Central Valley Regional Water Quality Control Board
21 February 2025 Board Meeting
Response to Comments
for the
Pacific Coast Producers, Inc.
Oroville Processing Facility and Palermo Land Application Area
Tentative Waste Discharge Requirements
Butte County

At a public hearing scheduled for 21 February 2025, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of tentative Waste Discharge Requirements for Pacific Coast Producers, Inc. (Discharger) Oroville Processing Facility and Palermo Land Application Area (Facility). This document contains responses to written comments received from interested persons and parties in response to the tentative Order. Written comments from interested persons and parties were required to be received by the Central Valley Water Board by 17 November 2024 in order to receive full consideration. Due to the deadline falling on a Sunday, it was extended to the following day, 18 November 2024. Comments were received prior to the deadline from:

1. Jo Anne Kipps (received 18 November 2024)

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

JO ANNE KIPPS COMMENTS

JO ANNE KIPPS COMMENT #1 – Flow and Effluent Limitations

Ms. Kipps requested staff "*Please characterize how the Discharger is unable to comply with the current order's discharge flow and effluent limitations. Specifically, which seasonal flow limitations were exceeded? Which effluent limitations were exceeded"*.

RESPONSE:

Information was added to Finding 7 to clarify when flow limitations were exceeded in addition to what constituent loading rates were exceeded.

JO ANNE KIPPS COMMENT #2 – Annual Discharge Flow Limitation

Ms. Kipps requested explanation as to "*why the tentative order proposes to authorize* an annual discharge flow limitation that is 2.25 times greater than current annual flow when elsewhere it indicates that discharge flow will remain at current volumes. If the Discharger did not request this substantial increase in annual discharge flow, why does the tentative order propose this increase? Unless the proposed 360-MG annual discharge flow limitation is justified (e.g., by water balance calculations), please consider reducing the limitation to reflect current annual flow plus a reasonable 25% safety factor (i.e., to 200 MG/year)."

RESPONSE:

Finding 27 and Table 3 have been updated to reflect the process wastewater flow for 2023 which was 193.19 MG. Requirements C – Flow Limitation has been revised to reflect a 250 MG/year flow limitation from the storage pond at the land application area. This flow limit accommodates the Dischargers current operations and provides a buffer for annual production fluctuations.

JO ANNE KIPPS COMMENT #3 – Cannery Emergency Storage Pond

Ms. Kipps requested clarification if "the emergency pond (is) equipped with a liner? Does the Discharger have the means to pump wastewater discharged to the emergency pond to the LAA for disposal?"

RESPONSE:

Finding 28 has been revised to reflect the emergency pond located at the cannery is not lined and the discharger does have the ability to discharge the pond to the land application area.

JO ANNE KIPPS COMMENT #4 – Biochemical Oxygen Demand Calculations

Ms. Kipps requested clarification on "What specifically are the equations and site specific assumptions used to derive the site-specific BOD loading limit of 242 lbs/acre/day? As the tentative order identifies this precise number as the order's BOD mass loading limit, please document the derivation of this value either in the response to comments or in the tentative order's information sheet. Also, value of 242 lbs/acre/day implies a level of precision that is not likely represented in the input values used in its derivation. Consider setting the limitation to 250 lbs/acre/day if justified."

RESPONSE:

Staff has provided Ms. Kipps with a stamped technical memorandum prepared by the Discharger's consultant, Brown and Caldwell, which contains the equations and site specific assumptions that were used to determine the BOD loading limit.

Staff has met with the Discharge, who has agreed to maintain the existing limit of 150 lb/acre/day. Per Provision I.1.e and I.1.f, the Discharger will submit an Organic Loading Reduction Workplan within six months of adoption of the order and will have two years to come into compliance with the BOD limit of 150 lb/acre/day once they have received concurrence on the workplan from the Central Valley Water Board. An interim BOD limit of 250lb/ac/day will be in effect until Provision I.1.f has been met.

JO ANNE KIPPS COMMENT #5 – Pond Characteristics

Ms. Kipps requested additional information regarding "What are the areas and depths of the process facility holding pond and the freshwater pond? When was the process facility holding pond equipped with a clay liner? What is the thickness of the clay liner? What is the liner's permeability?"

RESPONSE:

The Discharger believes that the process facility hold pond was clay lined when it was installed in the 1970's. They have been unable to find evidence that it was lined and staff has taken the position that the pond is not lined due to lack of documentation and also data from MW-H indicates that it is within the wastewater mound associated with an unlined pond.

Attachment C has been revised to remove the reference to a lined pond.

JO ANNE KIPPS COMMENT #6 – Wastewater Mounding

Ms. Kipps requested that staff "Please characterize the extent of groundwater mounding in the vicinity of the LAA ponds (i.e., mound height and areal extent). And, please elaborate on what is meant by the implication that groundwater passing through MW-H is "not representative of mixed groundwater conditions"? Why is groundwater passing through this well not subject to the same water quality objectives as groundwater elsewhere influenced by the discharge?"

RESPONSE:

At this time the extent of groundwater mounding in the vicinity of the LAA ponds is not known. The discharge appears to be degrading groundwater in the vicinity of the process wastewater pond, seen at MW-H, which appears to be monitoring the radial mound of effluent percolating from the pond prior to mixing with groundwater. The discharge's average effluent BOD concentration is 3,182 mg/L from 2017-2022.

Elevated organic concentrations in the process wastewater pond could lead to anoxic conditions that may cause mobilization of metals in the groundwater. However, this is expected to be a localized condition; as the groundwater travels down gradient, the anoxic conditions would be expected to be diminished. Currently, the impact to the groundwater from the process wastewater pond is unquantified, however, this Order requires the installation of a monitoring well network surrounding the process wastewater pond and to ensure that the discharge is protective of groundwater quality. Once the monitoring well network is installed and monitored a Groundwater Quality Study will be conducted which will assess the wastewater pond mounding and possible exceedances of WQOs.

JO ANNE KIPPS COMMENT #7 – Title 27 Exemption

Ms. Kipps requested staff "Please explain why the tentative order exempts the discharge from Title 27 despite presenting evidence that the discharge (specifically to the process facility holding pond) has caused an exceedance of the water quality objective for dissolved manganese."

RESPONSE:

Staff concurs that monitoring of MW-H has shown concentrations of manganese in exceedance of WQOs. It is staff's position that MW-H is within the radial mound of effluent percolating from the pond prior to mixing with groundwater and not truly indicative of groundwater at the land application area. Per provisions 1a, 1b, 1c, and 1d the Discharger will be undertaking efforts to analyses and quantify impacts their operation is having on the groundwater underlaying the land application area. If it is found that their operation is causing groundwater to contain waste constituents (other than electrical conductivity, total dissolved solids, sodium, and chloride) in concentrations statistically greater than applicable WQOs, the Discharger will be required to taking measures to bring groundwater quality to within the WQOs.

JO ANNE KIPPS COMMENT #8 – Antidegradation Analysis

Ms. Kipps requested staff "Please revise the tentative order's Antidegradation Analysis findings to address the apparent exceedance of the water quality objective for dissolved manganese in groundwater passing through MW-H, which is in close proximity to the process facility holding pond."

RESPONSE:

Staff concurs with the comment and have added a discussion of dissolved manganese in the Compliance with Antidegradation Policy section. In addition, dissolved iron and dissolved arsenic are also discussed in the same section.

JO ANNE KIPPS COMMENT #9 – Pond Liners

Ms. Kipps requested staff "Please include (1) a discharge specification prescribing a hydraulic conductivity standard of 1x10-6 cm/s for the process facility holding pond, (2) a requirement to periodically monitor pond liner integrity (at least once every five years), and (3) a provision for establishing a compliance time schedule for the Discharger to equip the holding pond with a liner meeting the order's hydraulic conductivity standard. Revise the tentative order elsewhere as appropriate to reflect these changes."

RESPONSE:

The Discharger believes that the process facility hold pond was clay lined when it was installed in the 1970's. They have been unable to find evidence that it was lined and staff has taken the position that the pond is not lined due to lack of documentation and also data from MW-H indicates that it is within the wastewater mound associated with an unlined pond. Per provisions 1a, 1b, 1c, and 1d the Discharger will be undertaking efforts to analyses and quantify impacts their operation is having on the groundwater downgradient from the unlined wastewater pond. If it is found that their operation is causing groundwater to contain waste constituents (other than electrical conductivity, total dissolved solids, sodium, and chloride) in concentrations statistically greater than applicable WQOs, the Discharger will be required to take measures to bring groundwater quality to within the WQOs, which could include lining of the wastewater pond.

JO ANNE KIPPS COMMENT #10 – Land Application Area Soil Description

Ms. Kipps requested clarification regarding Finding 25 and "*what is the reference for the 1-foot depth of surface soils at the LAA?*"

RESPONSE:

Staff has removed the reference to a 1-foot depth of soil in the finding.

JO ANNE KIPPS COMMENT #11 – Hardness and Alkalinity Testing

Ms. Kipps requested staff "Please revise the MRP's Table 4 to require quarterly monitoring for hardness and alkalinity."

RESPONSE:

Staff concurs with the recommendation and Table 4 of the Monitoring and Reporting Program has been updated to require quarterly monitoring of hardness and alkalinity.

STAFF REVISIONS

1. Added information to Finding 6 regarding flow and constituent exceedances.
2. Finding 10 revised to include physical descriptions of the ponds.
3. Findings 19 and 20 combined.
4. Finding 23 has been revised has been revised to clarify soil types in the Land Application Area.
5. Finding 25 has been revised to clarify that the storage pond is lined and can be discharged to the Land Application Area.
6. Finding 26 has been revised to include a discussion of annual process wastewater flow.
7. Table 3 has been revised to include 2023 results.
8. Finding 27 separated from finding 28.
9. Finding 28 revised to add discussion of wastewater mounding and Monitoring Well H.
10. Finding 52 revised to reflect a BOD loading rate of 150lbs./acre/day.
11. Finding 57 revised to add dissolved metals.
12. Table 6 revised to add dissolved manganese, total and dissolved iron and dissolved arsenic.
13. Finding 57.b. added for discussion of dissolved manganese.
14. Finding 57.c. added for discussion of dissolved iron.
15. Finding 57.d. added for discussion of dissolved arsenic.
16. Finding 58 revised to add language regarding measures to minimize or prevent degradation.
17. Finding 61 revised to identify Title 14, section 15304 of CEQA as applicable to incorporating the additional Land Application Area into the order.
18. Finding 72 revised to remove reference to the information sheet.
19. Requirements C.1. revised to an annual flow limit of 250 MG.
20. Requirements E.1. revised to add reference to Provision I.1.e and f.
21. Table 8 revised BOD load rate to 150 lbs./acre/day.
22. Footnotes added to Table 8.
23. Requirements I.1.a revised to clarify compliance timeframe.
24. Requirements I.1.b. revised to clarify Monitoring Well Workplan.

25. Requirements I.1.c. revised to clarify Groundwater Quality Study to include Downgradient in addition to Background and pond mounding.
26. Requirement I.1.d. split from I.1.c. and a time limit defined for the Facility Improvement Workplan.
27. Requirement I.1.e. added to include a time schedule for an Organic Loading Reduction Workplan.
28. Requirement I.1.f. added to include a time schedule for the Discharger to come into compliance with the BOD loading limit.
29. Attachment C revised to remove reference to a lined pond.
30. MRP Table 4 revised to require quarterly monitoring of Hardness and Alkalinity.