is unreasonable. And, labeling the discharge’s groundwater impacts as degradation is a misnomer. The discharge has created a condition of pollution in groundwater in violation of the California Water Code. Except for requiring the Discharger to cease the Sutter Campus sludge discharge in ten years, the tentative order does little to mitigate the arsenic pollution caused by the discharge.

RESPONSE: The Central Valley Water Board acknowledges the concerns regarding groundwater impacts associated with the discharge of wastewater and biosolids at the Facility. Groundwater monitoring data indicate elevated concentrations of arsenic and other constituents, including in upgradient wells, suggesting both regional influences and site-specific contributions. The Order does not dismiss these impacts but instead addresses them through a comprehensive framework of mitigation, monitoring, and adaptive management.

The Discharger is required to implement BPTC measures consistent with State Water Board Resolution 68-16 (Antidegradation Policy). These measures include the removal of unlined sludge drying beds, remediation of the unlined drying bed

location (if necessary), and the installation of lined drying beds. The Order also requires additional evaluations of groundwater for dissolved metals to better characterize the extent and sources of impact and to inform future corrective actions.

The Discharger is actively participating in and remains in compliance with the Salt and Nitrate Control Programs, which provide a regional strategy for managing salinity and nitrate impacts to groundwater. Continued discharge under the conditions specified in the Order supports the goals of these programs and aligns with the Water Quality Control Plan for the Central Valley Region.

While the use of unlined treatment ponds and unlined sludge drying beds have contributed to groundwater impacts, the facility's design reflects historical engineering standards and widespread practices for large municipal systems at the time the existing Order was adopted. Replacing the pond-based treatment system with conventional mechanical treatment would require substantial capital investment and land use changes that are not considered economically feasible or practicable at this time. The Order's approach balances environmental protection with the need to maintain essential public infrastructure and services, consistent with the best interest of the people of the State.

The Order includes groundwater limitations, effluent and loading limits, and a tiered regulatory structure that allows for escalation of requirements if monitoring data indicate worsening conditions. Should future evaluations demonstrate that discharge practices continue to degrade groundwater, the Board retains full authority to require additional corrective actions, including further modifications to solids management and treatment infrastructure.

In summary, the Order does not justify degradation but rather establishes a pathway for continued discharge under enhanced oversight, implementation of BPTC measures, and alignment with regional water quality programs. This approach is protective of beneficial uses and consistent with applicable law and policy.

COMMENT F134: The discharge has already caused chronic violations of WQOs, including primary and secondary drinking water standards. And, the discharge is more complex than other similarly-sized wastewater treatment facilities due to its Can Seg land treatment component, as well as many groundwater monitoring wells. These are sufficient reasons to justify a rating of 1A for threat to water quality and complexity. Recall, the Discharger provides industrial sewage service to many well-known and presumably lucrative enterprises, including E. & J. Gallo Winery, Del Monte Foods, and Nestle.

RESPONSE: The discharge has always had a rating of 1B. The error in the tentative Order was corrected.

COMMENT F135: First, WDRs for waste discharges to land not subject to Title 27 identify discharges as exempt from Title 27, not the WDRs regulating the discharge. Second, discharges must be in compliance with the Basin Plan to qualify for a Title 27 exemption. That is, the discharge must not cause groundwater to contain waste constituents in concentrations exceeding applicable WQOs or background groundwater in the event background exceeds WQOs. The tentative order has ample evidence to conclude that this discharge has polluted and will continue to pollute groundwater for As, as well as for Fe and Mn. Consequently, the discharge does not comply with the Basin Plan and does not

qualify for Title 27 exemption. In these situations, WDRs typically find a discharge compliant with the Basin Plan contingent on Discharger's implementation of BPTC measures to abate the pollution.

RESPONSE: Comment noted. See response to Comment 3.

COMMENT B.1 & B.2: Is it the intention of staff to include these prohibitions in every WDRs issued to dischargers required to implement Phase I requirements of the Salt Control Program and/or the requirements of the Nitrate Control Program? Did staff include these prohibitions because it is not confident the Discharger comply with these two programs? Please explain.

RESPONSE: The referenced prohibitions will be included in future WDRs for facilities required to participate in the Salt Control Program and Nitrate Control Program.

COMMENT B.3: Revise to read: Except as expressly authorized under a separate permit, the **direct** discharge of wastes to surface waters or surface water drainage courses, including irrigation ditches outside of control of the Discharger, is prohibited.

RESPONSE: The Discharge Prohibition is correct as written and is consistent with other similar WDRs. No changes were made.

COMMENT B.5: The Can Seg diversion is treatment bypass and not allowed under the Clean Water Act, Section 402. However, the Discharger's Modesto Ranch LAAs provide an unspecified level of treatment by through natural soil processes and crop uptake of applied salts and nutrients on the Modesto Ranch.

RESPONSE: The discharge of wastewater to the Modesto Ranch from the Can Seg Line is not considered a bypass or diversion of treatment. The system is operating as designed and no bypasses are occurring. The phrase *For the purposes of Standard Provision E.2, Can Seg Line diversion from treatment is not a "treatment bypass" because the segregated process water does not contain domestic waste* was deleted from the text.

COMMENT B.6: Since the findings did not describe the discharge of diverted tailwater and intercepted groundwater to storage ponds, does that mean the Discharger is prohibited from discharging this waste stream to the storage ponds?

RESPONSE: The WDRs clearly describe that tailwater is returned to the pond system when necessary (Finding 42) and Land Application Area Specifications §.J requires the tailwater to be confined to the LAAs or *ponds*. A statement was added to the WDRs Finding 42 to state that *Surfacing groundwater, which can be present during periods of high groundwater levels, is also collected and directed back to the pond system*.

COMMENT B.13: This prohibition concerns the discharge of stormwater and/or tailwater/intercepted groundwater from LAA fields. It states, in part: "Storm water and or irrigation water runoff shall not be allowed to flow from the LAAs until at least 15 days after the last irrigation cycle..." Flows of storm water, tailwater, and intercepted groundwater from the LAAs drain to a ditch that runs adjacent to the irrigation forebay and east recirculation channel and terminates at the return drain pump station, which pumps the

collected flow to the San Joaquin River or, since August 2018, to the irrigation forebay for crop irrigation.

RESPONSE: Comment noted.

COMMENT C.1: Run the spreadsheet water balance models with corrected inputs for NPDES flow (maximum 14.9 MGD) and reduced effluent storage capacity due to apparent excessive solids accumulations and revise the limits accordingly. Also, to facilitate CIWQS data entry of flow violations, assign unique labels to each flow limit (i.e., C.1.a for 5,300 MG/year and C.1.b for 25 MGD).

RESPONSE: Central Valley Water Board staff have reviewed the water balance models submitted for this Facility, which were prepared and stamped by two licensed Professional Engineers. These models are considered technically sound and appropriate for evaluating the Facility's capacity and for establishing regulatory limits under this Order. See response to comment 49.

COMMENT E.1: Revise to read: "The total nitrogen loading **to the LAAs** from the discharge, including effluent, effluent blended with Can Seg wastewater, biosolids, and fertilizer, **and in soil nitrogen remaining from previous waste applications**, ~~to the LAAs,...~~"

RESPONSE: A Cropping and Irrigation Annual Monitoring Report and Plan was added to the MRP and requires *Calculations for PAN shall consider mineralized organic nitrogen from previous cycle applications.*

COMMENT E.2: Besides not providing technical justification for increasing the current order's BOD loading limits, it directs the Discharger to use an equation in the MRP that does not make sense, as it uses the number of fields as variables and not field acreages. Refer to other MRPs with the correct equation and revise accordingly. Also, due to the size of the Modesto Ranch, and the fact that it receives not only effluent, but Can Seg waste and biosolids, there is a lot to keep track of, a task that is well suited by the use of GIS software.

Question: Has staff performed mass balance calculations to determine if the Discharger can comply with this loading limit? I did one that identified the Modesto Ranch discharge BOD has to be reduced to 300 mg/L in order to consistently meet the 200 lb/ac/d limit during peak months.

RESPONSE: See response to comment 6 regarding GIS. The BOD₅ loading limit was discussed numerous times with the Discharger and their consultant. It was agreed that while the BOD₅ loading calculations have been modified when compared to other WDRs, the decision to allow this modification was based on the design of Discharger's irrigation system. Modifications to the system are possible but would incur unnecessary costs that may be passed down to disadvantaged users that rely on this system. The Discharger agreed that the BOD₅ loading limit would be met. Furthermore, the Discharger is required to conduct an evaluation of metals in groundwater. Based on the conclusions from that evaluation, the BOD loading limit could require revision.

COMMENT E.3: To ensure that the Modesto Ranch has the capacity to receive additional biosolids, the tentative order should include a finding identifying the cumulative loading to

date to each field for each Part 503 metal. Alternatively, revise to include a provision requiring the Discharger to submit this information. And, revise to not allow the Discharger to apply biosolids from other facilities until this provision is satisfied and the resulting submittal demonstrates the cumulative loading to LAA fields complies with Part 503 requirements.

RESPONSE: Cumulative loading rates and ceiling concentrations were added to Biosolids Discharge Specifications § H and are sufficient to regulate the application of biosolids, including biosolids from other facilities.

COMMENT F.2: The Discharger does not currently comply with this specification (e.g., unlined sludge drying beds at the Sutter Campus, WAS discharge to unlined ponds for treatment and storage at the Jennings Campus). The tentative order should acknowledge this and, preferably be accompanied by a cease and desist order requiring the Discharger to essentially abandon its use of unlined secondary treatment ponds.

RESPONSE: The Sutter beds will be removed, as required by Provision M.2.d (currently M.2.e) . The discharge of WAS to the pond system is allowed under these WDRs as it is part the design of the system and it has been demonstrated that groundwater has reached steady-state conditions indicating they treatment system is operating as designed. The Discharger is required to cease discharge of sludge/biosolids/solids to the Sutter Beds by 31 December 2036.

COMMENT F.8: Revise: “Public contact with wastewater and Class B biosolids at the WQCF **and Modesto Ranch** shall be prevented through use of fences, signs, or acceptable alternatives.

RESPONSE: Modesto Ranch is one portion of the WQCF and the requirement applies to all portions of the WQCF. No changes were made.

COMMENT F.13: The Discharger reports the facultative ponds have substantial solids accumulations that will require several years to remove. It plans to use only one facultative pond in the meantime. Revise to include a provision requiring the Discharger to clean out all ponds within five years. Recall that groundwater reaches the bottoms of ponds during parts of the year. And, the tentative order must prohibit the use of digester pits in the facultative ponds. By any measured, the discharge of WAS directly into groundwater, which is apparently happening at this site, is not acceptable and is definitely not compliant with the Basin Plan.

RESPONSE: The use of digester pits within the facultative ponds and the associated discharge of WAS are integral components of the system as originally designed and permitted. Although groundwater levels periodically come into contact with the bottoms of the ponds, long-term monitoring data demonstrate steady-state conditions for key water quality constituents, indicating that any interactions between pond contents and groundwater are not contributing to worsening degradation (with the exception of some metals, which are required to be addressed; see Provisions).

COMMENT J.4: What ponds are referenced? Treatment ponds? Storage Ponds? Both?

RESPONSE: Tailwater may be returned to any pond. The text has been clarified.

COMMENT L.3: The Discharger will be in immediate violation of this requirement due to its discharge of WAS to unlined ponds and discharge of sludge to unlined drying beds. Ideally, an accompanying enforcement order is warranted to address this issue. However, earlier I offered several mitigation measures and suggested deadlines.

RESPONSE: Central Valley Water Board staff do not concur. The discharge of wastewater and WAS to unlined ponds is expressly permitted under this Order. The WDRs support the conclusion that, although impacts from the discharge of wastewater, biosolids, and WAS have occurred, the discharge is sufficiently managed, with the exception of metals in groundwater which is addressed separately. This is evidenced by decreasing constituent concentrations as groundwater flows toward the Facility boundaries. Furthermore, continuation of this discharge is justified because it: (1) is consistent with the maximum benefit to the people of California; (2) will not unreasonably affect beneficial uses or result in water quality less than that prescribed by applicable policies; and (3) is minimized through WDR provisions requiring the implementation of BPTCs. Accordingly, issuance of an enforcement order is not warranted at this time.

COMMENT M.2.d.: This is unacceptable. The Discharger should have been monitoring groundwater at the Sutter Campus since the 1990s, but it has escaped scrutiny all these decades and now staff proposes to give the Discharger another pass. Revise to delete this alternative compliance option.

RESPONSE: Central Valley Water Board staff do not concur with the assertion that the Order provides the Discharger with a pass. The Order requires the decommissioning and removal of the Sutter Plant sludge drying beds by a specified deadline. If the beds are not removed, the Discharger will be required to install groundwater monitoring wells to assess potential impacts. This conditional requirement ensures that groundwater monitoring will occur if the source remains in place.

In addition, the Order requires the Discharger to submit a sludge drying bed work plan that outlines the proposed removal activities and management of any residual material. Upon submittal, Board staff will evaluate the adequacy of the proposed actions to ensure protection of groundwater quality. The requirement for a Work Plan reflects a proactive approach to site remediation and is consistent with the Board's practice of allowing Dischargers to propose site-specific compliance strategies, subject to Board review and approval.

The Order does not waive scrutiny or oversight. Rather, it establishes a structured process for evaluating the location and condition of the sludge drying beds following removal, including the potential need for additional investigation or corrective action. The Discharger retains flexibility in selecting the method of remediation, but all proposed actions must be reviewed and concurred with by the Central Valley Water Board to ensure they are protective of water quality and consistent with applicable regulations.

This approach reflects the Board's commitment to regulatory accountability while recognizing the importance of site-specific feasibility and the principle that the method of compliance may vary, provided the outcome meets the required environmental standards.

COMMENT M.2.i: Revise order to require the sludge cake drying working surface meet a hydraulic conductivity standard of 1×10^{-5} cm/s.

RESPONSE: Sludge from the digestors and ponds are removed and placed in trucks for deposit in the sludge drying beds, which are scheduled to be moved to the Jennings Campus. The construction and liner type for the new beds and any related working surfaces will be evaluated upon submittal of the work plan.

COMMENT ATTACHMENT C – JENNINGS CAMPUS SITE FEATURES MAP: (1) Show drainage ditches identified in Attachment D, Modesto Ranch, joining the drainage ditch adjacent to Recirculation Ponds 4 and 8 that ends near the Facility's disinfected tertiary effluent outfall. The Discharger's "ranch drain pump station...discharges flow from this channel into the San Joaquin River." (TM Modesto ROWD P2). (2) show the portion of the Westport Drain adjacent to Storage Ponds #1 and #2 that drains to the San Joaquin River. (4) identify the location of the Discharger's 18-acre River View Ranch feedlot, regulated by an 8 April 2019 Notice of Applicability for coverage under the Waste Discharge Requirements General Order for Confined Bovine Feeding Operations, Order R5-2017-0058 (Bovine General Order).

RESPONSE: (1) The drainage ditch was already shown on Attachment D but the Modesto Ranch boundary line was obscuring the drainage line. The boundary line was adjusted to show the drainage ditch that runs along the Irrigation Forebay. In addition, the drainage ditch located along the East Recirculation Channel was added to Attachment C. (2) West point drain was added to Attachment C. (4) River View Ranch was added to Attachment D and information regarding the cattle feed lot was added to the findings in the Order.

COMMENT MRP.1: The tentative order does not provide technical justification for reducing monitoring frequency from quarterly to annually. Unless and until it does, it should carry over the current quarterly frequency. Also, the MRP requires groundwater monitoring for constituents not currently monitored (e.g., total organic carbon) and, as such, none of the wells in current groundwater monitoring well network should be abandoned, let alone destroyed. Data from the deeper wells is necessary to evaluate the vertical extent of degradation resulting from the discharge. Alternatively, allow for a reduction in groundwater monitoring frequency for some constituents after three years of quarterly sampling provided technical justification showing the reduced frequency will still yield maximum, minimum, and average values comparable to those determined from increased frequency.

RESPONSE: The monitoring frequency for all constituents in groundwater was revised to a quarterly frequency. The Discharger has shown that groundwater quality between the shallow wells and deeper wells do not show a significant difference in quality between the shallow and deep intervals to justify requiring the continued sampling of the deeper wells. However, the deeper wells may be needed as part of the metals evaluation in groundwater and that determination will be included in the Discharger's assessment.

COMMENT MRP.2: And, require monitoring of diverted tailwater/groundwater for flow (continuous) diverted for irrigation use and discharged to the San Joaquin River; and require periodic monitoring for quality (twice during the irrigation season in nonconsecutive months for EC, TDS, standard minerals)

RESPONSE: Tailwater and intercepted groundwater monitoring are not required. The captured waters are discharged back to the pond system. Discharges from the pond system are metered and sampled. Therefore, the quality and volume of the captured waters are already accounted for in the standard monitoring requirements.

COMMENT MRP.3: Also, please reinstate the soil monitoring requirements of the current MRP, and increase monitoring for general minerals to quarterly or, at least, semiannually in order to obtain a decent sample size in a short amount of time.

RESPONSE: Central Valley Water Board staff have determined that soil sampling is not required at this time. Groundwater monitoring and compliance with effluent and loading limits are sufficient to demonstrate groundwater protection. However, the MRP can be revised at any time if it is decided that soil sampling is necessary.

COMMENT MRP.4: Lastly, please explain of what appears to be an unauthorized discharge of waste to a 20-acre area within the Discharger's Sutter Campus parcel. The areas about 1,700 feet west of the sludge drying beds and includes three surface impoundments. See Google Earth images dated 2/25/2021, 5/26/2023, and 4/1/2024).

RESPONSE: The site features in question are associated with the Carpenter Road Landfill, regulated separately from this Order.