

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 23 August 2024**

**Response To Written Comments for the
Sandridge Partners, LP
Proposed Sandridge Cattle Lemoore Processing Facility
Kings County
Tentative Waste Discharge Requirements**

At a public hearing scheduled on 23 August 2024, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider the adoption of Waste Discharge Requirements (WDRs) and a Monitoring and Reporting Program (MRP) for Sandridge Partners, LP's (Sandridge or Discharger) Sandridge Cattle Lemoore Processing Facility (Facility) in Kings County.

This document contains responses to written comments received from interested persons regarding the tentative Waste Discharge Requirements (TWDRs) and MRP circulated on 14 June 2024. Written comments from interested parties were required to be received by the Central Valley Water Board by 5:00 p.m. on 15 July 2024 to receive full consideration. Comments were received from the Discharger on 3 July 2024 and from Ms. Jo Anne Kipps on 15 July 2024.

Written comments are summarized below, followed by responses from Central Valley Water Board staff. In addition, staff made some minor changes to the WDRs to improve clarity and correct typographical errors based on commentary; however, these comments are considered non substantial and are omitted here.

SANDRIDGE COMMENT

Sandridge – Comment #1: The Discharger submitted a 3 July 2024 letter expressing concerns with the proposed requirements of the TWDRs and the MRP for the proposed Sandridge Facility and noted that the MRP requirements are similar to other nearby beef processing facilities that have much larger operations (i.e., larger number of cattle processed per day). Sandridge contended that its smaller operational capacity and the large size of the proposed land application areas (366 acres) present less risk for water quality impacts relative to larger operations, and the MRP should reflect as such.

Additionally, an annual cost estimate that includes annual fees, monitoring, and lab analyses was provided with the letter indicating that the Discharger's annual cost to comply with the TWDRs and MRP would be approximately \$215,000. The Discharger stated that the project is likely to be abandoned given the cost analysis and requested reductions in monitoring frequencies (daily to weekly, weekly to monthly, and monthly to yearly).

Response: Central Valley Water Board staff (staff) reviewed the Discharger's cost estimate analysis and found that several inconsistencies with the MRP

requirements and typical monitoring practices resulted in overestimations. For example, the cost analysis included monitoring and lab costs for two influent and effluent monitoring locations, where the MRP only specifies one influent monitoring location and one effluent monitoring location. Furthermore, the Discharger included labor costs for sampling each constituent, and lab costs for observations and constituent measurements that can be collected via sensors or probes (e.g., electrical conductivity, pH, dissolved oxygen). Based on staff's review, it appears that monitoring and lab costs for the tentative MRP would be around 50% less than the Discharger's rough estimate.

Staff reevaluated the MRP and determined that monitoring frequencies could not be completely revised as requested by the Discharger; however, some influent, effluent, storage pond, and groundwater monitoring frequency reductions are appropriate. While many of these frequency reductions will not come into effect until the Discharger has satisfied the monitoring requirements for one year (e.g., following twelve consecutive months of monitoring, monthly effluent monitoring for TDS, FDS, and TSS will be reduced to quarterly), the modifications in monitoring frequencies are more in line with similar sized operations permitted by the Central Valley Water Board.

On 18 July 2024, staff met with Mr. Mathew Maxson of Sandridge, and Kyle Parreria and Amanda Ceasar of 4-Creeks, Inc., to discuss Sandridge's concerns, and staff's changes to the MRP. The Discharger seemed amenable to the proposed revisions.

JO ANNE KIPPS (Kipps) COMMENTS

Kipps – Comment #1: *Please identify the Facility's disinfection chemicals and discuss the extent to which their use may cause the discharge to contain disinfection by-products (e.g., trihalomethanes) in concentrations that may pose a threat to groundwater quality.*

Response: The tentative MRP requires the Discharger to report the chemicals used at the Facility, including chemical name, purpose, and quantity used as part of the Fourth Quarter Monitoring Report. No changes were made to the TWDRs, but a quarterly total trihalomethanes (THMs) effluent monitoring requirement was added to the tentative MRP to monitor for disinfection by-products from chlorine disinfection of slaughterhouse equipment.

Kipps – Comment #2: *Consider using similar abbreviations for the LAAs throughout the tentative order and its monitoring and reporting program. Also, revise Attachment C to provide a legend for its solid and dashed lines, or explain the meaning of these lines in the finding that first references the attachment.*

RESPONSE: Abbreviations were edited where needed. A legend was added to Attachment C.

Kipps – Comment #3: Since Sand Lane effluent comprises only two percent of the Facility's wastewater flow, consider revising the MRP to establish separate monitoring locations for the two effluents and monitor these separately for the same constituents, but at a much reduced frequency for the Sand Lane discharge due to its relatively low volume.

RESPONSE: The commenter notes that the Holding Pen discharge will comprise about two percent of the total estimated discharge. The sampling location specified by the MRP (Pond No. 1 inlet) provides an accurate evaluation of the treated comingled wastewater prior to its discharge into the ponds. Based on its relatively low volume and the current requirements to sample the comingled waste streams, separate sampling of the Holding Pen discharge prior to treatment is not needed. No changes were made to the MRP.

Kipps – Comment #4: What is the design BOD_5 removal of the Facility's Treatment System at maximum design flow? Consider revising Finding 15 to include this information. And, please consider adding a new monitoring location for Treatment System influent, that is, a location where a representative sample of the combined discharges from the slaughterhouse can be collected prior to treatment, and require quarterly monitoring of Treatment System influent for BOD_5 , at a minimum.

RESPONSE: The design BOD_5 removal rate was not listed in the RWD, but BOD loading rates presented in the RWD indicate low BOD loadings that range from about 25 to less than 50 lbs/ac/day. If BOD loading rates exceed the estimated loading rates, the Discharger will be required to submit an updated RWD to address BOD loading.

Kipps – Comment #5: Because Attachment C's flow diagram indicates the LAAs receive discharge only from Pond No. 2, consider revising the monitoring location description as follows:

Location where a representative sample of the comingled wastewater can be obtained after all treatment and storage (i.e., after storage in PND-001 and PND-02) prior to discharge to the LAAs or blending with irrigation water (or any other water).

RESPONSE: Requested change was made to the MRP.

Kipps – Comment #6: Revise Finding 32 to refer to the "City of Lemoore," as it is an incorporated city. And please comment on how the City of Lemoore's General Plan proposals for zoning changes in LAA-02 may impact its long-term use for Facility wastewater disposal?

The commentator also stated that The City's 2024 General Plan Map shows the LAAs within the city's Urban Growth Boundary and that LAA-01 is zoned as an Employment Reserve Area, and that LAA-02, which is intended as a secondary application area, is zoned for Low and Very Low Density Residential and Commercial development.

RESPONSE: Finding 32 was revised as requested.

The RWD indicates that LAA-01 has sufficient acreage to discharge the Facility's wastewater at agronomic rates, and that LAA-02 is a secondary application area to be used if needed. Should the use of LAA-02 conflict with the City of Lemoore's General Plan in the future, the Discharger may submit a revised RWD to modify the land application areas at that time. No changes were made to the TWDRs.

Kipps – Comment #7: *If the tentative order's disclosed values for estimated salt, nitrogen, and organic loadings in Finding 67 assume that wastewater will be applied uniformly across the entire 369 acres of LAA-01, please explain how this will actually be achieved, especially if flood irrigation is used. If flood irrigation is used, consider disclosing the expected effluent application depth per irrigation event (e.g., six inches?), and disclose the area (in acres) that actually will be used annually for wastewater disposal and recalculate expected loadings presented for salt, nitrogen, and organics. And, reconsider the information value of presenting an annualized BOD loading, and instead provide estimates for instantaneous and cycle average BOD loadings.*

RESPONSE: Finding 12 was revised to identify that flood irrigation is the proposed primary method for irrigating crops at the LAAs. Flood irrigation is a generally accepted method for applying irrigation water, including wastewater, to the crops proposed to be grown at the LAAs. Additionally, the MRP requires detailed reporting of the acres used for irrigation, the volume of wastewater and fresh water applied, the types of crops that are grown, crop uptake, crop yields, etc. The MRP requires BOD to be reported as a cycle average.

Kipps – Comment #8: *How does the Discharger propose to dispose of groundwater extracted from the operation of the effluent ponds' groundwater dewatering system?*

RESPONSE: Central Valley Water Board staff discussed the disposal of dewatered groundwater should groundwater rise to greater than 5-feet below the ground surface with the Discharger and their consultant during development of the RWD. The Discharger confirmed that it has sufficient land available to dispose of the groundwater extracted from the dewatering system, and as it is not wastewater, there is low potential to impact groundwater quality. Discharge Specification E.18 was added to the WDRs as follows:

The discharge of groundwater from dewatering operations conducted at the effluent storage ponds shall remain onsite, must infiltrate/evaporate within 72-hours, and shall not cause water quality impacts or nuisance conditions (e.g., ponding, vectors, etc).

Kipps – Comment #9: *Please check the accuracy of the 240 mg/L value cited in Finding 23 for discharge nitrate as nitrogen and revise finding accordingly (and also Finding 67). Also, revise Table 3 to include expected discharge concentrations of potassium and phosphorus.*

RESPONSE: The value is for total nitrogen. Table 3 was modified accordingly.

Kipps – Comment #10: *What, specifically, are the “stringent nitrate limits” referenced in Finding 56? Are they the tentative order’s groundwater limitations to protect MUN beneficial uses (i.e., 10 mg/L nitrate as nitrogen)? The Discharger proposes to use double-lined surface impoundments equipped with leachate recovery and effluent disposal by crop irrigation at rates not exceeding agronomic demand. It would appear, then, the proposed discharge poses a low threat of exacerbating what may be an existing condition of nitrate pollution in shallow, perched groundwater. Accordingly, please explain exactly why the Discharger will be “unable to comply with stringent nitrate limits.*

RESPONSE: Finding 56 in the tentative WDRs has been revised as follows:

For the Nitrate Control Program, dischargers of nitrate to groundwater basins or sub-basins ~~that are unable to comply with stringent nitrate limits will be required to take on alternate compliance approaches that involve providing replacement drinking water to persons whose drinking water is affected by nitrates. Dischargers~~ may comply with the new nitrate program either individually (Pathway A) or collectively with other dischargers (Pathway B). The Facility is within Groundwater Basin 5-022.12 (San Joaquin Valley – Tulare Lake), which is a Priority 2 Basin. Notices to Comply for Dischargers in Priority 2 Basins were sent to the Discharger in December 2023 and the Discharger has until February 2025 to respond to the notice. The Discharger has indicated they intend to participate in the Pathway B Management Plan for Groundwater Basin 5-022.12.

In addition, since the Facility is located in a Priority 2 Management Zone, a Management Zone Implementation Plan has not yet been approved for the San Joaquin Valley -Tulare Lake Basin. Therefore, staff revised Groundwater Limitation G.1. as shown below:

1. The Primary or Secondary MCLs established in Title 22, excluding salinity and nitrate.

Kipps – Comment #11: *The RWD’s estimated FDS and total nitrogen loadings to LAA-01 appear to not accurately reflect the discharge flow and FDS and total nitrogen concentrations presented in Table 10. Please confirm the accuracy of the estimated loadings and revise the finding as appropriate.*

RESPONSE: The values were evaluated, and appropriate revisions were made to Findings 67.a and 67.b and Table 10 of the TWDRs.

Kipps – Comment #12: *What is the design hydraulic conductivity of the effluent ponds’ liners? Does it meet or exceed the 1x10-6 cm/s standard in the Statewide Winery General Order? Consider revising Discharge Specification E.6 to include: “The*

engineered lined surface shall meet a hydraulic conductivity standard of 1x10-6 centimeter per second.”

RESPONSE: Discharge Specification E.6 was revised as follows:

*The storage of beef processing wastewater shall be on an engineered lined surface with a leachate collection system as described in the Findings and the May 2023 Pond Liner Report. **The engineered lined surface shall meet a hydraulic conductivity standard of 1x10-6 centimeter per second.***

Kipps – Comment #13: Consider revising Discharge Specification F.17 to establish a reasonable time limit for the Discharger to complete its inspection and repair of the primary liner system.

RESPONSE: The amount of time needed to repair a leak could vary greatly based on where and what is the cause making setting a specific timeline difficult. Discharge Specification E.16 requires the Discharger to inspect and repair the primary liner if necessary and following additional language was added:

*The Discharger shall regularly inspect the liner condition of the proposed lined effluent storage pond(s). The Discharger shall maintain and repair the liner as necessary to ensure the integrity of the pond liner is maintained and leakage from the liner is minimized. **Necessary repairs shall be completed in reasonable timeframes that are consistent with the severity of the impairment and potential for impact to water quality.***

In addition, Discharge Specification E.17 was revised as follows:

*The proposed lined effluent storage ponds will contain a Leachate Collection and Removal System (LCRS), with an Action Leakage Rate (ALR) of 1.9 gpm for each LCRS. If leachate generated in either/both LCRS exceeds the ALR, the Discharger shall take actions to inspect and repair the primary liner system if necessary. **To ensure compliance with Discharge Specification E.16, if the LCRS exceeds the ALR, the Discharger shall provide a workplan that discusses how the Discharger intends to address the pond liner leak(s) in a timely manner. This workplan shall be submitted within 60 days of identifying the ALR exceedance.***

Kipps – Comment #14: Consider combining the intent of Discharge Prohibitions B.3 and B.5 in one prohibition.

RESPONSE: Discharge Prohibition B.5 was removed as it was duplicative.

Kipps – Comment #15: Consider revising Discharge Specification E.4 to include the manure pad and dead animal management area.

RESPONSE: Discharge Specification E.4 was revised as follows:

All wastewater generated at the holding pens, manure pad, and dead animal management area shall be treated via the Sand Lane prior to discharge into the effluent storage pond.