

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

**Response to Written Comments for the
Central Valley Meat Company, Inc.
Hanford Beef Processing Facility
Kings County
Tentative Waste Discharge Requirements**

At a public hearing scheduled for 22/23 June 2023, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of revised Waste Discharge Requirements (WDRs) for Central Valley Meat Company, Inc. Hanford Beef Processing Facility (Facility) in Kings County.

This document contains responses to written comments received from interested persons regarding the tentative WDRs (TWDRs) circulated on 14 April 2023. Written comments were required by public notice to be received by the Central Valley Water Board by 15 May 2023 to receive full consideration. On 15 May 2023, Central Valley Water Board staff received written comments on the TWDRs and tentative Monitoring and Reporting Program (MRP) from Brian Coelho with Central Valley Meat Company, Inc. (CVM) and Jo Anne Kipps an interested party. Ms. Kipps provided a revised copy of her comments with a minor correction on 16 April 2023.

Written comments are summarized below, followed by responses from Central Valley Water Board staff specific changes are shown in ~~strikeout~~ and **bolded** text. In addition, staff has made a few minor changes to the TWDRs to improve clarity and fix typographical errors.

CVM COMMENTS

CVM COMMENT #1: CVM requests that Finding 81 in the TWDRs, which discusses compliance with the California Environmental Quality Act (CEQA), be modified to include the following statement:

“The Central Valley Water Board has reviewed the Mitigated Negative Declaration and determined that any identified impacts within its authority as a responsible agency will be mitigated to less than significant with adoption of this Order and the accompanying MRP.”

RESPONSE: Central Valley Water Board staff finds that the existing language in Finding 81 is sufficient to address the Central Valley Water Board’s role as a “responsible agency” under CEQA. Therefore, no change was made.

CVM COMMENT #2: The TWDRs include a salinity performance-based effluent limit for fixed dissolved solids (FDS) of 800 mg/L as an annual average. CVM contends concentration-based limits are problematic since they are dependent on the amount of freshwater in the system, and that while it can currently comply with this limit, it may be too restrictive in light of water conservation efforts to address ongoing drought conditions in the Central Valley. In addition, the new rendering facility, which started operations in December 2022, is only operating at

about 30% capacity, and it is uncertain what the full impact the rendering facility discharge will have on FDS concentrations of the blended effluent when the rendering facility is fully operational. Therefore, CVM requests that the salinity effluent limit for FDS be either:

1. Increased to 1,000 mg/L, or
2. Include a performance-based salt mass limit of 2.0 million pounds per year (in FDS) applied to the land application areas (LAAs). According to CVM, a total mass load of 2.0 million pounds/year is consistent with maintaining the existing salinity discharge levels currently applied to the LAAs while allowing flexibility for variations in effluent FDS concentrations.

RESPONSE: The request to use a performance-based salt mass limit of 2.0 million pounds per year (as FDS) applied to the LAAs (with some restrictions) appears reasonable given current loading rates and will ensure that the Discharger is maintaining its mass loading levels as part of its compliance with the Salt Control Program. The 2.0 million pounds per year is based on an overall annual average effluent FDS concentration of 638 mg/L (current effluent salinity concentration) and a total annual flow limit of 365 million gallons per year (proposed effluent limit). Therefore, the TWDRs have been modified as follows:

Finding 19: As discussed in greater detail...As part of the requirements to maintain **existing** salinity levels, these WDRs **include a performance-based salinity limit, which restricts the annual salt load (from the Facility's discharge) to 2.0 million pounds per year (in fixed dissolved solids [FDS]) applied to the LAAs** ~~an annual average performance-based effluent salinity limit for FDS of 800 mg/L. This performance-based effluent limit was set based on average estimated FDS concentrations (using average FDS data for the last three years and expected contributions from the new rendering plant) plus 25 percent (approximately) to allow some flexibility for water conservation efforts.~~

Finding 65.a: Sets a **Salinity Mass Loading Limit of 2.0 million pounds of FDS for the discharge of wastewater to the LAAs.** ~~Performance-Based Effluent Limitation of 800 mg/L for FDS (calculated as an annual average) on the effluent sent to the LAAs.~~

Finding 76.d: **Salts.** For salts, based on the available data...Meanwhile, to help ensure that the Discharger continues to implement salinity reduction and control measures to protect groundwater quality, this Order **limits the annual cumulative salt load for FDS in the discharge to the LAAs to 2.0 million pounds per year.** ~~sets a performance-based effluent limit for FDS of 800 mg/L (annual average).~~ Furthermore, this Order requires the Discharger to continue to comply with the Salt Control Program (i.e., participate in the P&O Study).

D. Effluent Limitations Salinity Limit

1. **The cumulative mass load of salt from the discharge shall not exceed 2.0 million pounds per year (calculated as the cumulative salt load from effluent FDS applied to the LAAs on a monthly basis as described in sections III.B.12 and III.B.14 of the MRP).**

Table 1 – Salinity Performance – Based Effluent Limitation

Constituent	Limit	Basis for Compliance Determination
FDS	800 mg/L	Annual Average (see 1 below)

1 ~~The FDS effluent limitation is a performance-based effluent limitation (as discussed in Findings 19 and 64) since the Discharger has selected to participate in the P&O Study. The purpose of this limit is to ensure the Discharger is implementing appropriate performance-based measures at the Facility.~~

And the Information Sheet (IS.vi)

DISCHARGE PROHIBITIONS, LIMITATIONS, DISCHARGE SPECIFICATIONS, AND PROVISIONS

The proposed Order prohibits the discharge of waste to surface water... The Order also **establishes a performance-based salt limit requiring the Facility’s cumulative discharge salt load (in FDS) to not exceed 2.0 million pounds per year. This is consistent with current loading rates to the LAAs and allows more flexibility for seasonal changes and water conservation efforts.** ~~specifies a performance-based annual average effluent limitation for FDS of 800 mg/L. The performance-based effluent limitation is based on the average annual FDS concentrations for 2020 and 2021 and estimated contribution from the rendering plant plus 25 percent to allow some flexibility for water conservation efforts.~~

In addition, to ensure proper record keeping and tracking to comply with the Salinity Limit the following changes have been made to the MRP Section III.B.14:

- 14 **Calculate the cumulative mass loading of FDS from the discharge sent to the LAA for the reporting year (determined using the equation in III.B.11 for each discreet application area).** ~~Calculation of the annual average FDS for Monitoring Location EFF-004. Include a comparison of the annual average concentration for the entire LAA to the Performance-Based Effluent Salinity Limit specified in the WDRs of 2.0 million pounds per year.~~

CVM COMMENT #3: CVM requests that the due dates for submitting of a Monitoring Well Installation Work Plan and subsequent installation and submittal of a Monitoring Well Installation Report required by Provisions I.5 and I.6 in the TWDRs be extended by three months.

RESPONSE: The TWDRs have been modified to reflect this change.

CVM COMMENT #4: CVM requests that since odor has not been an issue in the effluent storage ponds the deadline to submit a Pond Evaluation Report (Provision I.7) be extended from 6 months to 12 months to allow for more data to be collected to assess seasonal impacts critical to the evaluation.

RESPONSE: TWDRs have been modified to reflect this change.

CVM COMMENT #5: CVM requests the following administrative edits to clarify details and repair typographical errors.

1. Recommend the Table of Contents page ii and Finding 3.f include Standard Provisions and Reporting Requirements (SPRRs) as an Attachment.

RESPONSE: Unfortunately, due to formatting issues and requirements for posting documents on our website the SPRRs (like the MRP) cannot be incorporated directly as part of the WDRs. As a result, the SPRRs are not included as an Attachment in the WDRs but are referenced as a separate document. However, to clarify any issues we have incorporated a link to the SPRRs within the TWDRs to direct readers to these requirements.

2. The last sentence in Provision I.6 regarding the Monitoring Well Installation Report appears to be cut off.

RESPONSE: The TWDRs have been modified to correct this error. The last sentence in Provision I.6 has been modified as follows:

“... The report shall describe the installation and development of all new monitoring wells and explain any deviation from the approved **Work Plan**.”

3. Recommend Provision I.12 include the date of the SPRRs.

RESPONSE: The TWDRs have been modified to reflect this change.

4. Recommend listing BOD and BOD₅ in the Glossary or consistently using BOD or BOD₅ rather than interchangeably throughout the document.

RESPONSE: The Glossary was modified to differentiate between BOD₅ (5-day biochemical oxygen demand at 20° C), which is applied in tables and throughout the TWDRs when referring to the specific analysis and/or sampling results vs. BOD (biochemical oxygen demand) used as a general term when discussing soil reactions and loading requirements.

CVM COMMENT #6: MRP, Section C. Pond Monitoring states that “Freeboard shall be measured to the nearest 0.1 foot vertically from the surface of the water to the lowest elevation of the berm.” CVM requests that due to the challenges of installing a staff gage with a synthetic liner, the freeboard be measured to the nearest 0.5 or 1.0 foot.

RESPONSE: The MRP has been modified to require freeboard measurement to the nearest 0.5 foot.

CVM COMMENT #7: The MRP, Section C. Pond Monitoring, Table 4 footnote 5 requires inspection of the leachate collection and removal system (LCRS) for the presence of leachate.

CVM requests that the footnote clarify that LCRS monitoring only applies to PND-001 and PND-002 since the concrete-lined settling ponds are not equipped with a LCRS system.

RESPONSE: The MRP has been modified to reflect this change.

CVM COMMENT #8: CVM requests that source water monitoring (MRP, Section D. Source Water Monitoring) be presented in tabular format for each well rather than as a flow-weighted average. CVM contends that a flow-weighted average for the source water is no longer necessary since the TWDRs no longer contain a Basin Plan effluent limit of 500 $\mu\text{mhos/cm}$ over source water. In addition, CVM contends that actual sampling data and flow data from supplemental irrigation sources applied to each field can be applied separately to calculate the actual loading applied rather than using the flow-weighted average over the whole acreage.

RESPONSE: The MRP has been modified to reflect this change.

CVM COMMENT #9: MRP, Section G. Groundwater Well Monitoring requires the Discharger to monitor the current monitoring well network and any subsequent or additional monitoring wells in or around the Facility and LAAs, including the existing shallow monitoring wells should groundwater levels start to rise. In addition, this section requires the Discharger to maintain its groundwater monitoring well network and submit a work plan to replace well(s) in the event the well(s) go dry or become damaged. CVM contends that due to climatic conditions, some dry wells may become briefly viable before eventually going dry again and that CVM should not be required to replace historically dry monitoring wells that have already been addressed and requests clarification on this issue.

RESPONSE: Central Valley Water Board staff agrees that shallow groundwater monitoring wells that have already been replaced by deeper wells do not need to be replaced in the future if they should go dry again if the existing deeper groundwater monitoring wells provide sufficient coverage for the area. The Groundwater Monitoring Section G in the MRP has been modified as follows:

In addition, the Discharger shall maintain its groundwater monitoring well network. If a groundwater monitoring well(s) is dry for four consecutive sampling events or is damaged, the Discharger shall submit a work plan and proposed time schedule to replace ~~the~~ **any groundwater monitoring well(s), as needed, to ensure adequate coverage of the Facility and LAA...** Once installed all new monitoring wells shall be added to the existing groundwater monitoring well network.

CVM COMMENT #10: The MRP states “Laboratory analysis reports shall be included in the monitoring reports. In addition, all laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3”. CVM requests that the laboratory analysis reports **not** required to be submitted with the monitoring reports. However, all laboratory reports will be retained at the Facility for a minimum of three years and available to the Central Valley Water Board upon request. CVM contends that this will save on paper and reduce the effort to submit large files electronically and still comply with regulatory requirements.

RESPONSE: CVM has historically had issues with switching or providing inaccurate data in its monitoring reports (particularly switching data for total and fixed dissolved solids), forcing Central Valley Water Board staff to rely on the laboratory analytical reports to evaluate the discharge. In addition, the Central Valley Water Board has gone to a paperless office system and all monitoring reports are required to be submitted electronically. Little effort would be required to submit the laboratory analysis reports as a separate email if the file becomes too large or documents can be transferred to a CD or flash drive and mailed to the office. In recent years, the Central Valley Water Board's WDRs Program has consistently required dischargers to submit laboratory analysis reports as part of their MRP monitoring reports. Therefore, no change has been made.

CVM COMMENT #11: MRP requires CVM to submit quarterly monitoring reports by the 1st day of the second month following the quarter (i.e., January-March quarterly report is due 1st May). CVM requests that submittal of the quarterly monitoring reports be changed to the 1st day of the third month following the quarter (i.e., January-March quarterly report due 1st June). CVM contends that loading calculations and other items required in the quarterly monitoring reports cannot be complete until all laboratory analyses results are complete, and the change will allow more time to address potential laboratory errors, questionable results, and reanalysis to ensure adequate time to compile, analyze, and prepare the reports.

RESPONSE: The requirement to submit quarterly monitoring reports by the 1st day of the second month is a consistent requirement in MRPs issued/adopted by the Central Valley Water Board. While the MRP specifies monthly, quarterly, and annual sampling, it does not specify the exact date the samples need to be collected for analysis. To ensure adequate time to get laboratory results, CVM can arrange to collect the necessary samples at the beginning of the specified period in order to allow sufficient time to address questionable results. If CVM determines corrections/revisions need to be made (e.g., lab reporting error) to a previously submitted monitoring report, CVM can just email a revised monitoring report noting the corrections. In addition, CVM can start compiling the monitoring reports at the beginning of the reporting period as data is collected rather than at the end of the monitoring period. Therefore, no change was made.

CVM COMMENTS #12 and #13: MRP Sections III.A.8 and III.B.10 regarding annual chemical usage at the Facility. CVM requests that a discussion of the annual chemical usage at the Facility be included in just the Fourth Quarter Annual Report rather than quarterly reports. In addition, CVM requests that the discussion on chemical usage be limited to those chemicals that may impact the wastewater quality and that other chemicals used in the processing areas or cleaning chemicals that may discharge to the on-site septic system and do not come in contact with the wastewater should be excluded.

RESPONSE: The MRP has been modified to reflect these changes.

CVM COMMENT #14: MRP, Section III.B.8. Fourth Quarter Monitoring Reports requires "A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program." CVM requests that calibration logs for hand-held monitoring devices not be submitted as part of the quarterly monitoring reports.

Instead, the calibration logs will be retained for a minimum of three years and be available for review upon request. CVM contends that this still meets regulatory requirements and is consistent with other MRPs.

RESPONSE: MRP Section III.B.8 refers to the submittal of calibration records for all flow meters used to demonstrate compliance with the flow limits in the WDRs. This is a standard requirement and should be submitted as part of the Fourth Quarter Annual Report. With regard to calibration logs for hand-held monitoring instruments (MRP sections III.A.10 and III.B.9) current monitoring reports include monthly calibration logs for hand-held devices. However, retaining calibration logs onsite for a minimum of three years is sufficient to comply with the regulations if the logs are provided upon request by Central Valley Water Board staff. Therefore, MRP sections III.A.10 and III.B.9 requiring the submittal of calibration logs for hand-held monitoring instruments in Quarterly and Annual Monitoring Reports have been removed.

CVM COMMENT #15: MRP Section III.B.15 Fourth Quarter Annual Report requires reporting of annual production of total solids in dry tons or cubic yards. CVM requests that the annual production totals be reported as either total dry solids or mass of total solids removed at the “as-received” moisture content.

RESPONSE: The following change was made to MRP section III.B.15

15. Annual production of total solids in ~~dry~~ tons or cubic yards.

CVM COMMENT #16: CVM requests that the acronyms LCRS (Leachate Collection and Removal System) and ALR (Action Leakage Rate) be included in the respective Glossaries of the TWDRs and MRP and correct misspellings of LCRS throughout the documents.

RESPONSE: The TWDRs and MRP have been modified to reflect this change.

KIPPS COMMENTS

KIPPS COMMENT #1: Identify the number of days per week the Facility is in operation, including the new rendering facility, and explain if the Facility’s processing capacity and operation schedule differ from that identified in the Mitigated Negative Declaration prepared for the Facility.

RESPONSE: The Facility currently operates about 6 days per week, though some additional cleaning still takes place on the 7th day. In addition, the new rendering facility (once in full production) will operate 7 days per week. This is consistent with the details provided for the Mitigated Negative Declaration, which states the Facility will operate seven days a week, 24 hours per day. Staff has revised Finding 14 to provide additional details consistent with the 2021 RWD and Mitigated Negative Declaration:

14 The Facility ~~currently can operate up to seven days per week and process between 4,300 and 1,600~~ **and 2,000** cattle per day. Wastewater is generated from various processes within the Facility including live cattle washing, kill floor,

tripe process, carcass washes, condensers, boning room, truck washes, plant sanitation, stormwater and other processing activities....

KIPPS COMMENT #2: The TWDRs require the Discharger to monitor residual solids accumulation in the effluent storage ponds and require removal of residual solids as necessary to maintain adequate capacity. Ms. Kipps requests that the TWDRs disclose the volume corresponding to “adequate storage capacity” for all ponds and describe current practices for removing and disposing of sludge and scum and confirm if sludge and scum removed from the ponds is stored on unlined surfaces.

RESPONSE: The Settling Ponds are drained and cleaned out regularly. Sludge and scum removed from the settling and effluent storage ponds are collected and placed in the manure storage area on the southeast corner of the property. The manure storage area consists of a compacted clay soil that is graded to drain all excess water and stormwater runoff back to the wastewater collection system. Discharge Specification E.8 requires the Discharger to monitor solids accumulation in the effluent storage ponds to ensure “adequate storage capacity”. However, to provide additional clarification, Discharge Specification E.8 has been modified as follows:

E.8 The Discharger shall monitor residual solids accumulation in the effluent storage ponds annually and shall periodically remove residual solids as necessary to maintain adequate storage capacity. **Specifically, if the estimated volume of sludge in the pond(s) threatens to impact the pond(s) storage capacity the Discharger shall clean out the sludge in the pond(s) within 12 months after the date of the estimate.**

KIPPS COMMENT #3: In 2021, the annual discharge flow was 172.1 MG (Finding 15). An “existing flow” of 0.856 mgd implies the Facility was operated only 201 days in 2021. Doesn't the value of 0.856 mgd come from the 2021 RWD and is the proposed flow from all the Facility's operations except the rendering facility? If the values presented in Table 5 are supposed to reflect 2021 flow, wouldn't the use of 0.856 mgd yield an inaccurate projection of effluent quality?

Also, since daily influent and effluent flows may be dissimilar, please characterize daily influent flow since January 2022 in terms of monthly maximum, and monthly daily averages with the latter determined based on working days (i.e., divide the total volume by the number of days the Facility was operated that month). Confirm that these flow rates are below the 2.5 mgd daily maximum and 1.0 mgd annual average daily discharge flows.

RESPONSE: The TWDRs do not limit the number of days the Facility can operate. The December 2021 Report of Waste Discharge (RWD) proposed flows of up to 365 million gallons per year or 1 million gallons per day based on the Report of Waste Discharge's analysis of limiting factors, existing and future operations, loading rates, and available storage capacity. The December 2021 RWD projected an annual flow based on existing flows from 2019 (269 million gallons) with the addition of the proposed rendering facility (47 million gallons) at approximately 316 million gallons per year. The request flow limit of 365 million gallons per year was in case facility flows increased beyond the flows

experienced in 2019. The purpose of the 2021 RWD was to demonstrate that the Discharger can adequately store and dispose of wastewater up to 365 million gallons per year consistent with agronomic rates. Additional flows in excess of 316 million gallons per year will allow for flexibility to handle increased cleaning to comply with Department of Agriculture Health and Safety requirements and the potential to expand operations up to 7 days per week if needed. Existing influent flows for 2022 average about 0.66 mgd with peak daily flows as high as 0.85 mgd without the contribution from the rendering facility (except for December 2022).

Staff has revised Table 5, Footnote 2 as shown below:

2. Projected flow-weighted average effluent concentrations after treatment **were taken from the 2021 RWD** based on **the percentage of** existing facility flows **from 2019** (~~2021~~) of 0.856 mgd and 0.150 mgd from the new rendering facility.

KIPPS COMMENT #4: Ms. Kipps requests that staff consider revising the Flow Limitations to read:

- C. Flow Limitations. Influent discharged to the settling ponds (monitored at INF-001) shall not exceed:
 1. A maximum of 2.5 mgd per processing day.
 2. A monthly average of 1.0 million gallons per processing day, calculated by dividing the total influent flow by the number of processing days per reporting month.
 3. A total annual discharge of 280 million gallons.

RESPONSE: Wastewater generated at the Facility can vary widely from month to month or season by season, depending on operations and demand, making it difficult to set a monthly average influent flow rate. The 2015 and 2016 RWD proposed an effluent flow limit of 2.5 mgd (discharge from pond to the LAA) based on the maximum daily flow from the effluent storage ponds multiplied by 25%. The proposed flow limit was based on the available effluent storage capacity and demonstration that the land application could meet agronomic rates. The Facility has a robust treatment system, including a large effluent storage capacity, and has significantly increased its land application areas to handle variations in flows over the year. The water balance and technical demonstration provided by the Discharger's licensed engineer along with the antidegradation analysis submitted as part of the 2021 RWD demonstrate that the Facility has the capacity to handle the proposed annual average effluent flow of 1.0 million gallons per day or 365 million gallons a year.

In addition, the TWDRs include various requirements to ensure that the Discharger treats, stores, and discharges wastewater as proposed in the 2021 RWD, including requiring a minimum of two feet of freeboard in the storage ponds, wastewater application at reasonable agronomic rates, and prohibitions on odor and nuisance conditions and wastewater applications when soils are saturated are sufficient to protect water quality. In addition, the TWDRs include a new requirement for the Facility that the effluent treatment and storage ponds need to have at least a dissolved oxygen (DO) content of 1.0 mg/L to

control odors and prohibit objectional odors beyond the limits of the Facility (including the storage ponds) or LAAs. These new requirements will help ensure that the Discharger properly operates and maintains its wastewater treatment and disposal areas. Therefore, no change was made.

Staff has made some changes to Finding 9 in the TWDRs to provide clarification:

- 9 On 29 October 2015, Central Valley Meat submitted a Report of Waste Discharge (RWD) to increase flows, specifically requesting a maximum daily effluent flow of 2.5 mgd, ~~with an annual average daily flow of 1.0 mgd and a total annual flow of 129 million gallons.~~ The 2015 RWD also proposed to expand the LAAs to a total of 1,420 acres. On 26 April 2016, a revised RWD was submitted with additional information regarding the application of process wastewater to the LAAs. **The proposed limit was based on a technical evaluation of the available effluent storage and disposal capacity.** According to the 2016 RWD, the overall processing capacity at the Facility was estimated at 1,300 to 1,600 cows per day. By letter dated 27 January 2017, the Central Valley Water Board determined that the proposed expansion of the LAAs was categorically exempt (existing facilities exemption (**Cal. Code Regs., tit. 14, sec. 15301**)) from the provisions of the **California Environmental Quality Act (CEQA)**, since the land has been in agricultural use and the use of food processing wastewater will be covered by WDRs.

KIPPS COMMENT #5: Provide information regarding the drawdown of the storage ponds prior to the onset of the rainy season and confirm that the storage ponds provide sufficient capacity to retain effluent when discharge to the LAAs is not warranted (no crop demand) or not allowed (during precipitation events and when soils are saturated).

RESPONSE: Typically, the effluent storage ponds store excess wastewater until it can be applied to the LAAs for irrigation of crops. The wastewater flows through the ponds in series and is pumped to the irrigation lines at the far end of the last pond (North Pond 2). The water balance in the 2021 RWD shows a steady accumulation of storage in the ponds over the winter months with peak storage occurring around early March at 21 million gallons (this is less than the 24 million gallons storage capacity with 2 feet of freeboard). Over the summer, the storage in the ponds is steadily drawn down until there is no net storage in the ponds by October 1st. The ponds have a minimum storage capacity of about 15 days at peak flows, though actual flows are generally smaller during winter months and CVM has not had an issue with storage capacity while maintaining the two feet of freeboard and still avoiding discharges to the LAAs during precipitation events. In addition, the storage ponds have an additional 3.8 million gallons of excess storage to be used in the event of an emergency, such as to handle a major storm event without overflowing.

KIPPS COMMENT #6: If available, please characterize BOD loading to the storage ponds (lbs/day/acre) prior to and after initiation of the rendering facility discharge and disclose whether the Discharger case file has complaints of odors from the Facility's treatment system and/or effluent discharges to the LAAs.

RESPONSE: Influent sampling is done before the wastewater enters the settling ponds, so we do not have actual data on BOD loading to the effluent storage ponds. Influent BOD concentrations prior to the settling ponds ranged from about 630 to 1,600 mg/L in 2022. Our files do not contain any odor complaints for the Facility in recent years. In addition, staff contacted the San Joaquin Valley Air Pollution Control District, which confirmed that they have not received any odor complaints related to the Facility or the new rendering facility. Staff also conducted an inspection of the Facility in March 2023, after the rendering facility was operational, and did not observe any significant odor issues related to the rendering facility or in or around the wastewater sumps, effluent storage ponds, or nearby LAAs.

KIPPS COMMENT #7: Consider revising the BOD loading limit to include an instantaneous BOD loading limit of 300 lbs/acre/day (i.e., applicable on the day of application). Without this limit, effluent discharges to the LAAs may create odor or nuisance conditions and adversely impact residents of properties adjacent to the LAAs, who likely never received notice from Kings County of the Discharger's proposed construction and operation of the rendering facility.

RESPONSE: As discussed above, there have been no odor incidents reported for the Facility or the LAAs. Further, Central Valley Water Board staff reached out to local environmental justice groups about our intent to adopt revised waste discharge requirements for the Facility and did not receive any comments. Meeting an instantaneous BOD loading limit is problematic since there is a delay in getting BOD results in order to determine hydraulic loading to comply with an instantaneous loading limit. This can hinder farming operations, leading to poorly managed crops. Given site soil conditions, the potential for odor or nuisance conditions to develop in a properly managed land application area is negligible. In addition, the TWDRs contain prohibitions and specifications against odor and nuisance conditions around the Facility and LAAs and require all irrigation water (including applied wastewater) to infiltrate within 48 hours to minimize the potential for odor issues to develop within the LAAs. Therefore, no change was made,

KIPPS COMMENT #8: Since the LAAs are owned by various entities, it is doubtful that the Discharger's self-monitoring reports (SMRs) will accurately report BOD loading without a concerted effort on the part of the Discharger to properly monitor effluent discharges. Furthermore, due to limited resources at the Central Valley Water Board, it is doubtful that staff will review and provide guidance on the SMRs in a timely manner. Therefore, please consider including a provision requiring the Discharger to submit, by 400 days following order adoption, a technical report prepared and certified by a California registered civil engineer that summarizes an evaluation of the Discharger's SMRs. The report shall certify that all calculated values are determined in accordance with MRP instructions. If values are incorrectly calculated the report shall include corrected values and a description of corrective measures to be implemented to ensure SMRs are accurate and complete.

RESPONSE: While we agree that staff resources are limited, staff do not believe that this requirement is necessary based on its evaluation of the Facility's discharge characteristics. Further, this requirement would place an undue burden on the Discharger that has not been required of other, similar dischargers. In addition, as stated in Finding 26, CVM has a contract farmer, Chip Mello (who is also an owner of several parcels with the LAAs), to manage day-to-day farming operations on all parcels receiving the Facility's wastewater.

Mr. Mello also manages the distribution and application of wastewater to various fields. Therefore, the concern that the Discharger will need to provide training to various property owners to ensure accurate calculations is mitigated by its use of one operator for all LAAs. Further, current SMRs show that Mr. Mello provides sufficient information to use in calculating BOD and nitrogen loading. Therefore, no change was made.

KIPPS COMMENT #9: The addition of the rendering facility provides an essential function to the Valley's agribusiness and elevates the significance of the Facility similar to that of a municipal sewage treatment plant in terms of having to consistently provide an essential service. As a result, the TWDRs should not rely on just soil treatment for BOD removal, nor should it rely on field personnel retained by the property owners to ensure essential data is collected to calculate BOD loading. It is not unprecedented for Board-adopted WDRs regulating food processing discharges (e.g., Hilmar Cheese and Foster Farms Livingston) to contain effluent limitations for conventional pollutants comparable to secondary treatment.

Consider revising the TWDRs to prescribe BOD effluent limits of 40 mg/L (monthly average) and 80 mg/L (daily maximum) for the discharge from the settling ponds to the storage ponds measured at a new location, INF-002. Alternatively, please consider prescribing a BOD loading limit of 600 lbs/day to the effluent storage ponds, monitored at INF-002, to ensure consistent compliance with the minimum dissolved oxygen (DO) limit of 1.0 mg/L. Given that the Discharger cannot immediately comply with these limits, please consider a reasonable compliance schedule not to exceed five years.

RESPONSE: Staff disagrees with the attempt to characterize the rendering facility as an essential service similar to a municipal wastewater treatment plant. Finding 79, which you referenced refers to the entire Facility providing an essential service (i.e., meat products) for the Central Valley and that the new rendering plant will provide a needed service for the Facility. The rendering plant at the Facility is intended to process small scraps and bones produced as part of the Facility's operations as well as handle material from other local beef processors. The rendering plant will not take whole carcasses; rather, it is intended to take scrap material that would otherwise be sent to a local rendering plant for disposal. Finding 79 in the TWDRs has been modified to clarify this issue:

79 The Facility contributes to the economic prosperity of the region by providing for employment of 1,342 employees (1,205 regular employees, 13 US Department of Agriculture [USDA] inspectors, and 125 new employees with Facility expansion) and by providing a tax base for local and county governments. **The new rendering facility also allows the Discharger to provide sanitary disposal of byproducts from animal processing.** ~~The Facility will also provide essential services to the Central Valley, sanitary disposal of animal carcasses and byproducts of animal processing.~~ Rendering is the only approved method currently available in California ~~for confined animal facilities to dispose of animal mortalities~~ **byproducts**. Accordingly, to the extent that any degradation occurs as the result of the Facility's operation, such degradation is consistent with the maximum interest of the people of the State of California. In addition, the reuse of process wastewater for irrigation of crops, **rather than** ~~in place of~~ higher quality groundwater, is of further benefit to the people of the State.

As mentioned previously, odors have not been an issue at the site. In addition, the effluent is stored in lined ponds before being applied at agronomic rates consistent with standard practices for land application of wastewater (i.e., cycle average BOD loading rate of less than 100 lbs/acre/day). The TWDRs specify a DO limit of 1.0 mg/L to control odors and require the Discharger to prepare a pond evaluation report to evaluate the need for additional treatment or aeration to control odors in the storage ponds. Therefore, the need to meet a specific BOD limit prior to discharging to the effluent storage ponds is unnecessary at this time.

In addition, a BOD limit of 40 mg/L (monthly average) and 80 mg/L (daily maximum) is a technology-based treatment standard intended to reduce organic matter in domestic wastewater systems that provide at least secondary level of treatment. It is unclear to Central Valley Water Board staff, based on a review of the information available for the Facility (historic and proposed), why these BOD limitations need to be included in the TWDRs. As mentioned previously, the Discharger has installed double-lined effluent storage ponds with a leachate collection system and expanded the land application areas since 2008, resulting in improved groundwater quality beneath the site. Both the facilities mentioned in your comments (i.e., Hilmar Cheese and Foster Farms Livingston) are in areas with shallow groundwater and use either unlined or clay-lined storage ponds, requiring a higher level of treatment necessary to protect groundwater. These conditions are not applicable to this site, as the Discharger has properly lined the effluent storage ponds and groundwater in the area is over 100 feet deep. Requiring this level of treatment when site conditions do not warrant the need would place an undue hardship on the Discharger. Therefore, no change was made.

KIPPS COMMENT #10: Given the nature of the wastewater, consider including the following setbacks, as taken from State Water Resources Control Board's Winery General Order.

- i. Waste shall not be discharged within 50 feet of any water supply well.
- ii. Waste shall not be discharged within 50 feet of surface waters or surface water drainage courses.
- iii. Wastes shall not be discharged within 25 feet of the property line, except for land application areas where a 5-foot setback from the property line shall apply provided the irrigation system is managed to prevent discharge offsite.

RESPONSE: The TWDRs have been modified to include the following setback distances, in section G (Land Application Area Specifications).

3. Wastewater from the Facility shall not be applied within:

- a. **50 feet of a water supply well;**
- b. **50 feet of a surface water or surface water drainage course; and**
- c. **25 feet of a property line or public right-of-way unless the irrigation system is managed to prevent runoff or overspray, in which case a minimum setback of 5 feet shall be maintained.**

KIPPS COMMENT #11: The current WDRs include Reuse Area Specification D.2., which states, “No physical connection shall exist between wastewater piping and any domestic water supply or domestic well, or between wastewater piping and any irrigation well that does not have an air gap or reduced pressure principle device”. Revise the TWDRs to carry over the above specification as a new Land Application Area Specification

RESPONSE: The TWDRs have been modified to reflect this change (Land Application Area Specification G.14)

KIPPS COMMENT #12: Confirm that the Discharger is not currently regulated by Order R5-2017-0058 (Confined Bovine Feeding Operations General Order) and explain, if warranted, why staff has determined this general order is not applicable to the Facility’s cattle corrals and associated pond and waste stockpiles. If staff has determined that the Facility’s corrals are subject to regulation under the general order then the TWDRs should be revised to either (1) include applicable requirements in the general order to the Facility’s cattle corral operation, or, preferably (2) include a provision requiring the Discharger to submit a Notice of Intent for coverage under the general order within a reasonable amount of time (i.e., 90 days).

RESPONSE: The Facility is not regulated under the Bovine General Order. The main cattle pens and alleyways are concrete-lined and graded to drain stormwater runoff into the wastewater collection system. The temporary holding pens over the former wastewater ponds consist of compacted soil with 20% fines and are graded to divert all runoff into the wastewater collection system. All the cattle pens, including the overflow area above the former wastewater ponds, are scraped periodically and the manure and solids are placed in the manure storage area before being sent to a composting facility for disposal. The manure storage area consists of compacted clay soil and is graded to drain to the wastewater collection system. There is one low area just west of the cattle pens which sometimes collects stormwater runoff. According to CVM, any water that collects in this low area is pumped out and piped to the wastewater collection system. Since the cattle areas are paved with concrete and/or graded so that all stormwater runoff drains into the wastewater collection system (which is regulated by the Facility’s individual WDRs), separate coverage under the Bovine General Order for the Facility is not required at this time. However, staff added the following Discharge Specifications E.11 and E.12 to the TWDRs to clarify compliance with the conditions in the Bovine General Order:

- 11. All pens, alleyways, and manure storage areas shall be graded to promote drainage into the wastewater collection system.**
- 12. The animal confinement areas and manure and feed storage areas shall be designed and maintained to convey all water that comes into contact with animal waste to the wastewater collection system. In addition, the areas shall be graded to minimize standing water as of 72 hours after the last rainfall to limit infiltration of water into underlying soils.**

In addition, staff has made the following changes to Finding 27 and added a new finding (Finding 28) to the TWDRs:

- 27 Solids (primarily manure) **from the cattle pens and settling ponds** are **stockpiled in the manure storage area and** hauled off-site to the Wood Industries Company Composting Facility in Tulare County, which is regulated under the Composting General Order as a Tier II composting operation (NOA2015-01210DWQ-R5F010). The manure **storage area consists of** ~~and solids removed from the concrete settling ponds are stored on~~ a graded compacted pad. Runoff from the pad is collected in drains and returned to the wastewater collection system...
- 28 **The main cattle pens, alleyways, and watering troughs are paved with concrete and graded to drain all waste and stormwater runoff to the wastewater collection sumps. In addition, the temporary holding pens above the former wastewater ponds consists of compacted clay soil with at least 20% fines and is graded to direct all runoff to the wastewater collection system. Since all runoff from the cattle holding areas is directed into the wastewater collection system regulated by these WDRs coverage under General Order R5-2017-0058 for Confined Bovine Feeding Operations is not required at this time.**

KIPPS COMMENT #13: The TWDRs indicate that the former wastewater ponds were decommissioned and required removal of 1,450 cubic yards of soil. Given the area, this would suggest only about three inches of soil was removed and no evidence was provided to indicate that the remaining soil is comparable to background and poses little or no risk to groundwater. Without this information, the operation of cattle corrals poses the risk of further degrading the deeper soils and contributing to existing groundwater degradation. Provide an explanation on why the TWDRs should not prohibit the use of the former pond area for cattle corrals or other Facility operations that generate waste discharges to land.

RESPONSE: The former ponds were scraped to remove visibly impacted material (i.e., about 3 inches) before being backfilled with clean borrow material. While confirmation samples were not collected from the bottoms of the ponds, the area was inspected by a registered civil engineer to confirm all organic material had been removed. The corrals over the former wastewater storage ponds provide only temporary storage for cattle. Nevertheless, the area consists of compacted soil with at least 20% fines and is graded to divert all stormwater runoff to the wastewater collection system. Therefore, the Discharger has provided sufficient mitigation measures to reduce the potential threat of any residual impacted soils further degrading groundwater. Furthermore, groundwater data for recent years shows improving groundwater conditions in the area since the ponds were backfilled in 2014.

KIPPS COMMENT #14: Finding 29 indicates effluent is discharged to border checks and/or furrows. Finding 30 indicates the Discharger's 2021 RWD described how compliance with the BOD loading limit can be achieved by applying 1.0 to 5.0 inches of wastewater every 1 to 40 days. Please explain how effluent application of 1 inch depth can be achieved via flood irrigation since typical water depth for flood irrigation is 5.0 inches or more?

RESPONSE: Finding 30 (now Finding 31) has been modified to clarify the issue:

- 31 The December 2021 Revised RWD includes a cycle average BOD loading rate matrix, ~~indicating that a cycle average BOD loading rate below 100 lbs/acre/day can be achieved by applying 1.0 to 5.0 inches of wastewater every 1 to 40 days to each LAA field.~~ **Based on the matrix** At a maximum wastewater depth of 5 inches, the cycle average BOD loading rate can be maintained below 100 lbs/acre/day with a minimum 5-day irrigation schedule. **In general, the Discharger provides between 10 and 25 days between irrigation cycles.**

KIPPS COMMENT #15: Finding 14 references a process flow schematic (Attachment D), which does not show the Solids Collection area having any wastewater flows (leachate or stormwater runoff). Please disclose how the Solids Collection Area is designed and operated to collect and properly dispose of leachate and stormwater runoff.

RESPONSE: As discussed previously the manure storage area is compacted and graded to drain all excess water and stormwater runoff to the wastewater collection system. Attachment D has been modified to include this information.

KIPPS COMMENT #16: Ms. Kipps also noted that the evaluation of the effluent quality discussed in Finding 18 did not adequately address biological oxidation and reduction reactions likely occurring within the effluent storage ponds.

RESPONSE: Finding 18 has been modified to clarify this issue:

- 18 The data shows a marked increase in EC and Bicarbonate between influent and effluent samples, **likely in some part** due to evapoconcentration within the lined effluent storage ponds. However, the data also shows a marked decrease in TDS between influent and effluent samples **along with increasing bicarbonate concentrations**. The reason for this is unclear, **however it is likely partly due to biological oxidation and reduction reactions occurring within the effluent storage ponds** ~~One possible explanation could be internal reactions within the storage ponds resulting in reduced BOD and TSS concentrations.~~ According to the Discharger, no chemical additives or aeration are added to the ponds.