

**Regional Water Quality Control Board
Central Valley Region Board Meeting
11/12 August 2022**

**Response to Written Comments for the
Califia Farms, LLC and North Kern Water Storage District
Califia Farms Bakersfield Facility
Kern County
Tentative Waste Discharge Requirements**

At a public hearing scheduled for 10/11 August 2022, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of revised Waste Discharge Requirements for Califia Farms LLC, the North Kern Water Storage District, and Paramount Ranch L.P. (collectively referred to as Dischargers) for a proposed flow increase at Califia Farms Bakersfield Facility in Kern County. This document contains responses to written comments received from interested persons regarding the tentative Waste Discharge Requirements (TWDRs) originally circulated on 8 April 2022. Written comments were originally required by public notice to be received by the Central Valley Water Board by 9 May 2022 to receive full consideration. Central Valley Water Board staff initially received preliminary or initial feedback from Ms. JoAnne Kipps on April 25th and 26th regarding the TWDRs. Ms. Kipps then submitted her comments on the TWDRs in a 10 May 2022 letter.

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

In response to comments received during this period, a substantive change was made to the tentative WDRs and MRP. Specifically, Paramount Ranch Company, LP has been added as a Discharger on the WDRs. In order to provide interested parties and the public with an opportunity to comment upon the updated tentative WDRs and MRP, both documents are being recirculated for a second 30-day focused public comment period (comments due by 8 July 2022).

MS. KIPPS – 10 May 2022 COMMENTS

KIPPS COMMENT #1: *Califia's Bakersfield Facility (Facility) is situated on a 485-acre parcel owned by Paramount Ranch Co LP. The TWDRs should name this property owner as codischarger or provide a reason for not doing so.*

RESPONSE: Paramount Ranch L.P. is listed in Finding 3 of the TWDRs as the owner of the land. Staff revised the TWDRs to include Paramount Ranch L.P. as a Discharger. Staff contacted a representative of Paramount Ranch L.P. to inform them of this change and will recirculate the tentative WDRs for another 30-day public comment with Paramount Ranch L.P. as a listed Discharger.

KIPPS COMMENT #2: *The TWDRs mentions source water treatment (Finding 20) prior to its use in the Facility's plant-based products (e.g., almond milk). It does not characterize untreated source water, which makes up most of the Facility's wastewater flow. The TWDRs (or Response to Comments) should include an explanation for this. The current WDRs*

requires quarterly source water monitoring. Califia's self-monitoring reports do not contain source water data, nor apparently does Califia's 2021 Report of Waste Discharge. Califia should have some relevant data available on treated source water quality that it can provide staff for use in the TWDRs. Even if it is post treatment, its quality should be relevant for assessing Califia's salinity control efforts.

RESPONSE: The Facility's source water is supplied to the Facility by an onsite well (Well 1). The Discharger monitors and report quarterly samples of its source water as required by Monitoring and Reporting (MRP) R5-2017-0019. The results are included with the laboratory data that are submitted separately from the self-monitoring reports. Finding 45 (Table 9) of the TWDRs summarizes the Facility's source water supply data. In response to this comment, staff provided Ms. Kipps with the 2020 and 2021 lab reports with source water monitoring results.

KIPPS COMMENT #3: *Salinity is not the only water quality concern with Califia's discharge of Oxidation Ditch effluent to the Lerdo Canal. Its high BOD (above 500 mg/L) is also a concern, if only for odor nuisance control. Its discharge, either to the Lerdo Canal or to the Basin's lateral canals, will exert an oxygen demand that may cause nuisance odors. The TWDRs (or Response to Comments) should state whether this ongoing discharge has ever resulted in nuisance odor complaints.*

RESPONSE: Central Valley Water Board staff reviewed the file record and there are no violations for odors and/or nuisance conditions in the record since WDRs R5-2017-0019 was adopted in February 2017. The Facility was also inspected by Central Valley Water Board staff in 2016 and April 2022 and odors causing nuisance conditions were not observed/detected beyond the limits of the Facility property. The TWDRs include Prohibition B.2. and Discharge Specifications E.4. prohibiting the Facility's discharge from causing nuisance conditions. The Facility's discharge is blended with other waters in the Lerdo Canal and, based on the Discharger's models, typically makes up less than one percent of the total volume of water in the canal. Therefore, based on the provided information and historical Facility operation, staff does not expect that the flows generated from the Facility will increase nuisance conditions within Lerdo Canal provided the Discharger complies with the requirements of the TWDRs.

KIPPS COMMENT #4: *The TWDRs should include receiving water limitations for the Lerdo Canal discharge to protect its beneficial use of agricultural supply. These include:*

- a) *Biostimulatory Substances. Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses;*
- b) *Suspended Material. Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses; and*
- c) *Dissolved Oxygen. The dissolved oxygen concentration to be reduced below 1.0 mg/L at any time.*

RESPONSE: As stated in response #3, staff is not aware of the Facility's discharge causing nuisance conditions within the Lerdo Canal. Therefore, adding new receiving water limitations for biostimulatory substances, suspended materials, and dissolved oxygen is unwarranted at this time. However, staff has revised the TWDRs to include the following Discharge Specification (Section E)

10. The Facility's discharge to Lerdo Canal shall not impact the Lerdo Canal's agricultural supply beneficial use.

Furthermore, staff has revised the tentative MRP to require the Discharge to monitor dissolved oxygen within the Lerdo Canal, upstream and downstream of the Facility's discharge point (Monitoring Locations LC-001 and LC-002).

KIPPS COMMENT #5: *The TWDRs Monitoring and Reporting Program (MRP) should add dissolved oxygen to the parameters monitored in receiving water.*

RESPONSE: See response to Comment #5, staff has revised the tentative MRP to require the Discharger to monitor dissolved oxygen within the Lerdo Canal.

KIPPS COMMENT #6: *The direct discharge of high BOD wastewater to the Basin's lateral canals without sufficient produced water for dilution threatens to cause anoxic conditions in the vadose zone that, in the long run, may unreasonably degrade high quality groundwater. The potential for this degradation requires the discharge be conducted in a manner that reflects best practicable treatment of control (BPTC). The direct discharge of undiluted, high-strength industrial wastewater to prime groundwater recharge soils is not BPTC and should be prohibited or otherwise restricted when produced water is unavailable for blending.*

RESPONSE: As discussed in the TWDRS Findings, when the Lerdo Canal is closed for maintenance, Califia may discharge wastewater to lateral pools within the Rosedale Spreading Basin via trucks. However, in recent years, Califia and the District have coordinated when maintenance occurs to minimize potential disruptions and the need for Califia to discharge wastewater via trucking due to the financial costs associated with trucking the wastewater. During the shutdown, Califia performs required maintenance to the Facility that reduces wastewater production until the discharge to the canal can resume. According to the Discharger, the last time Califia discharged wastewater to the Rosedale Spreading Basins was in 2017. Furthermore, according to the Dischargers, if Califia needed to discharge to the Rosedale Spreading Basins due to the closure of the Lerdo Canal, the discharge to the basins would only occur up to two weeks.

In response to the comment, staff reached out to the Discharger's consultant (GEI Consultants) to obtain more information about the possible discharge to the Rosedale Spreading Basins. According to GEI, if Califia discharged directly to the Rosedale Spreading Basins, produced oil field water would still be the predominant water source within the Rosedale Spreading Basins (if not other sources as well) and the Facility's wastewater would be blended prior to flowing into the recharge basins. The TWDRS information sheet has been updated to reflect this information.

KIPPS COMMENT #7: *The TWDRs identifies blending as a BPTC measure (Finding 67.c). Blending has been cited as a BPTC measure in other WDRs for similar discharges. So, there is precedent. But, please consider. The Basin Plan's designed beneficial uses of surface waters and groundwaters do not include "blending supply" for diluting wastes to achieve a quality protective of designated beneficial uses. The TWDRs should delete Finding 67.c (and elsewhere if mentioned) and revise Finding 68 as follows: "The Discharger's implementation of the above-listed BPTC measures, and the dilution provided by higher quality water in the Lerdo Canal and Rosedale Spreading Basins, will minimize the extent of water quality degradation resulting from the Facility's continued operation."*

RESPONSE: Central Valley Water Board staff modified Findings 67 and 68 as requested.

KIPPS COMMENT #8: *Typically, oxidation ditches are operated to provide a two-day hydraulic detention time for effective BOD removal. The Board should recognize this long-standing rule-of thumb as BPTC. The Facility's Oxidation Ditch has a maximum hydraulic capacity of 0.6 million gallons. A two-day minimum detention time requirement would limit flow to 0.3 MGD. At 0.5 MGD, the detention time decreases to 1.2 days, which will decrease BOD removal performance. If it doesn't already, the TWDRs should disclose that discharge BOD will increase at higher flows.*

RESPONSE: Finding 66.c. was modified to state that BOD may increase as the result of the higher flows due to reduced detention times in the oxidation ditch.

KIPPS COMMENT #9: *The current WDRs did not require influent monitoring for BOD, which is needed to characterize BOD removal performance. The TWDRs should not make that same mistake again by*

- a) Establishing an influent monitoring location at a location where a representative sample of wastewater can be obtained prior to discharge to the Oxidation Ditch, and*
- b) Requiring monthly monitoring of influent BOD concurrent with effluent BOD, and*
- c) Requiring reporting monthly average percent influent BOD removal.*

RESPONSE: Neither the current WDRs nor the proposed TWDRS specify a minimum BOD percent removal limitation for the oxidation ditch. While the oxidation ditch provides some organic removal, the system was initially installed when the Facility previously discharged directly to land application area owned by Sun Pacific. While BOD is a constituent of concern for the Facility, the Facility's current disposal practices (i.e., discharge to the Lerdo Canal) significantly minimizes the extent of potential water quality degradation resulting from the Facility's discharge since the effluent is heavily diluted by other water sources. Furthermore, the proposed TWDRs require effluent monitoring and new canal water monitoring requirements to monitor the impact of the Facility's discharge to the waters within the Lerdo Canal. The Discharger has indicated challenges with establishing an influent monitoring location due to the oxidation ditch

configuration. Therefore, the costs associated with requiring the Discharger to also collect representative influent samples are not currently justified.