

Central Valley Regional Water Quality Control Board

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COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR MERCED COUNTY CONDITIONAL USE PERMIT NO. CUP20-014, BORBA DAIRY FARMS EXPANSION PROJECT (STATE CLEARINGHOUSE NO. 2022050451)

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) is the state agency with the statutory responsibility to protect water quality in California's Central Valley. (Wat. Code, § 13000 et seq.) In support of this mission, the Central Valley Water Board regulates discharges of waste, including from dairies, that have the potential to affect surface water and groundwater. The Central Valley Water Board, in its role as responsible agency, has reviewed the subject Draft Environmental Impact Report (DEIR). Consistent with the Central Valley Water Board's obligations as a responsible agency, this comment letter reviews the scope and content of the environmental information germane to the Board's statutory responsibilities.

CENTRAL VALLEY WATER BOARD COMMENTS

1. Description of Hydrogeology and Existing Water Quality Should Consider 2019 Groundwater Separation Study.

Borba Dairy Farms, at 5297 Kelley Road, Hilmar, Merced County (Dairy) is located near the confluence of the San Joaquin and Merced Rivers, and thus groundwater levels are shallow in the area. As a result, its waste management, storage, and disposal operations are more likely to have a significant impact on groundwater quality than dairies in areas where groundwater is deeper. On 29 March 2019, the Central Valley Water Board issued a directive pursuant to Water Code section 13267 (13267 Order) requiring the Dairy to evaluate whether and to what extent its waste storage ponds were impacting underlying groundwater. The letter stated:

Based on a review of available groundwater data, including Department of Water Resources well data and monitoring data from regulated facilities in the area, there is reason to believe that groundwater is present beneath Borba Dairy Farms at a depth of approximately 10 feet or less. Borba Dairy Farms uses 2 in-ground wastewater ponds and 1 settling basin to manage dairy wastewater and manure. Information in the dairy's Waste Management Plan further indicates that it is likely that the bottoms of one or more of the dairy wastewater ponds or settling basins may intersect the shallow groundwater table below.

This 13267 Letter and the directed submittals such as groundwater separation studies, water level analysis reports, piezometer installation and a groundwater sampling plan. These required monitoring data were not mentioned in the DEIR. Given that these items provide project-specific details concerning potential water quality impacts, the DEIR should include discussion of these materials and consideration of potential Project water quality impacts that might result from an increase of waste storage in these unlined ponds.

Also, the DEIR mentions pond construction information was not available for review. However, as documented above, the Dairy completed a Groundwater Separation Study and Piezometer and Installation Plan. A professional level survey of the ponds was also completed. This seems to indicate that the Dairy consultant that drafted this DEIR is not aware of those efforts and the information contained in the submittals. The final EIR should incorporate the ponds in groundwater information and data, as the Central Valley Water Board is concerned the existing Settling Basin and two existing wastewater storage ponds need remedial action to create separation from high groundwater levels intersecting with the bottoms of these waste and wastewater, containment structures.

2. DEIR Section 10.3.2 Environmental Impacts Impact HYD-3.

Groundwater contamination from expanded dairy project operations (Criterion X.a) discusses areas of potential groundwater contamination from waste storage and application on the Dairy. This includes a discussion about the Wastewater Storage and Treatment Ponds (p. 10-31 [221 of 320]). Central Valley Water Board staff are not aware of “treatment ponds” on site of this Dairy. The FEIR should be revised to describe these ponds are for storage of wastewater prior to land application or prior to offsite disposal.

3. Environmental Baseline Should be Revised Based on More Reflective Dataset.

The lead agency’s (County) description of the existing physical environment in the vicinity of the proposed project (i.e., “environmental baseline”) with respect to water quality is based on the Dairy’s September 2014 Nutrient Management Plan (NMP) and October 2014 Waste Management Plan (WMP), which it states “are generally representative of the existing [Dairy] operations at the time of circulation of the NOP (May 2022).” (DEIR, pp. 3-26, 10-6, 10-23.) This baseline evaluation should be revised to reflect data that is more robust and more reflective of conditions existing at the Dairy at the time the revised Notice of Preparation (NOP) was circulated (27 July 2022). (See Cal. Code Regs., tit. 14, § 15125(a).)

In particular, the County should revise its baseline based on a review of the Dairy’s more recent Annual Reports, rather than the Dairy’s *plans* from nearly a decade ago. The County’s reliance on the 2014 NMP and WMP is flawed because, although WMPs and NMPs may be appropriate sources of information concerning some existing conditions at dairy facilities, they may also contain forward-looking projections (e.g., proposed modifications in a WMP or periodically updated cropping or nutrient export plans in an NMP) that never come to exist. (See Central Valley Water Board Order R5-2013-0122, Provision J.1, and Attachments B and C [specifying required contents and triggers for updates of WMPs and NMPs § 15000 et seq.].) The CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) NMPs should be supported by additional data sources confirming

that hypothetical, *planned* conditions reflect(ed) actual, existing conditions. Provide that existing conditions baseline may not include hypothetical conditions, such as conditions that might be allowed under existing permits but that have not occurred. (See Cal. Code Regs., tit. 14, § 15125(a)(3).) The County should ensure that data obtained from NMPs and WMPs are reflective of existing, rather than hypothetical, conditions at the Dairy. To the extent possible, determinations of existing conditions based on WMPs and NMPs should be supported by additional data sources confirming that hypothetical, *planned* conditions reflect(ed) actual, existing conditions.

The Dairy's Annual Reports, which must be submitted to Central Valley Water Board annually (see Dairy General Order, Requirement L.1, MRP-12 – MRP-14) are more reflective than WMPs and NMPs of existing conditions at the Dairy. Annual Reports must describe, among other things maximum and average herd sizes, volume and characteristics of wastes generated at and disposed of by the Dairy, waste disposal details such as where waste was applied, crops used to uptake nitrogen from land applied wastes, whether and where manure was transferred for use or disposal at offsite locations, and whether waste was managed and disposed in accordance with the Dairy's WMP and NMP. In essence, while WMPs and NMPs provide forward-looking *plans* for waste management, storage, and disposal at the Dairy, the Annual Reports reflect the Dairy's actual practices, including variations from those plans. Therefore, Annual Reports are a better source of information than WMPs and NMPs for evaluating baseline conditions at the Dairy in compliance with the requirements of CEQA.

The Central Valley Water Board also recommends using more recent and more representative data to develop the baseline. The Board understands that CEQA allows the lead agency discretion and flexibility to determine what temporal "snapshot" provides the best representation of actual physical conditions (see, e.g., *Communities for a Better Env. v. South Coast Air Qual. Mgmt. Dist.* (2010) 158 Cal.App.4th 439). Nevertheless, it recommends that the County here consider a more representative snapshot that accounts for the variability in conditions at a dairy from year to year. As the County is aware, there are regular fluctuations in dairy herd sizes, cropping of land application areas, and groundwater depth that simply cannot be captured by looking at a single Annual Report, let alone single WMPs and NMPs from nearly a decade ago. A more robust evaluation of multiple recent Annual Reports, in addition to more recent WMPs and NMPs, would provide a more appropriate and representative basis for evaluating the potential effects of the Project.

If the County chooses not to consider a wider range of more recent Annual Reports and other data that is more reflective of existing conditions at the time of NOP circulation, it should include additional explanation based on substantial evidence for why the 2014 NMP and WMP are more appropriate bases than other, more recent, and less hypothetical data concerning conditions at the Dairy.

4. Nitrate Control Program.

The discussion of the Dairy's involvement in the Nitrate Control Program (DEIR, pp. 10-8 to 10-9) includes a brief discussion of the status of the Management Zone(s) in which the Dairy is participating. However, the most recent status may be missing. For example, while mentioning the Early Action Plan, the DEIR does not mention whether the Valley

Water Collaborative (VWC) has submitted its Management Zone Implementation Plan (MZIP). The DEIR also does not mention whether the Dairy is included, nor what its role would be regarding the MZIP. The FEIR should include discussion of any impacts, mitigation measures, and/or project alternatives that may foreseeably result or arise from MZIP implementation.

5. TMDL-based Monitoring and Mitigation.

The DEIR mentions the Total Maximum Daily Load (TMDL) Program – Impaired Waterways (DEIR, pp. 10-10), lists pollutants, and states the NMP and WMP are closely monitored to address potential impacts to the nearby impaired waterways (Merced and San Joaquin Rivers). However, many of the listed pollutants, whose source is likely agriculture, are not included in the Dairy General Order’s Monitoring and Reporting Program’s required constituent list. The DEIR should discuss measures for monitoring and mitigating impacts from those additional constituents.

6. Incorrect Reference to Maximum Permitted Herd Size.

The DEIR states that the Dairy is permitted for a maximum herd size of 2,703 mature cows including the 15 percent variation. (DEIR, pp. 3-24, 10-5.) Central Valley Water Board records indicate that the Dairy is actually permitted for a maximum herd size of 3,220 mature cows including the 15 percent variation.

7. Inconsistent Discussion of Herd Size Increase.

The Nutrient Management Plan (NMP) signed on 24 August 2021 and provided in DEIR Appendix J, indicates a herd size increase of 2,150 animals. This is inconsistent with the herd size increase of 1,650 animals presented on Table 3-3 of the DEIR (DEIR, Page 3-11). According to the NMP, application land was approximately 891 acres, but according to the DEIR it was 887 acres including the added new cropland 32 through 38. According to the DEIR, about 24.2 acres of the application land will be lost to new proposed structures that include four new roofed freestall barns, a new milking parlor, a storage barn, and two Tier 1 wastewater storage ponds that will be installed north of the dairy site on APN 045-060-009. The NMP signed on 24 August 2021 upon which the DEIR is based is inconsistent and therefore Mitigation Measure HYD-3d (DEIR, Page 2-8) is flawed because the NMP did not take in consideration the 24.2 acres loss of application land.

8. The WMP (signed 2 June 2020).

According to the DEIR, the mechanical manure separation system in addition to the settling basin has an efficiency of 40% (p. 10-24 [214 of 320] of the DEIR), but the 2020 WMP indicated that this combined manure solids separation efficiency is 65%. A decrease in the manure separation rate would increase the volume of residual manure solids and bedding sent to the wastewater storage ponds and therefore increase the required storage capacity of the dairy. The County should be aware of this inconsistency and how it can relate to reported and actual capacities during operations.

The 2020 WMP included one existing settling basin, two existing wastewater storage ponds, and two proposed Tier 1 wastewater storage ponds that will be installed north of the Dairy site on APN 045-060-009. In the 2020 WMP, the required and the existing storage capacities were calculated to be 20.3 and 39.1 million gallons, respectively.

Central Valley Water Board staff sent a letter dated 8 July 2020 (Letter) regarding the review of the design report for the two proposed Tier 1 wastewater storage ponds (Design Report). The Letter contained multiple comments on the Design Report that needed to be addressed by the Dairy, including the submission of an operation and maintenance plan for the LCRS systems, an explanation of the electrical leak survey procedure, a clarification of the inconsistency between Drain Trench and Trench Drain, and the submission of a WMP that shows sufficient storage capacity utilizing legal ponds that do not intersect groundwater. The Letter also served as a notice that the cover letter that the Dairy submitted with their design report does not serve as an approval for the Design Report and that the Dairy could proceed with construction only when an approval-to-construct letter is issued by the Executive Officer. The County should be aware of these outstanding comments and that the Dairy needs to address them before the Central Valley Water Board approves their Design Report.

The Central Valley Water Board appreciates Merced County's consideration of its comments on the DEIR. If you have any questions, please contact me by phone at (916) 464-4724 or by email at daniel.gamon@waterboards.ca.gov.

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