



May 15, 2023

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Submitted via email to:  
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**SUBJECT: Central Valley Meat Company, 2023 Tentative WDR/MRP Comments**

Dear Ms. Carpenter:

Thank you for providing us with the opportunity to comment on the Tentative Draft of the Waste Discharge Requirements (**WDRs**) and Monitoring and Reporting Program (**MRP**) for the Central Valley Meat Company facility (**CVM**) in Hanford, California. Provost & Pritchard Consulting Group (**Provost & Pritchard**) assisted us with these comments. We have reviewed the WDRs and MRP and are requesting that the following technical and administrative comments be considered:

## **WASTE DISCHARGE REQUIREMENTS (WDRs) – CVM**

### **Comment 1. WDR, Finding No. 81. Page 24.**

WDR Finding: The Central Valley Water Board, as a “responsible agency” under CEQA, was consulted in the lead agency’s development of the Mitigated Negative Declaration. The discharges and other activities authorized under this Order also fall within the scope of the proposed project (as contemplated in the Mitigated Negative Declaration).

Response and Comments: We request that the second sentence of Finding 81 be changed to “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.”

### **Comment 2. WDR Page 29. Item D. Effluent Limitations**

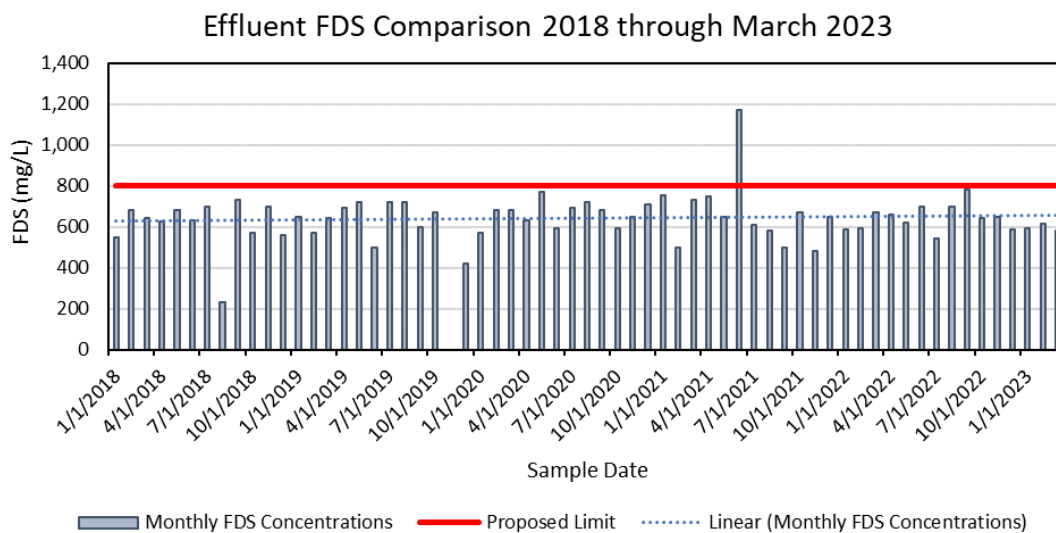
Summary of items in WDR: Item establishes in Table 8 - Salinity Performance-Based Effluent Fixed Dissolved Solids (FDS) Limitation of 800 mg/L to be determined as an annual average.

Response and Comments: It must be noted that the new rendering facility began operations in December 2022. As of this writing in May 2023, the rendering facility is operating at approximately 30% capacity. Therefore, it is currently uncertain what impact rendering at full capacity may have on FDS concentrations of blended processing effluent.

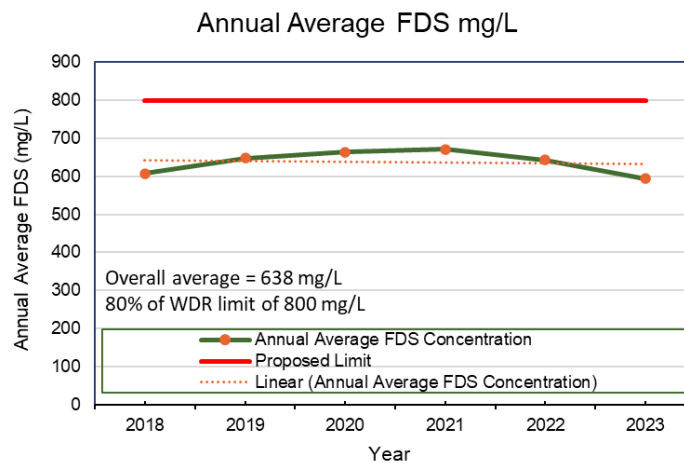
Effluent FDS concentrations from December 2022 through March 2023 ranged from 580 to 613 mg/L, which is generally consistent with effluent FDS concentrations prior to the commencement of rendering. This may not be the case when the rendering facility is fully operational.

Given these factors, it is not appropriate to establish a permanent FDS limit of 800 mg/L without a comprehensive characterization of future effluent quality once the rendering facility is at 100% capacity. **CVM requests that the FDS limit of 800 mg/L be increased to approximately 1,000 mg/L to account for possible increases in effluent FDS concentrations as rendering reaches design capacity.** At a minimum, provisions should be added to the WDR to allow an evaluation of facility FDS concentrations and the ability to modify the FDS limit as conditions change, such as increased rendering and water conservation and reuse efforts.

Monthly FDS data from 2018 through March 2023 were also reviewed, compared to the 800 mg/L limit, and summarized in the figure below. Effluent FDS concentrations during this period have consistently been less than 800 mg/L, although one result was substantially greater than 800 mg/L and many results were close to 800 mg/L. There appears to be a slightly increasing trend in FDS concentrations throughout this period.



A summary of the annual average FDS concentrations from 2018 through March 2023 compared to the limit is provided in the figure below. Annual average concentrations during this period were less than the 800 mg/L limit. The overall annual average of these years is 638 mg/L, which is approximately 80% of the WDR limit of 800 mg/L.



The annual performance-based annual average effluent limitation for FDS of 800 mg/L described in the Tentative WDR was based on “*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.*” The annual average FDS concentration of CVM effluent was 664 mg/L in 2020 and 671 mg/L in 2021. The overall average of 2020 and 2021 is 667 mg/L, and approximately 834 mg/L when increased by 25%. It is unclear how 800 mg/L was established as the limit.

Water conservation and reuse is a top priority for CVM. It is anticipated that in the coming years facility source water usage may be reduced by at least 25%. CVM evaluated the possible impact these water conservation efforts may have. See the list below:

1. The annual flow limit established in the WDR is approximately 365 MG/year.
2. The overall annual average FDS concentration from 2018 to March 2023 is 638 mg/L.
3. This results in approximately 1,942,178 pounds FDS/year.
  - a. Calculation:  $365 \text{ MG} \times 638 \text{ mg/L} \times 8.34$
4. A 25% reduction in effluent volume would be approximately 273.750 MG/year.
  - a. Calculation:  $365 \text{ MG} \times 0.75$
5. If the total pounds of salt generated by processing remains the same as #3 above, that mass of salt dissolved in 273.750 MG of water would result in an FDS concentration of approximately 851 mg/L.
  - a. Calculation:
    - i.  $(1,942,178 \text{ lbs FDS} \times 453,592 \text{ mg} \times 1 \text{ MG} \times 1 \text{ gal}) \div (273.750 \text{ MG} \times 1 \text{ lb} \times 10^6 \text{ gals} \times 3.78 \text{ L})$
6. This would exceed the 800 mg/L limit in the Tentative WDR by approximately 6% despite no increase in the mass of salt generated by processing or applied to the Land Application Area (**LAA**).
7. The allowable FDS concentration increase of 25% appears to be arbitrary and may actively discourage water conservation and reuse efforts planned by CVM.

Concentration-based limits are problematic in general because they are entirely dependent on the amount of freshwater used. Water conservation and reuse efforts at the facility could increase the FDS concentration of the influent and effluent with no net increase or possibly even a net decrease in the pounds of salt applied to the LAA. A concentration-based limit could incentivize increased freshwater usage to meet the Performance-Based Effluent Limitation, which is not for the maximum benefit of the people of California, especially considering ongoing

drought issues and new regulations limiting groundwater usage such as the Sustainable Groundwater Management Act (**SGMA**). Additionally, freshwater usage could decrease wastewater salinity concentrations but increase the total annual mass of salt discharged to land because of additional freshwater salinity added to existing wastewater salinity. Although this is not likely the intent of the regulatory requirements, it could be a consequence.

Considering these factors, it is more technically appropriate to establish a Performance-Based Effluent Limitation on a mass basis rather than concentration. A mass basis better represents the actual magnitude of salt discharge to the LAA and better accounts for variation in facility freshwater usage. Mass loading levels are deemed by the Central Valley Salinity Alternatives for Long Term Sustainability (**CV-SALTS**) Basin Plan Amendments to be an acceptable Performance Based limit, so the Regional Board has the authority to utilize this method to establish FDS limits.

For reference, using the overall annual average effluent FDS concentration of 638 mg/L described above and a total annual flow limit of 365 MG/year, the mass loading of salt would be 1,942,178 pounds/year. Maintaining this mass loading level would achieve the requirements of the Alternative Salinity Permitting Approach to maintain existing salinity discharge levels while allowing flexibility for possible variations in effluent FDS concentrations.

It must also be noted that the actual salinity capacity of the LAA is greater than 1,942,178 pounds of FDS/year, as demonstrated by the salt loading balances in the Revised 2021 Report of Waste Discharge (**RWD**) that show proposed salt loading rates that are less than the generally recommended guidelines. Crop salt removal was estimated to be approximately 3,250,808 pounds/year. The flow limit established in the Revised 2021 RWD was limited by nitrogen loading rates, not salt loading. **Central Valley Meat Company requests that the Performance-Based Effluent Limitation be based on an annual mass loading basis of 2,000,000 pounds of effluent FDS per year.**

Concern has been expressed that determining compliance with a mass-based limit versus a concentration-based limit can be challenging due to delayed reporting, as it requires proper recording and calculation of flows and effluent concentrations. Proper recording and calculation of flows and effluent concentrations is already required by the WDR and MRP, so that should not be a concern.

Moreover, there should be no concern about delayed assessment of compliance because:

- 1) the proposed effluent limit is an annual average already; hence compliance can only be determined annually just like a mass loading limit; and
- 2) the WDR also contains an annual flow limit of 365 MG/year, which is also evaluated on an annual basis.

Several other items are also evaluated on an annual basis (e.g., quantification of nitrogen and FDS crop uptake rates, solids disposal, annual chemical usage, etc.). If needed, progress towards the annual limit can be provided in quarterly reports to evaluate the compliance trend just like tracking progress with the annual flow limit (e.g., show year-to-date cumulative loading as a percentage of the annual limit). Considering these factors, the concerns about challenges with mass-based effluent limits and delays do not appear to have standing.

**Comment 3. WDR, Provision I.5, Page 34.**

WDR Provision: This provision requires CVM to submit a Groundwater Monitoring Well Installation Work Plan by 3 months of permit adoption.

Response and Comments: CVM requests that this deadline be extended to six months from permit adoption. Four new monitoring wells were installed in November and December 2020, as described in the February 2021 Report on Installation of New Monitor Wells at the Central Valley Meat Co. Planned Application Area. Considering the recent expansion of the monitoring well network, more time is needed to complete another Groundwater Monitoring Well Installation Work Plan.

We also request that related provisions such as I.6 be delayed three months, accordingly.

**Comment 4. WDR, Provision I.7, Page 35.**

WDR Provision: This provision requires CVM to submit a Pond Evaluation Report by 6 months of permit adoption.

Response and Comments: Odor has not been an issue from CVM ponds. CVM requests that this deadline be extended to 12 months from permit adoption. This additional time will allow for more seasonal data collection that is critical to complete this evaluation.

**Comment 5. WDR, Minor Administrative Edits – CVM**

- 1. Table of Contents page ii and Findings Page 1, section 3.f.** The Table of Contents on page ii is missing Standard Provisions and Reporting Requirements dated 1 March 1991 (SPRRs) as an Attachment, this could be Attachment F. Additionally, the SPRRs dated 1 March 1991 are missing and currently are not attached to the WDR.
- 2. Provision 1.6. Groundwater Monitoring Well Installation Report. The last sentence is cut off. “The report shall describe the installation and development of all new monitoring wells and explain any deviation from the approved?”**
- 3. Provision 1.12. Land Application Area Specifications. Page 36.** Recommend adding the date of the SPRRs, 1 March 1991 SPRRs.
- 4. Entire Document.** BOD and BOD<sub>5</sub> are used interchangeably throughout the WDR, consider listing both in the Glossary; or consistently using BOD or BOD<sub>5</sub>

## COMMENTS ON MONITORING AND REPORTING PROGRAM (MRP)

### Comment 6. MRP Page 5, Section C. Pond Monitoring

Summary of items in MRP: *The MRP states the following: “Freeboard shall be measured to the nearest 0.1 foot vertically from the surface of the water to the lowest elevation of the berm.”*

Response and Comments: Measurement of freeboard to a tenth of a foot is impractical given most depth markers used on plastic lined ponds. CVM requests that freeboard precision only be required to the nearest 0.5 to 1 foot.

### Comment 7. MRP Page 5-6, Section C. Pond Monitoring, Table 4 footnote 5.

Summary of items in MRP: *This footnote requires inspection of the LCRS system for the presence of leachate.*

Response and Comments: Please clarify that this requirement only applied to PND-001 and PND-002. The concrete-lined settling ponds do not have LCRS systems.

### Comment 8. MRP Page 6, Section D. Source Water Monitoring

Summary of items in MRP: *The MRP states the following: “If source water is from more than one well, the results shall be presented as a flow-weighted average of all wells.”*

Response and Comments: Source water flow monitoring is not required by the MRP, so flow-weighted averages are not possible.

CVM proposes to collect source water quality samples and analyze them for the constituents in Table 5 of the MRP. However, it is proposed that the results from each well be presented in a tabular manner only rather than flow-weighted results. It is unclear what the utility of flow-weighted source water data will provide in the context of the WDR and MRP.

Concern has been expressed that flow-weighted averages of source water wells are needed to account for the relative contribution from each source water well on the LAA loading rates. This is not how LAA loading rates are calculated. Loading rates to the LAA are based on the effluent water quality data, not source water quality. The source water wells are not utilized for direct irrigation of the LAA. Source water quality data contributes to the overall effluent water quality, but all loading rate impacts are accounted for in the effluent water quality. Source water quality data are not used for LAA loading rate calculations.

Prior to the CV-SALTS Basin Plan Amendments, source water flow-weighted averages may have had some utility to compare against the common source water + 500  $\mu\text{mhos/cm}$  electrical conductivity (EC) limit, but that provision no longer applies and has been replaced by the FDS Performance Based Effluent Limitation.

It is important to account for LAA loading rates from supplemental irrigation water (as required by MRP Table 7), but that is a different water source than facility source water. Flow weighted averages are not needed to calculate supplemental irrigation water loading rates either. A simpler and preferable approach is as follows: collect flow and water quality data from each supplemental irrigation source, calculate loading rates to each field from each supplemental

irrigation source independently, then sum the pounds/acre of constituents of interest from all supplemental irrigation sources. This allows for a more direct calculation of loading rates from each water source and avoids cumbersome averaging.

The additional burden of those costs does not bear a reasonable relationship to the need for the information and any related benefits per California Water Code Section 13267 Section (b)(1). Note this requirement should also be removed from MRP section B.2.

### **Comment 9. MRP Page 8 and 9. Section G – Groundwater Well Monitoring Network.**

Summary of items in MRP: The Discharger shall monitor the current monitoring well network (monitoring wells MW-5B, MW-12, MW-13, MW-14, and MW-15) and any subsequent or additional monitoring wells, in or around the Facility and LAA's (including shallow monitoring wells MW-2, MW-4A, MW-5A, MW-6, MW-7, MW-8, MW-9, MW-10, and MW-11 should groundwater levels start to rise)....

Note 2: 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 well(s). If a monitoring report reports a fourth consecutive dry sampling event for a well or if a well is damaged, the work plan shall be submitted within 90 days of submittal of the quarterly monitoring report. The well(s) shall be replaced following written Executive Officer approval of the work plan and time schedule. Once installed, all new monitoring wells shall be added to the existing groundwater monitoring well network.

Response and Comments: Some monitoring wells have historically been dry. The groundwater monitoring network was adapted with the installation of four new monitoring wells (MW#s 12, 13, 14, and 15) in November and December 2020, as described in the February 2021 Report on Installation of New Monitoring Wells at the Central Valley Meat Company Planned Application Area.

Due to varying climatic conditions, some historically dry monitoring wells could temporarily become active and eventually go dry again. Since the groundwater monitoring well network was already adapted to account for the dry wells, CVM should not be required to replace historically dry monitoring wells that may only temporarily become active again. The Groundwater Monitoring Well Installation Work Plan described in WDR Provision I.5 should be the main tool to evaluate and describe the adequacy of the groundwater monitoring well network, not intermittently active wells that have already been addressed.

CVM requests clarification of the items in MRP Page 8 and 9, Section G based on these comments.

### **Comment 10. MRP Page10, Section III. Reporting Requirements.**

Summary of items in MRP: *The MRP states the following: "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. of the SPRRs. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory."*

Response and Comments: To be consistent with many other discharger's MRPs in Region 5, it is proposed that laboratory analysis reports are not included in the monitoring reports. All laboratory reports will be retained for a minimum of three years and available for CVRWQCB review, upon request. This will reduce the effort of completing the monitoring reports, reduce paper usage and/or file size of monitoring reports (which can complicate submittal via email), and meet the regulatory requirements.

### **Comment 11. MRP Page 11, Section III.A Quarterly Monitoring Reports**

Summary of items in MRP: *The MRP states the following: "Quarterly Monitoring Reports shall be prepared and submitted to the Central Valley Water Board by the **1st day of the second month following the quarter** (i.e., the January-March quarterly report is due by 1st May)."*

Response and Comments: To provide adequate time to receive laboratory results, review for quality assurance, address issues, compile all farming data, analyze all information, and develop and internally review quarterly monitoring reports, **we request that the due dates for the CVRWQCB Quarterly Monitoring Reports be as follows: June 1 (Q1 report), September 1 (Q2 report), December 1 (Q3 report), and March 1 (Q4/annual report).**

Frequently, final laboratory results are not available until approximately two weeks prior to the quarterly report deadlines. Loading rate calculations and other items in the monitoring reports cannot be fully completed and evaluated until all laboratory results for the quarter are available and the quality control process is complete. Occasionally, this involves coordination with laboratories to discuss questionable results, failure of laboratory QAQC processes, and/or sample analysis re-runs. These steps can take several to multiple days. This short timeline does not allow adequate time to compile, analyze, and prepare a quality monitoring report prior to submittal to the CVRWQCB. This is an even more significant concern for the 4<sup>th</sup> Quarter Monitoring Report that requires additional items that must be completed in the same timeline as quarters 1-3.

The additional time to develop quality monitoring reports benefits CVM, the CVRWQCB, and the public while maintaining a quarterly report cycle. The Regional Board very rarely provides any feedback on monitoring reports, especially on a timely basis. A slight change to the reporting schedule to allow for higher quality reports is justified and benefits all stakeholders. If a one month change to the reporting cycle proposed above is unacceptable to the Regional Board, a minimum of two weeks should be granted.

### **Comment 12. MRP Page 12, Section III.A.8 Fourth Quarter Monitoring Reports**

Summary of items in MRP: The MRP requires that the following be submitted as a part of the Quarterly Monitoring Reports: *"A discussion of annual chemical usage at the Facility (e.g., chemical name, purpose, and quantity used)."*

Response and Comments: CVM proposes that a discussion and summary of annual chemical usage at the Facility be removed from the Quarterly Monitoring Reports and included in the Fourth Quarter or Annual Monitoring Report as required by MRP III.B.10. This is consistent with other discharger's MRP in Region 5 and would reduce the effort to complete the quarterly Self-Monitoring Reports while still meeting the regulatory requirements.



**Comment 13. MRP Page 12, Section III.A.8 and Section II.B.10 – Chemical Usage**

Summary of items in MRP: The MRP requires a discussion of chemical usage at the facility.

Response and Comments: Please clarify in the MRP that this requirement only applies to chemicals used in processing activities that may have an impact on the wastewater quality that is applied to the LAA. Products that are directly applied to or injected into beef products do not impact wastewater quality and should not be subject to this reporting requirement. Other household chemicals that drain to the on-site septic system also do not impact wastewater quality. Lubricants should also be excluded.

**Comment 14. MRP Page 13, Section III.B.8 Fourth Quarter Monitoring Reports**

Summary of items in MRP: *The MRP requires that the following be submitted as a part of the Fourth Quarter Monitoring Reports: “A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.”*

Response and Comments: To be consistent with many other discharger’s MRPs in Region 5, it is proposed that calibration logs for hand-held monitoring instruments and devices are not included in the quarterly self-monitoring reports. All calibration logs will be retained for a minimum of three years and available for CVRWQCB review, upon request. This will reduce the effort of completing the self-monitoring reports, reduce paper usage and/or file size of monitoring reports, and meet the regulatory requirements.

**Comment 15. MRP Page 14, Section III.B.15 – Solids Production**

Summary of items in MRP: This item requires reporting the annual production of total solids in dry tons or cubic yards.

Response and Comments: CVM requests that solids reporting can be in either total dry solids or the total mass of solids removed from the facility at the “as-received” moisture content.

**Comment 16. MRP Minor Administrative Edits**

MRP: LCRS is sometimes spelled as LRCS (see the Information Sheet, page IS.i); please re-check both WDR and MRP. We also request that LCRS and Action Leakage Rate (ALR) acronyms be added to the Glossary.

Thank you for your consideration of our comments.

Sincerely,



Central Valley Meat Company, Inc.