

*FINAL*

**ENVIRONMENTAL IMPACT REPORT  
FOR THE  
SILVA DAIRY FARMS  
EXPANSION PROJECT**

**CONDITIONAL USE PERMIT CUP21-011**



**COUNTY OF MERCED  
DEPARTMENT OF COMMUNITY  
AND ECONOMIC DEVELOPMENT**

Prepared with the Technical Assistance of:  
Environmental Planning Partners, Inc.



SCH # 2022080190  
February 2025

***FINAL***  
**ENVIRONMENTAL IMPACT REPORT**  
**FOR THE**  
**SILVA DAIRY FARMS EXPANSION PROJECT**  
**CONDITIONAL USE PERMIT CUP21-011**

---

**COUNTY OF MERCED**  
**DEPARTMENT OF COMMUNITY**  
**AND ECONOMIC DEVELOPMENT**  
2222 'M' Street  
Merced, CA 95340

Prepared with the Technical Assistance of:  
Environmental Planning Partners, Inc.



2934 Gold Pan Court, Suite 21  
Rancho Cordova, CA 95670

SCH # 2022080190  
February 2025

## TABLE OF CONTENTS

---

1.0	Introduction .....	1-1
1.1	CEQA Process .....	1-1
1.2	Purpose of This Environmental Impact Report.....	1-1
1.3	Type of Environmental Impact Report .....	1-2
1.4	Public Review .....	1-2
1.5	County Consideration of the Silva Dairy Farms Expansion Project.....	1-3
1.6	Comments that Require Responses .....	1-3
1.7	Mitigation Monitoring and Reporting Program.....	1-4
2.0	Executive Summary of the EIR .....	2-1
2.1	Project Summary.....	2-1
2.2	Summary of Project Alternatives .....	2-1
2.3	Areas of Controversy/Issues to be Resolved.....	2-2
2.4	Summary of Environmental Impacts and Mitigation Measures.....	2-3
3.0	Public Comment and Response to Comments.....	3-1
3.1	Public Comments and Responses .....	3-1
4.0	Changes to Text of the Environmental Documents .....	4-1
4.1	Changes to the Environmental Impact Report.....	4-1

## LIST OF TABLES

---

Table 2-1	Summary of Impacts and Mitigation Measures .....	2-4
Table 3-1	CalEnviroScreen Scores for Merced County Rural Census Tracts.....	3-59

This page intentionally  
left blank.

## 1.1 CEQA PROCESS

In preparing an Environmental Impact Report (EIR), the California Environmental Quality Act (CEQA) requires public agencies to circulate a Draft EIR (DEIR) for public and agency review and comment. The public agency then uses the comments obtained by this review to modify or correct the EIR for subsequent use in project review and consideration. The document containing the text of any comments received on the DEIR, responses of the lead agency to these comments, and any corrections or amendments to the EIR is termed the Final EIR (FEIR).

The DEIR for the Silva Dairy Farms Expansion project was circulated locally and with the State Clearinghouse, SCH #2022080190, from July 25, 2024 to September 9, 2024. The County accepted written comments on the DEIR during this period. This FEIR has been prepared to respond to the comments received on the DEIR for the Silva Dairy Farms Expansion project.

Section 15132 of the CEQA Guidelines, requires that an FEIR consist of:

- The DEIR (published on July 25, 2024 and incorporated by reference);
- A list of persons, organizations, and public agencies commenting on the DEIR;
- Comments received on the DEIR;
- The response of the Merced County Community and Economic Development Department to significant environmental issues raised in the review and consultation process; and,
- Modifications to the EIR arising from the County's response to comments received on the DEIR.

This “response to comments” document, together with the DEIR for the Silva Dairy Farms Expansion project and its Appendices, constitutes the FEIR for the project. This document incorporates comments received on the DEIR, as well as responses by the lead agency (Merced County) to these comments. The FEIR is an informational document that must be considered and certified by the lead agency prior to considering approval of the Silva Dairy Farms Expansion project.

## 1.2 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

CEQA requires the evaluation of government actions or private activities permitted by government to determine their effects on the environment. When such an action could have a significant effect on the environment, the agency with primary responsibility over the approval of the project (the lead agency) is required to prepare an EIR. As stated in CEQA Guidelines Section 15121:

An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency (*when considering whether to approve a project*).

An EIR is the public document used to meet these requirements. The EIR must disclose: significant adverse environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects. For this EIR, an “impact” or “significant impact” is assumed to be an adverse effect on the environment.

This EIR is intended to provide information to the public and to decision makers regarding the potential environmental effects of approval and implementation of the Silva Dairy Farms Expansion project. Prior to considering approval of this request, the Merced County Planning Commission must certify that this EIR is adequate under CEQA and that they have considered the information therein. If significant environmental effects are identified, the lead agency must adopt “Findings” indicating whether feasible mitigation measures or alternatives exist that can avoid or reduce those effects. “Findings” are described more fully in Section 1.5 below.

### **1.3 TYPE OF ENVIRONMENTAL IMPACT REPORT**

This EIR is being prepared as a “Project” EIR pursuant to Section 15161 of the State CEQA Guidelines. A project EIR is prepared to examine the environmental impacts of a specific development project. According to the CEQA Guidelines, “(t)his type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.” This EIR is intended to serve as the environmental document for all activities related to the Silva Dairy Farms Expansion project, including issuance of a Conditional Use Permit and issuance of construction and building permits.

### **1.4 PUBLIC REVIEW**

CEQA provides three opportunities for public and agency participation during the environmental review process. These points are: (1) during the Notice of Preparation (NOP), when the public and agencies are informed that an EIR is to be prepared, and are requested to comment on the scope and contents of the proposed EIR; (2) upon circulation of the DEIR, when the public and agencies can comment on the adequacy of the environmental document; and (3) finally, after circulation of the FEIR, when the public and agencies can evaluate the lead agency’s responses to comments submitted on the DEIR.

In accordance with Section 15082(a) of the State CEQA Guidelines, the Notice of Preparation of an EIR was filed with the Office of Planning and Research (OPR) on August 9, 2022. The NOP and Initial Study were circulated to the public, local and state agencies, and other interested parties to solicit comments on the proposed project. Environmental issues and alternatives raised by comments received on the NOP during the 30-day public review period were considered for inclusion in the EIR.

The DEIR for the Silva Dairy Farms Expansion project was circulated locally and with the State Clearinghouse from July 25, 2024 to September 9, 2024. During this time, the DEIR and its Appendices were available for download from the County website at:

<https://www.countyofmerced.com/414/Environmental-Documents>

Printed copies of the DEIR and its supporting documents were made available at the Merced County Community and Economic Development Department, 2222 'M' Street, Merced, California 95340.

## **1.5 COUNTY CONSIDERATION OF THE SILVA DAIRY FARMS EXPANSION PROJECT**

After the DEIR public circulation period closed, the County prepared responses to all written comments submitted during the comment period. The DEIR, the comments and responses, including any revisions of the DEIR contained therein, constitute the FEIR that the County will evaluate for certification, based on review and consideration of the FEIR and other evidence presented in the public record. County staff will make recommendations to the Planning Commission regarding the adequacy of the FEIR and the merits of the proposed Silva Dairy Farms Expansion project. The Planning Commission will review the FEIR for adequacy and consider it for certification, pursuant to the requirements of Section 15090 of the State CEQA Guidelines.

Prior to certification of the FEIR, the County will prepare written findings of fact for each significant environmental impact identified in the FEIR, which in turn must be supported by substantial evidence in the administrative record. For each significant impact, the County must make one of the following findings:

- Determine that changes in the project have been made to substantially reduce the magnitude of the impact;
- Determine that the changes to the project are within another agency's jurisdiction, and have been or should be adopted; or,
- Find that specific economic, social, legal, technical, or other considerations make mitigation measures or alternatives infeasible (State CEQA Guidelines Section 15091(a)).

After considering the FEIR in conjunction with making findings, if implementation of the Silva Dairy Farms Expansion project would result in significant environmental impacts after imposition of feasible mitigation measures, the County may approve the Silva Dairy Farms Expansion project if the benefits of the project are determined to outweigh the unavoidable environmental effects. Under these circumstances, a Statement of Overriding Considerations would be prepared explaining why the County is willing to accept each significant effect (State CEQA Guidelines Section 15093).

## **1.6 COMMENTS THAT REQUIRE RESPONSES**

Section 15088(c) of the State CEQA Guidelines specifies that the focus of the responses to comments shall be on the disposition of significant environmental issues. Responses are not required on comments regarding the merits of the proposed Silva Dairy Farms Expansion project or on issues not related to the project's environmental impacts. Comments on the merits of the proposed Silva Dairy Farms Expansion project or other comments that do not raise environmental issues are noted in the responses, and will be reviewed by the Planning Commission before it takes any action on whether to approve the proposed Silva Dairy Farms Expansion project. When a comment does not directly pertain to the environmental issues analyzed in the DEIR, does not ask a question about the adequacy of the analysis contained in the DEIR, or does not challenge an element of or conclusion of the DEIR, the response will note the comment and provide additional

information where possible. The staff report prepared as part of the hearing process will address non-environmental comments and the County policies that regulate confined animal facilities.

## **1.7 MITIGATION MONITORING AND REPORTING PROGRAM**

CEQA requires that when a public agency makes findings based on an EIR, the public agency must adopt a Mitigation Monitoring and Reporting Program (MMRP) based on those measures that the agency has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (PRC Section 21081.6). The reporting or monitoring plan must be designed to ensure compliance with the adopted measures during project implementation (PRC Section 21081.6). The MMRP for this project has been prepared and circulated under separate cover for consideration by the County in conjunction with certification of the FEIR. Copies of the Mitigation Monitoring and Reporting Program, which must be adopted upon approval of the Silva Dairy Farms Expansion project, are available from the Merced County Community and Economic Development Department at 2222 'M' Street, Merced, California 95340.



## 2 EXECUTIVE SUMMARY OF THE EIR

---

### 2.1 PROJECT SUMMARY

The existing Silva Dairy Farms operation consists of two separate dairy facilities located on the north and south side of State Route (SR) 140 at the intersection of Edminster Road in the Stevinson area of the County. The main dairy facility is located south of SR 140 on  $\approx$ 25 acres, and the north facility is located on  $\approx$ 18 acres; the total existing farm area includes 414 acres on 22 parcels. The project cropland application area consists of  $\approx$ 364 acres.

Conditional Use Permit CUP21-011 proposes to modify and expand the existing dairy to house a total of 7,300 animals, including 4,000 milk cows, 500 dry cows, and 2,800 support stock, and to officially merge the two existing separate dairy facility permits into a single permit. Considering the existing 2,953 animals at the dairy facility, the proposed expansion would represent an increase of 4,347 animals from existing numbers. The proposed project would include construction of supporting buildings and features at the dairy facility, including five new freestall barns, two loafing barns, commodity barn, milking parlor expansion, a shop, and dry manure storage and calf hutch area. With construction of the proposed facilities, approximately 7 acres of cropped acreage would be converted to active dairy facilities. The remaining acreage would continue to be cultivated with dairy feed crops.

For more detailed information about the project, see DEIR Chapter 3, *Project Description*.

### 2.2 SUMMARY OF PROJECT ALTERNATIVES

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe and comparatively evaluate a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Thus, the range of alternatives evaluated in the following analysis is dictated by the range of significant impacts identified in the DEIR, and evaluated alternatives are limited to those that would reduce or eliminate identified environmental impacts.

This EIR identified 22 significant impacts that would occur with implementation of the proposed Silva Dairy Farms project, including:

1. the generation of ozone precursor emissions;
2. adverse odor from project operations;
3. nest disturbance and loss of foraging habitat for Swainson's hawk;
4. impacts to giant gartersnake;
5. impacts to western pond turtle;
6. loss of nesting habitat for tricolored blackbird;
7. impacts to the San Joaquin kit fox and/or American badger;
8. loss of foraging and nesting habitat for sensitive and migratory bird species;
9. interference with night-active wildlife;
10. substantial adverse change in the significance of historic, archaeological, or paleontological resources;
11. accidental discovery and disturbance of human remains;

12. increased greenhouse gas emissions from project construction and operation;
13. increased fly production and related nuisance effects;
14. degradation of surface water quality from dairy expansion operations;
15. groundwater contamination from dairy operations;
16. impacts from new well construction;
17. risk release of pollutants due to project inundation in flood zones;
18. impacts to water quality at off-site locations that receive manure;
19. conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan;
20. land use compatibility with existing off-site residential uses adjacent to the project;
21. cumulative impacts to air quality;
22. cumulative impacts to hydrology and water quality.

The environmental analysis concluded that all significant impacts could be reduced to a less-than-significant level with implementation of mitigation measures outlined in the EIR, except for impacts from ozone precursor emissions, greenhouse gas emissions<sup>1</sup>, impacts to groundwater quality from dairy project operations, impacts to water quality at off-site locations that receive manure, conflicts with a water quality control plan, and a significant contribution to cumulative air quality, and cumulative water quality impacts. These impacts would remain significant and unavoidable. Accordingly, four alternatives, including the required No Project alternative, listed below, were formulated to illustrate the range of projects that could be implemented as an alternative to the proposed Silva Dairy Farms Expansion project.

- Alternative 1 – No Project Alternative
- Alternative 2 – On-Site Anaerobic Digester Alternative
- Alternative 3 – Dairy Digester Cluster Alternative
- Alternative 4 – Air Emissions Limited Herd Size

Based on the comparative evaluation contained in the EIR, other than the No Project Alternative, Alternative 4 – Air Emissions Limited Herd Size Alternative would reduce the magnitude of the most impacts. Several of the significant impacts identified for the project would be reduced, but not eliminated, with implementation of Alternative 4. Alternative 4 would be the environmentally superior alternative.

## **2.3 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED**

The potential areas of controversy and issues to be resolved in the Final EIR process were derived from a review of responses received from public agencies and the public during circulation of the Draft EIR. Responses received from public agencies and the public during circulation of the Draft EIR raised similar environmental concerns previously identified in the NOP and discussed in the Draft EIR. These areas are summarized as follows:

- Short-term construction air quality impacts and long-term air quality impacts from an increase in operational emissions, including generation of odors (see Chapter 5, *Air Quality and Odors*).

---

<sup>1</sup> Impacts due to GHG emissions are considered a cumulative impact, since the project would result in a cumulatively considerable contribution to this impact.

- Potential inconsistency with state and federal air quality attainment requirements (see Chapter 5, *Air Quality and Odors*).
- Biological resources impacts from construction activities (see Chapter 6, *Biological Resources*).
- Cultural resources impacts from site clearing, grading, and other ground disturbing activities (see Chapter 7, *Cultural Resources and Tribal Cultural Resources*).
- Compliance with tribal consultation requirements, as applicable (see Chapter 7, *Cultural Resources and Tribal Cultural Resources*).
- Greenhouse gas emissions from direct and indirect sources (see Chapter 8, *Greenhouse Gas Emissions and Energy Use*).
- Potential inconsistency with the State's climate goals (see Chapter 8, *Greenhouse Gas Emissions and Energy Use*).
- Potential generation of nuisance insects (see Chapter 9, *Nuisance Conditions from Insects*).
- Violation of water quality standards, depletion of groundwater, groundwater and surface water contamination, and impacts to water quality at off-site locations (see Chapter 10, *Hydrology and Water Quality*).
- Potential incompatibility with Merced County planning documents (see Chapter 11, *Land Use Compatibility*).
- Conflict with Merced County Zoning Code and Animal Confinement Ordinance requirements, and land use incompatibility with surrounding residences and communities (see Chapter 11, *Land Use Compatibility*).
- Cumulative impacts of dairy expansion proposals in Merced County (see Chapter 12, *Required CEQA Analyses*).

## 2.4 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. The level of significance for each environmental impact is indicated both before and after mitigation. For a detailed discussion of the proposed project impacts and mitigation measures, see Chapters 5 through 11 of the Draft EIR.

Table 2-1      Summary of Impacts and Mitigation Measures					
Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Air Quality and Odors (EIR Chapter 5)					
Impact AQ-1: Construction-related air emissions	LS		<b>Recommended Measure AQ-1:</b> The applicant shall provide a Dust Control Plan approved by the SJVAPCD to the County, and implement all measures of applicable SJVAPCD Rules and Regulations.	LS	
Impact AQ-2: Carbon monoxide emissions from operational equipment and increased traffic	LS		<b>Mitigation Measure AQ-2:</b> None required.	LS	
Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic		PS	<b>Mitigation Measure AQ-3:</b> The applicant shall consult with the SJVAPCD regarding the establishment of a Voluntary Emissions Reduction Agreement between the applicant and the SJVAPCD.		SU
			Implementation of Alternative 1, No Project, would reduce the magnitude and significance of this effect.	LS	
			Implementation of Alternative 2, On-Site Anaerobic Digester, would potentially increase the magnitude but not the significance of this effect.		SU
			Implementation of Alternative 3, Dairy Digester Pipeline Cluster, would not change the significance of this effect.		SU
			Implementation of Alternative 4, Limited Herd Size, would reduce the magnitude and significance of this effect.	LS	
Impact AQ-4: PM <sub>10</sub> and PM <sub>2.5</sub> emissions from fugitive dust during project operations	LS		<b>Mitigation Measure AQ-4:</b> None required.	LS	
Impact AQ-5: Expose nearby residents to substantial pollutant concentrations from the emissions of toxic air contaminants from project construction and operations	LS		<b>Recommended Measure AQ-5:</b> The applicant shall apply SJVAPCD-approved control measures to reduce PM <sub>10</sub> emissions below SJVAPCD health risk thresholds.	LS	
Impact AQ-6: Expose nearby residents to substantial pollutant concentrations from emissions of criteria air pollutants	LS		<b>Mitigation Measure AQ-6:</b> None required.	LS	

Table 2-1 Summary of Impacts and Mitigation Measures					
Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Impact AQ-7: Adverse odor from project operations		PS	<b>Mitigation Measure AQ-7:</b> The applicant shall include additional information to neighbors regarding point of contact for nuisance complaints as part of the Odor Control Plan, and provide documentation regarding the preparation and distribution of the information document to Merced County prior to herd expansion.	LS	
Impact AQ-8: Health impacts due to Valley Fever	LS		<b>Recommended Measure AQ-8a:</b> Implement Recommended Measure AQ-1, which requires receipt of a SJVAPCD approved Dust Control Plan. <b>Recommended Measure AQ-8b:</b> Implement the Dust Control Plan, which shall include controls and work practices that reduce workers' exposure. <b>Recommended Measure AQ-8c:</b> Provide training and personal protective respiratory equipment to construction workers regarding Valley Fever.	LS	
Impact AQ-9: Health effects as a result of exposure to bioaerosols during dairy operations	LS		<b>Mitigation Measure AQ-9:</b> None required.	LS	
Impact AQ-10: Conflict with or obstruct implementation of the applicable air quality plan	LS		<b>Mitigation Measure AQ-10:</b> None required.	LS	
<b>Biological Resources (EIR Chapter 6)</b>					
Impact BIO-1: Nest disturbance and loss of foraging habitat for Swainson's hawk		PS	<b>Mitigation Measure BIO-1a:</b> <i>Protocol Surveys:</i> A qualified biologist shall conduct protocol surveys if work begins between March 1 and August 30. Mitigate for loss of Swainson's hawk nesting habitat. <b>Mitigation Measure BIO-1b:</b> <i>Nest Avoidance:</i> Implement measures to minimize potential impacts to Swainson's Hawk nests. <b>Mitigation Measure BIO-1c:</b> <i>Foraging Impacts:</i> If necessary, mitigate for loss of Swainson's hawk foraging habitat, and implement measures as required.	LS	

Table 2-1 Summary of Impacts and Mitigation Measures					
Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Impact BIO-2: Impacts to giant gartersnake		PS	<b>Mitigation Measure BIO-2a:</b> Complete an Environmental Awareness Training Program regarding giant gartersnake and procedures to follow if a snake is observed. <b>Mitigation Measure BIO-2b:</b> Construction of the WW storage pond shall occur between May 1 and October 1. Conduct preconstruction surveys and notify agencies if giant gartersnake is observed.	LS	
Impact BIO-3: Impacts to western pond turtle		PS	<b>Mitigation Measure BIO-3a:</b> Implement MM BIO-2a. <b>Mitigation Measure BIO-3b:</b> If construction occurs within 200 feet from suitable aquatic habitat, conduct preconstruction within 48 hours. If western pond turtle is found, coordinate with CDFW to ensure that the turtles are not harmed.	LS	
Impact BIO-4: Impacts to the San Joaquin kit fox and/or American badger		PS	<b>Mitigation Measure BIO-4a:</b> Implement MM BIO-2a. <b>Mitigation Measure BIO-4b:</b> The project applicant must follow the USFWS guidelines for protection of San Joaquin Kit Fox. Measures include preconstruction surveys for the kit fox and badger, preventative measures to avoid potential impacts to these species, and compulsory action should any animal be encountered.	LS	
Impact BIO-5: Loss of nesting habitat for tricolored blackbird		PS	<b>Mitigation Measure BIO-5a:</b> Implement MM BIO-2a. <b>Mitigation Measure BIO-5b:</b> If a TCBB nest colony is discovered during preconstruction surveys during the breeding season, a minimum 300-foot buffer shall be applied around the nesting colony and all disturbance within the buffer area will be prohibited until the breeding season has ended.	LS	

**Table 2-1 Summary of Impacts and Mitigation Measures**

Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
<b>Impact BIO-6: Loss of foraging and nesting habitat for sensitive and migratory bird species</b>		PS	<b>Mitigation Measure BIO-6a:</b> Conduct a preconstruction survey to determine the presence of nesting birds for any ground clearing or construction activities that will be initiated during the breeding season (February 15 through September 15). Implement measures to reduce project-related impacts to active bird nests and to reduce the potential for construction activities to interrupt breeding and rearing behaviors of birds. <b>Mitigation Measure BIO-6b:</b> Implement MM BIO-1c.	LS	
<b>Impact BIO-7: Loss and/or degradation of special-status plant species</b>	LS		<b>Mitigation Measure BIO-7:</b> None required.	LS	
<b>Impact BIO-8: Loss and/or degradation of riparian and vernal pool habitat or sensitive natural communities; loss or modification of wetlands</b>	LS		<b>Mitigation Measure BIO-8:</b> None required.	LS	
<b>Impact BIO-9: Interference with on-site wildlife movement corridors or wildlife nursery sites</b>		PS	<b>Mitigation Measure BIO-9:</b> The project applicant shall develop a Lighting Plan to minimize or shield project-related lighting to maintain lighting within developed areas of the dairy.	LS	
<b>Impact BIO-10: Potential selenium and heavy metals effects to on-site biological resources</b>	LS		<b>Mitigation Measure BIO-10:</b> None required.	LS	
<b>Impact BIO-11: Conflict with local policies or ordinances protecting biological resources</b>	LS		<b>Mitigation Measure BIO-11:</b> None required.	LS	
<b>Cultural Resources and Tribal Cultural Resources (EIR Chapter 7)</b>					
<b>Impact CUL-1: Cause a substantial adverse change in the significance of historical, archaeological, or paleontological resource, or a unique geological feature</b>		PS	<b>Mitigation Measure CUL-1:</b> The project applicant and construction contractor shall implement a plan to address discovery of unanticipated cultural or paleontological resources. If any features are discovered, work shall be suspended until a qualified archaeologist assesses the discovery and provides consultation with appropriate agencies. Appropriate mitigation shall be implemented as advised.	LS	

Table 2-1 Summary of Impacts and Mitigation Measures					
Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
<b>Impact CUL-2: Result in the accidental discovery and disturbance of human remains</b>		PS	<b>Mitigation Measure CUL-2a:</b> The project applicant and construction contractor shall implement the plan to address discovery of unanticipated cultural resources set forth in MM CUL-1.  <b>Mitigation Measure CUL-2b:</b> The project applicant and construction contractor shall implement a plan to address discovery of human remains. In the event human remains are discovered, no further disturbance shall occur until the county coroner has made the necessary findings as to the origin and disposition of the remains, and notified the appropriate parties.	LS	
<b>Impact CUL-3: Cause a substantial adverse change in the significance of a tribal cultural resource</b>	LS		<b>Mitigation Measure CUL-3:</b> None required.	LS	
<b>Greenhouse Gas Emissions and Energy Use (EIR Chapter 8)</b>					
<b>Impact GHG-1: Greenhouse gas emissions from project construction and operation</b>		PS	<b>Mitigation Measure GHG-1:</b> The proposed herd expansion shall not occur until the manure digester cluster is operational, <u>or other alternate feasible Scoping Plan mitigation strategies should the digester be determined infeasible due to changes in funding conditions</u> . Once operational, the dairy operator shall use the digester to store manure from the existing and proposed herd in order to capture methane for energy use to displace fossil fuel use and reduce GHG emissions from the dairy.		SU
			Implementation of Alternative 1, No Project, would reduce the magnitude and significance of this effect.	LS	
			Implementation of Alternative 2, On-Site Anaerobic Digester, would reduce the magnitude and the significance of this effect.	LS	
			Implementation of Alternative 3, Dairy Digester Pipeline Cluster, would reduce the magnitude and the significance of this effect.	LS	
			Implementation of Alternative 4, Limited Herd Size, would reduce the magnitude but not the significance of this effect.		SU



**Table 2-1 Summary of Impacts and Mitigation Measures**

Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
Impact GHG-2: Wasteful or inefficient consumption of energy	LS		<b>Mitigation Measure GHG-2:</b> None required.	LS	
Impact GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency	LS		<b>Mitigation Measure GHG-3:</b> None required.	LS	
<b>Nuisance Conditions from Insects (EIR Chapter 9)</b>					
Impact HAZ-1: Increased fly production and related nuisance effects		PS	<b>Mitigation Measure HAZ-1:</b> Implement the Odor Control Plan as revised in MM AQ-7.	LS	
Impact HAZ-2: Create significant nuisance conditions due to increased mosquito production	LS		<b>Mitigation Measure HAZ-2:</b> None required.	LS	
<b>Hydrology and Water Quality (EIR Chapter 10)</b>					
Impact HYD-1: Degradation of water quality due to storm water runoff during project construction	LS		<b>Recommended Measure HYD-1:</b> The project applicant shall Submit permit registration documents for the Construction General Permit Order 2022-0057-DWQ to the SWRCB, and comply with all requirements of the permit.	LS	
Impact HYD-2: Degradation of surface water quality from project operations	LS		<b>Mitigation Measure HYD-2:</b> None required.	LS	
Impact HYD-3: Groundwater contamination from project operations		PS	<b>Mitigation Measure HYD-3a:</b> The CVRWQCB should develop a revised Dairy General Order with updated standards that apply to all confined animal facilities within the Central Valley.  <b>Mitigation Measure HYD-3b:</b> The project applicant shall implement BMPs to prevent contamination of groundwater.		SU

Table 2-1 Summary of Impacts and Mitigation Measures					
Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<p><b>Mitigation Measure HYD-3c:</b> The CVRWQCB should issue interim individual WDRs. The applicant shall comply with requirements of the NMP/WMP, the interim individual WDR, and all Merced County ACO requirements not superseded by the conditions of the interim individual WDR.</p> <p><b>Mitigation Measure HYD-3d:</b> The project applicant shall apply liquid and solid manure to not exceed agronomic rates as set forth in the NMP, and shall confirm agronomic rates with soil testing as described in the NMP.</p> <p><b>Mitigation Measure HYD-3e:</b> The applicant shall comply with the Salt and Nitrate Control Program requirements to protect surface waters and groundwater from salts and nitrates in wastewater, as set forth in Board Resolution R5-2020-0057.</p> <p><b>Mitigation Measure HYD-3f:</b> The project applicant shall maintain continued membership in the groundwater monitoring network or install a site-specific groundwater monitoring system.</p> <p><b>Mitigation Measure HYD-3g:</b> The project applicant shall continue groundwater monitoring of the on-site domestic and irrigation wells, and develop an updated well monitoring schedule and submit to the County DEH.</p> <p><b>Mitigation Measure HYD-3h:</b> After monitoring, if groundwater contamination is shown, the project applicant may be required to submit a new ROWD to the CVRWQCB.</p> <p><b>Mitigation Measure HYD-3i:</b> The Department of Community and Economic Development and the DEH shall make a final inspection of the facility to confirm the dairy meets local and state requirements.</p> <p><b>Mitigation Measure HYD-3j:</b> During construction, all soils that contain manure or process water residue shall be maintained on the project site.</p>		

Table 2-1 Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			<b>Mitigation Measure HYD-3k:</b> The CVRWQCB may require the applicant to retrofit the existing ponds with a liner that meets Tier 1 pond standards, or decommission existing ponds and use new ponds.		
			Implementation of Alternative 1, No Project, would reduce the magnitude and significance of this effect.	LS	
			Implementation of Alternative 2, On-Site Anaerobic Digester, would reduce the magnitude and the significance of this effect.		SU
			Implementation of Alternative 3, Dairy Digester Pipeline Cluster, would reduce the magnitude and the significance of this effect.		SU
			Implementation of Alternative 4, Limited Herd Size, would reduce the magnitude but not the significance of this effect.		SU
<b>Impact HYD-4: Decrease groundwater supplies</b>	LS		<b>Mitigation Measure HYD-4:</b> None required.	LS	
<b>Impact HYD-5: Modification of surface water drainage patterns and an increase in runoff</b>	LS		<b>Mitigation Measure HYD-5:</b> None required.	LS	
<b>Impact HYD-6: Comply with regulatory requirements for new well construction</b>		PS	<b>Mitigation Measure HYD-6:</b> The applicant shall demonstrate compliance with the well permitting requirements of Drought Executive Order N-7-22 and the Merced County Groundwater Ordinance, including submittal of the proposed well plans to the Merced Subbasin Groundwater Sustainability Agency for a consistency determination.	LS	
<b>Impact HYD-7: Risk release of pollutants due to project inundation in flood zones</b>		PS	<b>Mitigation Measure HYD-7:</b> Implement flood protection report measures.	LS	
<b>Impact HYD-8: Water supply pathways for pollutant migration</b>	LS		<b>Mitigation Measure HYD-8:</b> None required.	LS	
<b>Impact HYD-9: Impacts to water quality at off-site locations as a result of project operations</b>		PS	<b>Mitigation Measure HYD-9:</b> The project applicant shall obtain written agreement from the recipients of manure exported off site, and provide the most recent analysis of the dry manure, in writing, to the manure recipient.		SU

Table 2-1 Summary of Impacts and Mitigation Measures					
Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
			Implementation of Alternative 1, No Project, would reduce the magnitude and significance of this effect.	LS	
			Implementation of Alternative 2, On-Site Anaerobic Digester, would reduce the magnitude and the significance of this effect.		SU
			Implementation of Alternative 3, Dairy Digester Pipeline Cluster, would reduce the magnitude and the significance of this effect.		SU
			Implementation of Alternative 4, Limited Herd Size, would reduce the magnitude but not the significance of this effect.		SU
<b>Impact HYD-10: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan</b>		PS	<b>Mitigation Measure HYD-10a:</b> Implement MM HYD-3, which requires compliance with Merced County and RWQCB regulations to minimize impacts to surface and groundwater quality. <b>Mitigation Measure HYD-10b:</b> Implement MM HYD-9, which requires compliance with Merced County and RWQCB regulations to minimize impacts to surface and groundwater quality from manure applied to cropland off site. <b>Mitigation Measure HYD-10c:</b> Implement MM HYD-6, which requires the applicant to demonstrate compliance with the requirements of Drought Executive Order N-7-22 and the Merced County Groundwater Ordinance.		SU
			Implementation of Alternative 1, No Project, would reduce the magnitude and significance of this effect.	LS	
			Implementation of Alternative 2, On-Site Anaerobic Digester, would reduce the magnitude and the significance of this effect.		SU
			Implementation of Alternative 3, Dairy Digester Pipeline Cluster, would reduce the magnitude and the significance of this effect.		SU
			Implementation of Alternative 4, Limited Herd Size, would reduce the magnitude but not the significance of this effect.		SU
<b>Land Use Compatibility (EIR Chapter 11)</b>					
<b>Impact LU-1: Consistency with Merced County Land Use Plans and policies adopted to protect the environment, including setback standards</b>	LS		<b>Mitigation Measure LU-1:</b> None required.	LS	

**Table 2-1 Summary of Impacts and Mitigation Measures**

Environmental Impact	Level of Significance Before Mitigation		Summary of Mitigation Measure/Alternative	Level of Significance After Mitigation	
	LS	PS		LS	SU
<b>Impact LU-2: Land use compatibility with existing off-site residential uses adjacent to the project area</b>		PS	<b>Mitigation Measure LU-2:</b> Implement the odor and dust control measures set forth in MM AQ-7.	LS	
<b>Impact LU-3: Land use compatibility with existing parks or wildlife uses adjacent to the project area</b>	LS		<b>Mitigation Measure LU-3:</b> None required.	LS	
<b>Cumulative Impacts</b>					
Aesthetics	LS		No cumulatively considerable contribution.	LS	
Agricultural Resources	LS		No cumulatively considerable contribution.	LS	
Air Quality		PS	The project would have a cumulatively considerable contribution.		SU
Biological Resources	LS		No cumulatively considerable contribution.	LS	
Cultural Resources	LS		No cumulatively considerable contribution.	LS	
Geological and Mineral Resources	LS		No cumulatively considerable contribution.	LS	
Greenhouse Gas Emissions			See Impact GHG-1		
Hazards (Nuisance Insects)	LS		No cumulatively considerable contribution.	LS	
Hydrology and Water Quality		PS	The project would have a cumulatively considerable contribution.		SU
Land Use	LS		No cumulatively considerable contribution.	LS	
Noise	LS		No cumulatively considerable contribution.	LS	
Population and Housing	LS		No cumulatively considerable contribution.	LS	
Public Services	LS		No cumulatively considerable contribution.	LS	
Recreation	LS		No cumulatively considerable contribution.	LS	
Transportation and Circulation	LS		No cumulatively considerable contribution.	LS	
Utilities and Service Systems	LS		No cumulatively considerable contribution.	LS	
<b>Growth Inducement and Secondary Effects</b>	LS		None required.	LS	
<b>Irreversible Commitment of Resources</b>	LS		None required.	LS	
<b>Potential Environmental Damage from Accidents</b>	LS		None required.	LS	

LS = Less than significant impact; PS = Potentially significant impact with mitigation; SU = Significant and unavoidable impact

This page intentionally  
left blank.

## 3 PUBLIC COMMENT AND RESPONSE TO COMMENTS

---

### 3.1 PUBLIC COMMENTS AND RESPONSES

The California Environmental Quality Act (CEQA) requires public disclosure in an Environmental Impact Report (EIR) of all project environmental effects and encourages public participation throughout the EIR process. As stated in CEQA Guidelines Section 15200, the purposes of public review of environmental documents are:

- sharing expertise;
- disclosing agency analyses;
- checking for accuracy;
- detecting omissions;
- discovering public concerns; and,
- soliciting counter-proposals.

CEQA Guidelines Section 15201 states that “(p)ublic participation is an essential part of the CEQA process.” A public review period of no less than 30 days nor longer than 60 days is required for a Draft EIR (DEIR) under CEQA Guidelines Section 15105(a). If a State agency is a lead or responsible agency for the project, the public review period shall be at least 45 days. In this case, a review period extending from July 25, 2024 to September 9, 2024 was established.

Merced County is the lead agency for this project (i.e., the agency that has primary discretionary approval authority over portions of the project) and will certify the EIR during project consideration. The Central Valley Regional Water Quality Control Board (CVRWQCB) and the San Joaquin Valley Air Pollution Control District (SJVAPCD) are responsible agencies (i.e., agencies that have more limited discretionary approval authority than the lead agency) and will be required to use this EIR in their consideration of the proposed Silva Dairy Farms Expansion project.

During circulation of the DEIR, Merced County received four comments on the EIR. For every written comment received from the public, agencies, and organizations, Merced County has provided a written response. The comments and responses to comments are included in the following pages.

For comments that advocate that Merced County take a certain action, or where the comment has stated the belief or opinion of the author, the response to the comment notes that Merced County will consider the views of the commenter in the County’s deliberation of the Silva Dairy Farms Expansion project. No other response to such a comment is provided. This is not to diminish the importance of such comments, but rather to ensure that the substance of the comment is debated and considered by the decision-makers of Merced County and not the authors of the EIR.

COMMENTS	DATE	LETTER CODE
----------	------	-------------

***Federal Agency Comments***

None received

***State Agency Comments***

California Department of Transportation	9/3/24	A
California Department of Fish and Wildlife	9/9/24	B
Central Valley Regional Water Quality Control Board	9/9/24	C

***Local and Regional Agency Comments***

None received

***Public Utility and Service Provider Comments***

None received

***Citizen / Non-governmental Organizations Comments***

Leadership Counsel for Justice & Accountability	9/9/24	D
---	--------	---



CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

**California Department of Transportation**

OFFICE OF THE DISTRICT 10 DIRECTOR  
 P.O. BOX 2048 | STOCKTON, CA 95201  
 (209) 948-7943 | FAX (209) 948-7179 TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



September 3, 2024

**10-MER-140-PM 013.700**  
**CUP21-011**  
**Silva Dairy Farms Expansion**

Tiffany Ho  
 County of Merced  
 2222 M Street, 2<sup>nd</sup> Floor  
 Merced, CA 95340

Dear Ms. Ho:

The California Department of Transportation appreciates the opportunity to review the proposed expansion of Silva Dairy Farms to accommodate a total of 7,300 animals. The project is located at various parcels on all quadrants of the SR 140/Edminster Road intersection. The Department has the following comments:

1. Please provide the following information to Caltrans for review and comment prior to project approval.
  - a. Provide the truck off-tracking in pdf and technical files for all turns onto and off of the State Route, including the SR 140/Edminster Road intersection. This analysis must be performed for the largest truck used for the proposed project.
  - b. Edminster Road must be improved to Caltrans standards.
  - c. Please provide a site plan showing the primary access points, and indicate if there be any new proposed access points to SR 140.
  - d. It appears the project traffic has been using an existing "unpaved driveway", approximately 620 feet east of SR 140 / Edminster Rd as an access to SR 140. Caltrans suggests that the project traffic access the project site from SR 140 / Edminster Rd instead. If this driveway is to be used as an access to SR 140, it needs to be accommodated to Caltrans Standards.

**A-1**

2. The developer needs to ensure that the existing State drainage facilities will not be significantly impacted by the project. If historical undeveloped topography shows drainage from this site flowed into the State Right-of-Way, it may continue to do so with the conditions that peak flows may not be increased from the pre-construction quantity and the site runoff be treated to meet present storm water quality standards. If historical undeveloped topography shows drainage from

**A-2**

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Ms. Ho  
September 3, 2024  
Page 2

this site does not flow into the State Right-of-Way, then it will not be allowed to flow into the State Right-of-Way at this time.

3. An Encroachment Permit will be required for work (if any) done within the Department's right of way. This work is subject to the California Environmental Quality Act. Therefore, environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy the Department's environmental review responsibilities. Ground disturbing activities to the site prior to completion and/or approval of required environmental documents may affect the Department's ability to issue a permit for the project. Furthermore, if engineering plans or drawings will be part of your permit application, they should be prepared in standard units.

**A-3**

If you have any questions, please contact me at (209) 483-2582 or Nicholas Fung at (209) 986-1552.

Sincerely,

  
FOR

Tom Dumas  
Chief, Office of Metropolitan Planning

"Provide a safe and reliable transportation network that serves all people and respects the environment"

## Response to Letter A

**Commenter** California Department of Transportation (DOT)  
September 3, 2024

---

- A-1 The comment requests information regarding the project truck movement prior to project approval. Comments include: provide a truck off-tracking analysis; improvements to Edminster Road must meet Caltrans standards; provide a detailed site plan; and reroute access to SR 140 away from the existing unpaved driveway OR improve said driveway to meet Caltrans standards.

The County acknowledges the DOT comment. These items will be included as conditions of approval for the project. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- A-2 The comment states that the existing State drainage facilities must not be significantly impacted by the project. The comment also states that if drainage from the project flows into State right-of-way, then it may continue provided peak flows don't increase and runoff is treated to meet standards. If drainage from the project flows does not flow into State right-of-way, then it will not be allowed with implementation of the project.

The County acknowledges the DOT comment. These items will be included as conditions of approval for the project and reviewed for compliance with Merced County's Stormwater Ordinance. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- A-3 The comment states that an Encroachment Permit will be required if any work is to be done within the State right-of-way, and appropriate environmental studies may be required.

The County acknowledges the DOT comment. The project as proposed does not include any work within the State right-of-way. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

Docusign Envelope ID: 2B9C4BFD-D3CC-46AB-99C7-615D3C36E8A1



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Central Region  
1234 East Shaw Avenue  
Fresno, CA 93710  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



September 9, 2024

Tiffany Ho, Deputy Director of Planning  
Merced County Community and Economic Development Department  
2222 'M' Street  
Merced, California 95340  
(209) 385-7654 ext. 4407  
[Tiffany.Ho@countyofmerced.com](mailto:Tiffany.Ho@countyofmerced.com)

Subject: **Silva Dairy Farms Expansion Project (Project)**  
**Draft Environmental Impact Report (DEIR)**  
**SCH: 2022080190**

Dear Tiffany Ho:

The California Department of Fish and Wildlife (CDFW) received a DEIR from Merced County for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

#### **CDFW ROLE**

**B-1**

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

---

<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Docusign Envelope ID: 2B9C4BFD-D3CC-46AB-99C7-615D3C36E8A1

Tiffany Ho  
Deputy Director of Planning  
September 9, 2024  
Page 2

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

**B-1**

**Unlisted Species:** Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession, or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

## PROJECT DESCRIPTION SUMMARY

**Proponent:** Silva Dairy Farms

**Objective:** The Project proposes to modify and expand the existing dairy to house a total of 7,300 animals, including 4,000 milk cows, 500 dry cows, and 2,800 support stock, to officially merge the two existing separate dairy facility permits into a single permit. The proposed expansion would represent an increase of 4,347 animals from 2,953 animals at this facility. The Project would also include the construction of supporting buildings and features at the dairy facility, including five new freestall barns, two loafing barns, commodity barn, milking parlor expansion, a shop, dry manure storage, and calf hutch area. With the construction of the proposed facilities, approximately 7 acres of cropped acreage would be converted to active dairy facilities.

**B-2**

**Location:** The Project site is located in unincorporated Merced County in the Stevinson area on the north and south side of State Route (SR) 140 at the intersection of Edminster Road. The Project site is located within Assessor's Parcel Numbers (APNs) 055-210-020, 055-210-049, and 055-210-024.

Tiffany Ho  
Deputy Director of Planning  
September 9, 2024  
Page 3

## COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Merced County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the DEIR prepared for the Project.

**B-2**

CDFW submitted a Notice of Preparation (NOP) comment letter to Merced County for the Project on September 12, 2022, with recommended mitigation measures for several special-status species that could potentially be impacted by the Project. Currently, the DEIR acknowledges that the Project area is within the geographic range of several special-status animal species and proposes specific mitigation measures to reduce impacts to less than significant. CDFW has concerns about the ability of some the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special-status animal species including the State threatened tricolored blackbird (*Agelaius tricolor*).

### Tricolored Blackbird

The DEIR notes that the Project could potentially impact tricolored blackbird (TRBL) and mitigation measure (MM) BIO-4b is provided to mitigate for potential impacts. MM BIO-4b states, "If construction outside the breeding season is not feasible, a preconstruction survey shall be conducted to determine presence / absence of TCBB within 500 feet of project activities." CDFW concurs with this measure and recommends the pre-construction survey be performed no more than 10 days prior to the start of ground-disturbing activities.

**B-3**

### Editorial Comments and/or Suggestions

**Project Lighting:** The southern portion of the Project site is immediately adjacent to the San Luis National Wildlife Refuge and Great Valley Grassland State Park where installation of outdoor artificial night lighting would likely disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication, determining when to begin foraging, thermoregulation behavior, and migration (Longcore and Rich 2004, Miller 2006, Nightingale et al. 2006, Perry et al. 2008, Stone et al. 2009). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004). Project activities could result in disruption of wildlife behavior, inadvertent injury, or mortality.

**B-4**

CDFW recommends the Project include feasible mitigation measures to decrease the impacts of artificial outdoor lighting on wildlife species. Potentially feasible mitigation

Tiffany Ho  
Deputy Director of Planning  
September 9, 2024  
Page 4

measures include motion sensitive lighting; mounting light fixtures as low as possible to minimize light trespass; use of light fittings that direct and confine the spread of light downward; and use of long-wavelength light sources. In addition, CDFW recommends that lighting not be installed in ecologically sensitive areas (e.g., streams, wetlands, and habitat used by special-status species, such as nesting/roosting sites and riparian corridors) and the use of the white/blue wavelengths of the light spectrum be avoided.

**Nesting birds:** CDFW encourages that Project ground-disturbing activities occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the nesting season (February 1st through September 15th), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections as referenced above.

**B-5**

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified biologist conduct a pre-construction survey for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected, either directly or indirectly, by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. CDFW recommends that a qualified biologist establish a behavioral baseline of all identified nests. Once Project activities begin, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is a compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

**Lake and Stream Alteration:** The DEIR notes that the Project site is bordered by the San Joaquin River to the south and that a canal runs through the Project site and feeds into the San Joaquin River. While the DEIR notes that Project-related impacts are not anticipated to these features, CDFW would like to reiterate that Project activities that

**B-6**

Tiffany Ho  
Deputy Director of Planning  
September 9, 2024  
Page 5

substantially change the bed, bank, and channel of any river, stream, or lake are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial and may include those that are highly modified such as canals and retention basins.

**B-6**

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (LSAA); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSAA issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

**California Natural Diversity Database:** Please note that the California Natural Diversity Database (CNDDDB) is populated by voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record, or lack of recent occurrence records, in the CNDDDB does not mean that a species is not present. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special-status species are present.

**B-7**

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDDB. The CNDDDB field survey form can be filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

**B-8**



DocuSign Envelope ID: 2B9C4BFD-D3CC-46AB-99C7-615D3C36E8A1

Tiffany Ho  
Deputy Director of Planning  
September 9, 2024  
Page 6

## FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

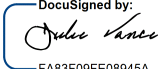
**B-8**

## CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist Merced County in identifying and mitigating Project impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Questions regarding this letter or further coordination should be directed to John Riedel, Environmental Scientist, at (559) 807-1453, or [john.riedel@wildlife.ca.gov](mailto:john.riedel@wildlife.ca.gov).

Sincerely,

  
FA83F09FE08945A...  
Julie A. Vance  
Regional Manager

cc: State Clearinghouse  
Governor's Office of Planning and Research  
[State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

Linda Connolly  
Senior Environmental Scientist  
[linda.connolly@wildlife.ca.gov](mailto:linda.connolly@wildlife.ca.gov)

Matt Nelson  
U.S. Fish & Wildlife Service  
[matthew\\_nelson@fws.gov](mailto:matthew_nelson@fws.gov)

Docusign Envelope ID: 2B9C4BFD-D3CC-46AB-99C7-615D3C36E8A1

Tiffany Ho  
Deputy Director of Planning  
September 9, 2024  
Page 7

## **REFERENCES**

- Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. *Frontiers in Ecology and the Environment*, 2:191–198.
- Miller, M. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor*, 108:130–139.
- Nightingale, B., T. Longcore, and C. Simenstad. 2006. Artificial night lighting and fishes. Pages 257–276 *in* C. Rich and T. Longcore, editors. *Ecological consequences of artificial light at night*. Island Press, Washington, D.C., USA.
- Perry, G., B. Buchanan, R. Fisher, M. Salmon, and S. Wise. 2008. Effects of night lighting on urban reptiles and amphibians. Chapter 16 *in*: *Urban Herpetology: Ecology, Conservation and Management of Amphibians and Reptiles in Urban and Suburban Environments*. J. C. Mitchell, R. E. Jung Brown and B. Bartholomew (ed.). *Herpetological Conservation*, 3:211-228.
- Stone, E., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology*, 19:1123–1127.

**Commenter** California Department of Fish and Wildlife (CDFW)  
September 9, 2024

---

- B-1 The comment summarizes the role of CDFW as Trustee Agency for fish and wildlife, a Responsible Agency under CEQA, and a regulatory agency over actions with the potential to result in impacts to nesting birds.

The County acknowledges the CDFW comment. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- B-2 The comment summarizes the details of the Silva Dairy Farm Expansion project. The comment also indicates that CDFW will provide recommended changes to mitigation measures included in the DEIR.

The County acknowledges the CDFW comment. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- B-3 The comment recommends revised mitigation language for tricolored blackbird (TRBL or TCBB) including pre-construction surveys within 10 days of start of ground disturbance.

As set forth in FEIR Chapter 4, Mitigation Measure BIO-5b has been revised as requested. These modifications will require focused surveys within 10 days of start of construction if construction outside the breeding season is not possible.

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide examples of when significant new information is added, such as when a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented, or when a substantial increase in the severity of an environmental impact would result unless mitigation is adopted that reduces the impact to a level of insignificance. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes an insignificant modification in an adequate EIR.

In the case of Mitigation Measures BIO-5b, the measure has been modified to be more protective of the environment than the measure set forth in the DEIR.

Because Merced County will impose this measure on the project upon approval of the Silva Dairy Farms Expansion, none of the conditions set forth in CEQA Guidelines Section 15088.5 are present, and no recirculation of the EIR would be necessary. The revised mitigation measure would be more effective than the previous version, and there would be no

change in the environmental conclusions presented in the DEIR as a result of this comment. Therefore, no further modification of the EIR would be necessary.

- B-4 The comment states that CDFW has concerns regarding installation of outdoor artificial night lighting associated with the project due to the immediate proximity of the San Luis National Wildlife Refuge and the Great Valley Grassland State Park. The comment recommends the project include feasible mitigation measures to decrease impacts of artificial lighting on wildlife species.

DEIR *Impact BIO-9: Interference with night-active wildlife or migrating birds* includes an evaluation of the impacts of proposed lighting at the dairy facility on night-active wildlife (DEIR pp. 6-24 to 6-26). The DEIR includes Mitigation Measure BIO-9, which requires preparation of a lighting plan so that no light trespass occurs onto adjacent fields or offsite. Minimizing and/or directing/shielding lighting away from sensitive areas would minimize disruption of night-active species and reduce impacts to less-than-significant levels. The existing mitigation measure is consistent with the CDFW comment suggestions. Therefore, there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, and no changes to the EIR would be necessary.

- B-5 The comment includes recommendations to evaluate project-related impacts on nesting birds.

DEIR *Impact BIO-6: Loss of foraging and nesting habitat for sensitive and migratory bird species* includes an evaluation of the impacts of the proposed project on special-status and migratory bird species (DEIR pp. 6-22 to 6-23). Mitigation Measure BIO-6a includes preconstruction surveys if construction is initiated during the breeding season, and appropriate buffers to minimize impacts to less-than-significant levels. While the CDFW recommends language regarding construction buffers, the DEIR includes buffers that are more protective of the environment. Therefore, because there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, and no changes to the EIR would be necessary.

- B-6 The comment notes that the project site is bordered by the San Joaquin River to the south and a canal that runs through the project site. The comment reiterates the CDFW regulatory authority in regard to rivers/streams/lakes. CDFW comments that if the CEQA document does not adequately describe the project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary.

Biological surveys were focused on the project site shown as red polygons in Figure 3-2 of the DEIR and general biological surveys were conducted of the overall project area shown as yellow polygons in Figure 3-2 of the DEIR. The proposed project impacts are all within highly disturbed areas consisting of cropland, disturbed land, and active dairy facilities. The project impact area was thoroughly surveyed and did not include any aquatic resources that are potentially jurisdictional waters of the U.S., waters of the state, or CDFW stream features.

Focused surveys did not extend to the riparian areas along the San Joaquin River. Jurisdictional limits of the aquatic resource features identified in this comment occur offsite and outside of the project area. Because no potentially jurisdictional aquatic resource features occur within the project impact area, an aquatic resource delineation was not required. The proposed project impacts are limited to previously disturbed areas consisting of active dairy

facilities and existing cropland and the proposed project will not: a) substantially divert or obstruct the natural flow of a river, stream, or lake; b) substantially change or use any material from the bed, bank, or channel of a river, stream, or lake; or c) deposit debris, waste, or other materials that could pass into a river, stream, or lake. Therefore, no wetland delineation or further evaluation of riparian habitat would be required.

There would be no change in the environmental conclusions presented in the DEIR as a result of this comment. Therefore, no modification of the EIR would be necessary.

- B-7 The comment states that despite the absence of listing on the CNDDDB, a species could be present where there is suitable habitat and features capable of supporting species. Pre-construction surveys are warranted during the appropriate survey periods in order to determine whether or not any special-status species are present.

See Mitigation Measures BIO-1a, BIO-2b, BIO-3a, BIO-4b, BIO-5b, and BIO-6a. The County acknowledges the CDFW comment. Because the comment does not raise any concerns not addressed in the cited Mitigation Measures or any other content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- B-8 The comment requests the report of any special-status species detected during project surveys, and the payment of filing fees, as necessary.

The County acknowledges the CDFW comment. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.



## Central Valley Regional Water Quality Control Board

9 September 2024

Tiffany Ho, Deputy Director of Planning  
County of Merced  
Dept. of Community and Economic Development  
2222 M Street, Merced, CA 95340

**CERTIFIED MAIL:**  
7021 1970 0000 8962 5179

### **COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR MERCED COUNTY CONDITIONAL USE PERMIT NO. CUP21-011, SILVA DAIRY FARMS EXPANSION PROJECT (STATE CLEARINGHOUSE NO. 2022080190)**

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. The Board appreciates Merced County's consideration and inclusion of its 2022 comments on the County's Notice of Preparation and Initial Study for the proposed project.

**C-1**

### **CENTRAL VALLEY WATER BOARD COMMENTS**

#### **1) DEIR page 10-31, Wastewater Ponds**

The second-to-last sentence of this paragraph states, "The new ponds would be built to the Central Valley Water Board Tier 1 pond standard..." This conflicts with the Project Description's statement that only one new pond would be constructed. (See DEIR, p. 3-11.) This inconsistency should be resolved and, if construction of more than one new pond would result from approval of the proposed project, the FEIR should describe and evaluate the construction and operation of those additional ponds.

**C-2**

#### **2) DEIR page 10-50, Mitigation Measure HYD-9, Bullet 1**

It is recommended that this sentence be revised and clarified to state:

*"The recipient is explicitly authorized by the appropriate RWQCB to discharge exported manure and/or wastewater in any manner or location that would impact or threaten to impact water quality. Such authorization may be granted via issuance of individual WDRs or waiver of WDRs, enrollment under a general WDRs order or waiver, or other action of the RWQCB."*

**C-3**

The Central Valley Water Board appreciates Merced County's robust analysis of potential water quality impacts from the proposed project and the opportunity to provide comments on the DEIR.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)

Silva Dairy Farms Expansion Project  
Hilmar, Merced County

09 September 2024

2

If you have any questions, please contact me by phone at (916) 464-4724 or by email at [daniel.gamon@waterboards.ca.gov](mailto:daniel.gamon@waterboards.ca.gov).

**Daniel**

Digitally signed by  
Daniel Gamon

Daniel Gamon, PG, CH, Date: 2024.09.09  
Section Engineering Geologist 12:31 -07'00'  
Confined Animal Facilities Unit Chief  
Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive, Ste. 200  
Rancho Cordova, CA 95670

cc:

Denise Mullinax, California Dairy Quality Assurance Program 2020 Research Park Drive,  
Suite 110 Davis, CA 95618

James Garner, Central Valley Dairy Representative Monitoring Program, PO Box 227,  
Sacramento, CA 95812

Joe Ramos, F&R Ag Services, Inc., 2857 Geer Road, Suite A, Turlock, CA 95382

cc via email:

John J. Baum, Central Valley Regional Water Quality Control Board

Scott Hatton, Central Valley Regional Water Quality Control Board

John Murphy, Central Valley Regional Water Quality Control Board

Lamyae Zinebi, Central Valley Regional Water Quality Control Board

Chris Moskal, State Water Resources Control Board, Office of Chief Counsel

## Response to Letter C

**Commenter** California Water Boards, Central Valley Regional Water Quality Control Board  
September 9, 2024

---

C-1 This comment states that the CVRWQCB is a responsible agency related to CEQA, and is the state agency that regulates discharges of waste that have the potential to impact surface and groundwater quality.

The County acknowledges the CVRWQCB comment. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

C-2 This comment states that DEIR page 10-31 includes inconsistent reference to the number of new ponds included as part of the dairy expansion project.

The reference to multiple new ponds is hereby amended as shown in Chapter 4 of this FEIR. This revision fixes an error and would not lead to any change in the EIR. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no additional modification of the EIR is necessary.

C-3 The comment recommends that DEIR page 10-50, Mitigation Measure HYD-9 be revised with suggested language. The comment also states appreciation for the robust analysis of impacts to water quality in the DEIR.

The suggested language has been added as a bullet in Mitigation HYD-9 as set forth in Chapter 4 of this FEIR. The addition of this language would further clarify that parties receiving exported manure from the Silva Dairy Farm must have their own authorization to discharge that manure. See comment B-3 above for a description of when recirculation of an EIR is required according to CEQA Guidelines Section 15088.5. In the case of Mitigation Measure HYD-9, the measure has been modified to be more protective of the environment than the measure set forth in the DEIR.

Because Merced County will impose this measure on the project upon approval of the Silva Dairy Farms Expansion, none of the conditions set forth in CEQA Guidelines Section 15088.5 are present, and no recirculation of the EIR would be necessary. The revised mitigation measure would be more effective than the previous version, and there would be no change in the environmental conclusions presented in the DEIR as a result of this comment. Therefore, no further modification of the EIR would be necessary.





September 9, 2024

Submitted via email: publiccomments@countyofmerced.com, tiffany.ho@countyofmerced.com

Merced County Board of Supervisors  
2222 M St  
Merced, CA 95340

**Re: Silva Dairy Farms Expansion Project Draft Environmental Impact Report**

Dear Merced County Board of Supervisors:

Leadership Counsel for Justice & Accountability (LCJA), in partnership with Central Valley Defenders for Clean Air and Water, respectfully submits these comments to the Silva Dairy Farms Expansion Project Draft Environmental Impact Report (DEIR) and application for conditional use permit. LCJA is a nonprofit organization that collaborates with communities in San Joaquin and Eastern Coachella Valleys to increase access to decision-making and elevate historically excluded communities. The community of Stevinson is a disadvantaged community near Silva Dairy (“the Dairy”).<sup>1</sup>

### **I. Introduction**

We again urge the Merced County to reject the DEIR and the requested Conditional Use Permit for expansion of the Dairy’s herd. The requested expansion would add pollution to the already heavily, over-taxed San Joaquin Valley air basin and San Joaquin River watershed. Those burdens would be disproportionately carried by the Stevinson residents in the form of heightened local pollution and threatened water supply. The DEIR expressly concedes that a herd expansion would result in unmitigable, cumulative environmental harm:

**D-1**

The significant unavoidable environmental effects of the proposed project are as follows:

- Ozone precursor emissions from dairy operations, farm equipment, and increased traffic
- Cumulative air quality impacts
- Cumulative impacts due to GHG emissions
- Cumulative hydrology and water quality impacts

---

<sup>1</sup> See Merced County’s SB 244 Analysis, which identifies Stevinson as Disadvantaged  
<https://www.countyofmerced.com/DocumentCenter/View/12199/Merced-County-SB244-Analysis?bidId=>

The DEIR goes on to conclude (correctly) that “irreversible environmental changes would include an increase in operational air emissions and greenhouse gases, among other impacts.”<sup>2</sup>

**D-1**

Furthermore, the DEIR fails to accurately analyze the full breadth and scope of environmental impacts of the proposed expansion on the surrounding region and communities. For example, it fails to accurately assess the impact of the expansion on odors, flies, groundwater supply, groundwater quality, air quality, and greenhouse gas emissions.

The DEIR admits that “Merced County is unable to mitigate any of these potentially significant adverse environmental impacts to a less-than-significant level; all of the adverse impacts of the proposed project identified above would remain significant and unavoidable.”<sup>3</sup> This admission, of course, does not even include those adverse impacts that the DEIR fails to analyze accurately and completely.

Thus, this project would result in significant and unmitigable impacts to Stevinson, Merced County, the San Joaquin Valley, and beyond and, accordingly, the DEIR is inadequate and the CUP must not be granted.

Further, the County’s adoption of the statement of overriding considerations would be improper. The County cannot adopt a statement of overriding considerations based on the deficient DEIR.<sup>4</sup> Moreover, there are no overriding considerations that merit approval of the project over the harms it would cause. In fact, growth of the Dairy’s herd would directly oppose federal, state, and local laws and policies mandating *reductions* in greenhouse gasses (GHGs) (methane particularly—of which cows are a major source) and other pollution, and which demand that communities most vulnerable to pollution are considered first. This proposed expansion would not confer any apparent benefits to nearby communities from an economic or environmental perspective<sup>5</sup> and would instead result in significant, unavoidable, and irreversible environmental degradation.

## **II. Legal Background**

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.<sup>6</sup> The EIR is the very heart of CEQA.<sup>7</sup> “The foremost principle in interpreting CEQA is that the Legislature intended the act to be read

**D-2**

---

<sup>2</sup> DEIR 12-20

<sup>3</sup> DEIR 12-14

<sup>4</sup> See *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 870 (“the [EIR’s] informational deficiency undermines the foundation upon which the statement of overriding considerations rests”).

<sup>5</sup> The herd expansion is to maximize profit (i.e., to “modernize” operations). The expansion would add no new jobs or other benefit. See e.g., DEIR, 3-15 (“With implementation of the proposed project, the number of employees would remain at 50 workers... no change in the peak number of employees on site at a given time is anticipated”).

<sup>6</sup> See, e.g., Pub. Res. Code § 21100.

<sup>7</sup> *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.

so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.”<sup>8</sup>

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.<sup>9</sup> “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’”<sup>10</sup> The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.”<sup>11</sup>

D-2

Second, CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and all feasible mitigation measures.<sup>12</sup> The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to “identify ways that environmental damage can be avoided or significantly reduced.”<sup>13</sup> If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.”<sup>14</sup>

### **III. The Dairy Expansion Would Exacerbate a Disparate Impact on Protected Classes in a Disproportionately Pollution-Burdened Community**

The project would have disparate impacts on protected classes in violation of fair housing and civil rights law. Stevenson is a 46% Hispanic/Latino community (higher than the San Joaquin Valley as a whole), that ranks 91st percentile for groundwater threats, 74th percentile for ozone, and 91st for poverty.<sup>15</sup> The dairy is sited adjacent to farmworker housing. Environmentally racist and discriminatory practices in the San Joaquin Valley disproportionately expose low-income communities and Black and Brown communities to public health and environmental hazards from industrial pollution like nitrates, ammonia, PM 2.5, NOx, groundwater depletion, odors, and insects. Expansion would exacerbate these impacts and further engrain the disparate impact

D-3

<sup>8</sup> *Communities. for a Better Env. v. Cal. Res. Agency* (2002) 103 Cal. App.4th 98, 109.

<sup>9</sup> 14 Cal. Code Regs. (C.C.R.) § 15002(a)(1).

<sup>10</sup> *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.

<sup>11</sup> *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354; *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

<sup>12</sup> 14 C.C.R. § 15002(a)(2) and (3); see also *Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at p. 564.

<sup>13</sup> 14 C.C.R. § 15002(a)(2).

<sup>14</sup> Pub. Res. Code § 21081; 14 C.C.R. § 15092(b)(2)(A) & (B).

<sup>15</sup> According to the California Office of Environmental Health Hazard Assessment’s CalEnviroScreen 4.0 data tool, available at <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

that dairy pollution has on the community of Stevinson.

#### **IV. Odor and Air Quality**

The expansion of Silva Dairy Farms raises significant concerns regarding air quality impacts, particularly related to ammonia emissions and the formation of PM<sub>2.5</sub> particles. Ammonia, a byproduct of manure decomposition, can contribute to the formation of ammonium nitrate and ammonium sulfate, which are significant components of PM<sub>2.5</sub>. Given that ammonium nitrate comprises about 40% of the annual PM<sub>2.5</sub> concentration in the San Joaquin Valley, increased emissions from the dairy could exacerbate existing air quality issues. Although current data indicates that dairy emissions might not exceed significant thresholds, the potential for increased health risks remains. Chronic exposure to elevated PM<sub>2.5</sub> levels is linked to exacerbation of respiratory diseases and higher mortality rates. While specific health impacts from dairy operations are not fully studied, it is well-documented that agricultural occupations, including animal confinement, have adverse respiratory effects.

**D-4**

The DEIR fails to fully assess potential odor and air quality impacts or propose adequate mitigation measures. The DEIR asserts that the dairy complies with existing, baseline requirements, yet fails to propose mitigation that would address additional odor and air quality impacts caused by expansion.

**D-5**

##### **A. Odor and other nuisances only increase with an increase in herd size**

The DEIR assesses that odor and other nuisance impacts to nearby residences would be a significant impact (DEIR 5-42 and 11-17 to 11-1) however the only mitigation proposed (AQ-7) consists of ongoing compliance with existing requirements in the ACO's Odor Control Plan and improved notification to the nearby community about how to make an odor complaint. While extremely necessary, improving the public's knowledge of the nuisance complaint process does not "reduce the magnitude" of the impact as the DEIR claims at 5-42. The Odor Control Plan is not adequate mitigation either, since it is an existing requirement and a part of the status quo. Should the project proceed, the applicant would be doing nothing differently than their status quo operations, which means this is not mitigation at all.

**D-6**

##### **i. The DEIR understates odor complaints and thus understates odor impacts from the dairy**

Odor from animal confinement facilities, primarily resulting from manure decomposition, is another critical concern. Studies show that odor intensity can increase up to 60 times under wet conditions, and odors often accumulate in low-lying areas or move downhill in calm conditions. The varied terrain around the dairy can either disperse or concentrate these odors. While strategies such as diet manipulation, manure treatment, gas capture, and enhanced dispersion are

**D-7**

employed to manage odors, these measures may not fully mitigate all odor issues. Nuisance odors can cause physical symptoms like headaches, nausea, stress, and respiratory issues, impacting both farm workers and neighboring residents.

Despite the recommended measures, several potential issues remain. The recommended measures predominantly address construction impacts, yet the DEIR asserts that the project would have significant odors impacts from dairy operations, affecting nearby residents. To better address community concerns, additional odor control measures should be considered, including improved manure handling techniques, advanced odor-neutralizing technologies, and a robust community feedback system. Establishing a transparent process for residents to report and resolve odor issues could enhance overall effectiveness and address persistent concerns, and must be paired with other mitigation measures that will meaningfully reduce the significance of the impact.

D-7

## **ii. Odor Impacts Violate the Terms of the Waste Discharge Requirements**

In summary, while the Silva Dairy Farms Expansion project DEIR leaves notable gaps in addressing the full scope of odor impacts. Enhanced mitigation strategies and community engagement are essential to ensure that the project does not adversely affect public health and quality of life for nearby residents.

D-8

## **B. The DEIR Fails to Analyze and Require Enforceable Mitigation for the Significant VOC and NOx Impacts**

The DEIR identifies volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions from the project as significant and unavoidable. Despite the “significant and unavoidable” finding, the County must still: (1) perform a thorough evaluation and description of the impact and its severity before and after mitigation, and (2) propose all feasible mitigation to “substantially lessen the significant environmental effect.”<sup>16</sup> Here, the DEIR fails to identify feasible mitigation measures to reduce the severity of the impacts.<sup>17</sup>

D-9

The proposed project would be a major source of emissions of VOC as noted in the DEIR.<sup>18</sup> VOCs (also referred to as reactive organic gases [ROG]) are a precursor to ozone (smog) formation.<sup>19</sup> The San Joaquin Valley, including Merced County, have been designated as Extreme

<sup>16</sup> CEQA Guidelines § 15091(a)(1); *see also id.* § 15126.2(a) (requiring an EIR to discuss “any significant impacts, including those which can be mitigated but not reduced to a level of insignificance.”).

<sup>17</sup> DEIR at 5-30.

<sup>18</sup> DEIR at 5-24 to 5-31.

<sup>19</sup> Technical Overview of Volatile Organic Compounds, U.S. EPA, available at <https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds>.

Nonattainment for EPA's 2008 8-hour ozone standard and 2012 8-hour ozone standard.<sup>20</sup> The San Joaquin Valley is also Severe Nonattainment for the state 1- hour ozone standard. Emissions of added VOCs into the atmosphere from the project would make a bad situation even worse.<sup>21</sup>

In addition to VOC, the project would emit significant amounts of NOx.<sup>22</sup> NOx, like VOCs, are a precursor to ozone formation and would also contribute to increasing the ozone concentration.<sup>23</sup> The annual emissions of NOx are below the SJVAPCD threshold of significance of 10 tons per year.<sup>24</sup> However, the cumulative effect of this additional NOx would worsen the local ozone (smog) concentration.<sup>25</sup> This is especially significant given that Merced County has recently approved several dairy expansions and is currently considering several additional dairy expansions. (Based on Merced County's website, the County has approved or is considering at least 12 dairy expansions or new dairies.)<sup>26</sup>

**D-9**

The County has a duty to analyze and require feasible mitigation measures.<sup>27</sup> Thus, the general rule is that it "is inappropriate to postpone the formulation of mitigation measures."<sup>28</sup> For example, "an agency goes too far when it simply requires a project applicant to obtain a biological report and then comply with any recommendations that may be made in the report."<sup>29</sup>

The DEIR identifies the air quality regulatory framework and authority of the Air District, as a responsible agency, to regulate air quality.<sup>30</sup> The DEIR also identifies the ozone and PM2.5 attainment plans as well as Air District rules applicable to dairy operations.<sup>31</sup> Because the air basin is designated nonattainment for ozone, the DEIR finds that project-level emissions of VOC and NOx, which are ozone precursors, cause significant impacts.<sup>32</sup>

The DEIR proposes one mitigation measure: Mitigation Measure AQ-3 requires the project proponent to "consult" with the Air District regarding a Voluntary Emissions Reduction

---

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> DEIR 5-27; *see also* Exhibit 1 [EPS Report at 2].

<sup>23</sup> EPS Report at 2.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> <https://www.countyofmerced.com/414/Environmental-Documents> (last accessed on September, 04, 2024).

<sup>27</sup> 14 C.C.R. § 15126.4. "Formulation of mitigation measures shall not be deferred until some future time." *Id.* § 15126.4(a)(1)(B).

<sup>28</sup> *King & Gardiner Farms, LLC v. Cnty. of Kern* (2020) 45 Cal.App 5th 814, 856, (citing *POET, LLC v. State Air Res. Bd.* (2013) 218 Cal. App. 4th 681, 735).

<sup>29</sup> *Id.*

<sup>30</sup> DEIR at 5-3.

<sup>31</sup> DEIR at 5-6 to 5-8.

<sup>32</sup> DEIR at 5-26.

Agreement (VERA). But it does not require the proponent to reduce emissions or actually enter into a VERA.<sup>33</sup> The DEIR asserts that *requiring* a VERA would be infeasible.<sup>34</sup>

The DEIR merely requires the applicant to consult with the Air District and comply with whatever permit the Air District issues. Indeed, the DEIR relies entirely on the project proponent's potential compliance with unspecified permitting by the Air District to mitigate the VOC and NOx emissions. Consulting with a responsible agency does not meet the definition of mitigation in CEQA.<sup>35</sup> Under CEQA, "mitigation" means avoiding, minimizing, rectifying, or reducing significant impacts.<sup>36</sup> The County, as the lead agency, has a duty to consider, analyze, and require feasible mitigation measures. By limiting the scope of mitigation to existing laws implemented by a responsible agency, and that AQ-3 does not meet CEQA's definition for mitigation, the DEIR fails to proceed in a manner required by law in failing to consider, analyze, and require *any* mitigation other than that which could be required by the Air District under existing law. Thus, the DEIR does not evaluate and impose feasible mitigation measures as required by CEQA.

**D-9**

### C. The DEIR Fails to Analyze and Mitigate Ammonia as a PM2.5 Precursor

The DEIR evaluates ammonia as a non-cancer hazard risk in AQ-5 and Appendix F.<sup>37</sup> However, the DEIR does not evaluate ammonia as a PM2.5 precursor pollutant for project-level emissions (apart from a brief sentence stating that ammonia is a PM2.5 precursor at 5-34). The DEIR declares that ammonia is a cumulatively significant and unavoidable impact based on the 2002 Merced County Animal Confinement Ordinance EIR. Thus, the DEIR should analyze the impact of ammonia in the context of ambient PM2.5 levels that violate several PM2.5 ambient air quality standards.

**D-10**

Ammonia reacts with nitric oxide in the atmosphere to form ammonium nitrate, which accounts for a significant portion of PM2.5 in the San Joaquin Valley. The DEIR claims at 5-31 to 5-32 that ammonia does not contribute significantly to ambient PM2.5 levels in the San Joaquin Valley, however ammonia nitrate comprises 38 percent of the PM2.5 mass on an annual average basis in Bakersfield, and 61 percent on high PM2.5 days.<sup>38</sup> The California Air Resources Board estimates that ammonia contributes 5.2 µg/m<sup>3</sup> (micrograms per cubic meter) per year to the Valley's PM2.5 nonattainment.<sup>39</sup> Recent research estimates that 1,690 people die in California

<sup>33</sup> DEIR 5-30.

<sup>34</sup> DEIR at 5-31.

<sup>35</sup> See 14 C.C.R. § 15370.

<sup>36</sup> *Id.*

<sup>37</sup> DEIR 5-34 to 5-37.

<sup>38</sup> 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards at 3-2 to 3-3, available at <https://www.valleyair.org/pmplans/documents/2018/pm-plan-adopted/03.pdf>.

<sup>39</sup> 2018 PM2.5 Plan, App. G, 3, available at <https://www.valleyair.org/pmplans/documents/2018/pm-plan-adopted/G.pdf>.

annually from agricultural ammonia emissions.<sup>40</sup> The lack of an Air District significance threshold does not obviate the need to analyze ammonia emissions as a PM<sub>2.5</sub> precursor. Thus, the DEIR should evaluate ammonia as a PM<sub>2.5</sub> precursor pollutant for project-level emissions.

#### **D. The DEIR Fails to analyze NO<sub>x</sub> Emissions from Nitrogen Applied to Soil**

The DEIR fails to evaluate and disclose the full extent of NO<sub>x</sub> emissions from the project. NO<sub>x</sub> emissions from nitrogen applied to soil have not been assessed in the DEIR. One study found that NO<sub>x</sub> emissions from the use of fertilizers on cropland could actually increase total NO<sub>x</sub> in the San Joaquin Valley NO<sub>x</sub> inventory by over 50%.<sup>41</sup> A more recent study came to similar conclusions finding that soil may be responsible for 40% of total California NO<sub>x</sub> emissions based on July 2018 data.<sup>42</sup> The EIR should analyze and disclose the impact of NO<sub>x</sub> emissions from fields both on the dairy and offsite.

D-11

#### **E. The DEIR Fails to Analyze or Mitigate NO<sub>x</sub> Emissions**

The DEIR fails to study or mitigate NO<sub>2</sub> emissions from the project. Despite state and federal NO<sub>2</sub> ambient air quality standards<sup>43</sup> and the DEIR's acknowledgment of the health impacts from NO<sub>2</sub> DEIR,<sup>44</sup> the DEIR does not analyze the extent of NO<sub>2</sub> emissions or their impacts. Similarly, it does not identify mitigation measures. As part of the analysis of soil NO<sub>x</sub> emissions and increased truck emissions from exporting manure off-site to the planned dairy digester cluster, the DEIR should analyze the impact of NO<sub>2</sub> emissions on ambient air quality.

D-12

#### **F. The DEIR Fails to Accurately Analyze the Increase in Daily Truck Trips**

The DEIR's air quality analysis fails to identify how many additional truck trips will occur daily to transport manure to the planned dairy digester cluster in Stevinson. Given that transport of manure to the cluster is a major component of the proposed project's manure management plan and the bulk of additional truck traffic will likely be for this purpose,<sup>45</sup> this is a glaring omission.

D-13

<sup>40</sup> Domingo, N. G. G., Balasubramanian, S., Thakrar, S. K., Clark, M. A., Adams, P. J., Marshall, J. D., Muller, N. Z., Pandis, S. N., Polasky, S., Robinson, A. L., Tessum, C. W., Tilman, D., Tschopen, P., & Hill, J. D. (2021), *Air quality-related health damages of food*, Proceedings of the National Academy of Sciences (Vol. 118, Issue 20, p. e2013637118) available at <https://doi.org/10.1073/pnas.2013637118>.

<sup>41</sup> See M. Almaraz, E. Bai, C. Wang, J. Trousdell, S. Conley, I. Faloona, B. Z. Houlton, *Agriculture is a major source of NO<sub>x</sub> pollution in California*. Sci. Adv. 4, eaao3477 (2018) available at <https://www.science.org/doi/pdf/10.1126/sciadv.aao3477>.

<sup>42</sup> Tong Sha, Xiaoyan Ma, Huanxin Zhang, Nathan Janecek, Yanyu Wang, Yi Wang, Lorena Castro García, G. Darrel Jenerette, and Jun Wang, "Impacts of Soil NO<sub>x</sub> Emission on O<sub>3</sub> Air Quality in Rural California," *Environmental Science & Technology* 2021 55 (10), 7113-7122 (available at: <https://pubs.acs.org/doi/10.1021/acs.est.0c06834>).

<sup>43</sup> DEIR at Table 5-1

<sup>44</sup> Table 5-3

<sup>45</sup> DEIR at 8-23



The DEIR only includes the number of additional truck trips that will be generated for feed and commodity deliveries at 5-24, and does not accurately portray the increase in daily truck trips that would occur with the proposed expansion. This implicates a bulk of the DEIR's air quality analysis, including its analysis of carbon monoxide, NOx, and NO2 emissions, ozone precursors, and health impacts.

D-13

**G. The DEIR's Ambient Air Pollution Analysis and Health Risk Assessment do not Analyze Health Impacts in Accordance with the California Supreme Court's Decision in *Sierra Club v. County of Fresno*.**

The DEIR's lack of analysis regarding the connection between the project's substantial air emissions and human health impacts falls far short of CEQA's standards. Under CEQA, the DEIR must contain a detailed discussion of the likely health effects of the proposed project's air quality impacts.<sup>46</sup> An EIR's discussion of the health impacts of a project was insufficient when it provided "only a general description of symptoms that are associated with exposure to the ozone, particulate matter, carbon monoxide, and nitrogen oxide, and the discussion of health impacts regarding each type of pollutant [was] at most a few sentences of general information."<sup>47</sup> Specifically, the Court faulted the agency for "fail[ing] to indicate the concentrations at which such pollutants would trigger the identified symptoms."<sup>48</sup> The court emphasized that to "allow the public to make an informed decision," "CEQA instead requires that the EIR have made a reasonable effort to discuss relevant specifics regarding the connection between two segments of information already contained in the EIR, the general health effects associated with a particular pollutant and the estimated amount of that pollutant the project will likely produce."<sup>49</sup>

D-14

The DEIR fails to comply with the California Supreme Court's dictates in *Sierra Club*. There is extensive information in the scientific literature regarding the health impacts of air emissions from concentrated animal feeding operations (CAFOs), as discussed in detail below. Instead of reviewing the scientific studies on air emissions from CAFOs, including the concentrations of pollutants known to cause harm to health, the DEIR throws up its hands, contending that "SJVAPCD currently does not have a methodology that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions."<sup>50</sup> As a result of this erroneous conclusion, the DEIR contains only the most conclusory, nonspecific statements about health impacts from the project's air pollution. Similarly, while the DEIR admits that "it has been well documented that there are adverse respiratory effects from exposure in agricultural occupations," the DEIR concludes it can say no more because "there is a lack of commonly

<sup>46</sup> *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 519.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* at 1165.

<sup>50</sup> DEIR 5-29.

accepted epidemiological models to forecast health impacts from dairies and other concentrated animal facilities.”<sup>51</sup> This is incorrect and ignores the prevailing scientific literature showing that health impacts from CAFOs can be objectively analyzed and predicted.

Indeed, the DEIR’s cursory remarks about health impacts in the DEIR and the Health Risk Assessment (Appendix G) fail to comply with CEQA similar to the EIR in *Sierra Club*. The DEIR could have, but did not, inform the public and decision-makers about the numerous health impacts that will be exacerbated by the project’s increase air pollution, including:

1. The disproportionate health impacts on already overburdened residents and dairy workers. The DEIR does not assess the strong correlation between air pollution, and the disparate health impacts on the community of Stevinson, which already is home to a number of large-scale Concentrated Animal Feeding Operations (CAFOs) and deals with existing air quality, groundwater supply and quality, odor, insect, and public health impacts as a result. The DEIR fails as an informational document because it does not disclose the disproportionate impact the project’s increased air emissions will have on the community near the dairy.

**D-15**

2. The health impacts from bioaerosols. The DEIR completely ignores bioaerosols that will be emitted from the project. CAFOs, including dairies, cause exposure to airborne dust particles contaminated with a wide range of bacteria, fungi and small bacterial remnants such as endotoxins.<sup>52</sup> “[D]airy operations increase community exposures to agents with known human health effects . . . airborne biological contaminants (i.e. cow allergen) associated with airborne particulate matter are statistically elevated at distances up to three miles (4.8 km) from dairy operations.”<sup>53</sup> Chronic exposure to endotoxins can cause lung disease and other respiratory diseases.<sup>54</sup> Although dispersion models can be used to analyze bioaerosol impacts from dairies, the DEIR did not even consider this option.<sup>55</sup>

**D-16**

3. Health impacts from ammonia. The DEIR acknowledges that the project will increase ammonia emissions significantly, yet does not meaningfully discuss the significant health impacts from the massive increase in emissions. Instead, the DEIR generally notes several health conditions associated with ammonia, but does not link those conditions to

**D-17**

---

<sup>51</sup> DEIR 5-15.

<sup>52</sup> J.P.G. Van Leuken, *Atmospheric dispersion modeling of bioaerosols that are pathogenic to humans and livestock – A review to inform risk assessment studies* ScienceDirect (2016).

<sup>53</sup> D’An L. Williams et al., *Airborne cow allergen, ammonia and particulate matter at homes vary with distance to industrial scale dairy operations: an exposure assessment*, Environmental Health (2011).

<sup>54</sup> *Id.* See also Progressive Dairy, *What’s the risk of airborne manure particles?* (2014), available at <https://www.progressivedairy.com/topics/manure/whats-the-risk-of-airborne-manure-particles>.

<sup>55</sup> *Id.*

the vastly increased emissions that would be caused by the project. For example, the DEIR does not disclose the concentrations of ammonia in the air caused by the project. This is problematic because health impacts caused by ammonia occur at very low concentrations: “Due to its high chemical reactivity, ammonia gas (NH<sub>3</sub>) is a very strong irritant. For humans, ammonia (NH<sub>3</sub>) inflames eyes and lungs, even at low concentrations. People begin to detect odors at 550 ppm. Irritation to mucous surfaces occurs at 100–500 ppm. Immediate irritation of eyes, nose and throat occurs at 400–700 ppm. Severe eye irritation, coughing and frothing at the mouth, which could be fatal, occur at 2000–3000 ppm.”<sup>56</sup>

4. Health impacts from PM10 and PM2.5. Particulate matter (PM10 and PM2.5) from CAFOs is mainly comprised of organic material such as fecal matter, feed materials, pollen, bacteria, endotoxins, fungi and viruses (and their products), skin cells and the products of microbial action on feces and feed.<sup>57</sup> CAFO’s inorganic components include silicates, calcium carbonate, and free (crystalline) silica.<sup>58</sup> Approximately one quarter of particulate at CAFOs is protein and about one third of total suspended dust is respirable (PM10 or smaller).<sup>59</sup> The National Research Council identified PM as a significant local-scale pollutant of concern from CAFOs.<sup>60</sup> Endotoxins are lipopolysaccharides that are products of the bacterial cell walls of gram-negative bacteria and are present in CAFO dusts.<sup>61</sup> Endotoxins are largely responsible for the adverse health effects resulting from exposure to agricultural dusts.<sup>62</sup> Worker exposures to endotoxin-rich dusts from agriculture operations have shown declines in lung function over time. The DEIR did not analyze, nor provide mitigation measures to address, health impacts from PM10 or PM2.5.

D-18

5. Failure to disclose health impacts from hydrogen sulfide. According to Appendix F, the project will increase hydrogen sulfide emissions, but the Health Risk Assessment (Appendix G) fails to analyze the associated health impacts of that increase.

D-19

6. Failure to study or mitigate Valley Fever exacerbated by the project. Valley Fever is “highly endemic” in Merced County.<sup>63</sup> Valley Fever, which produces headaches, fever,

D-20

<sup>56</sup> Lingying Zhao et al., *Ammonia Emission from Animal Feeding Operations and Its Impacts Agriculture and Natural Resources* (2014).

<sup>57</sup> Chemicals Associated with Air Emissions, CAFO subcommittee of the Michigan Department of Environmental Quality (MDEQ) Toxics Steering Group (May 10, 2006).

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> Cal. OSHA, Department of Industrial Relations, *Protection from Valley Fever*, available at <https://www.dir.ca.gov/dosh/valley-fever-home.html>.

cough, and chills, is caused by the *coccidioides* fungus that is prevalent throughout California in regions with loamy soils.<sup>64</sup> When the soil is disturbed—such as by high winds, construction work, digging or large equipment—fungus spores can become airborne and if inhaled, cause Valley Fever.<sup>65</sup> Thus, the project puts construction and dairy workers and nearby residents at risk for Valley Fever. Yet the DEIR fails to even consider valley fever as a potential impact.

## **V. The DEIR Fails to Provide Adequate Mitigation Measures for Insects**

To effectively address potential insect issues associated with the expansion of Silva Dairy Farms, the dairy must propose mitigation measures beyond the existing, minimum regulatory requirements in order to reduce the significance of the impact and ensure a healthy living environment for the nearby community. The DEIR makes the determination that public health impacts and nuisances from insects would be a significant impact at 9-10, yet fails to identify any real mitigation measures. The DEIR only proposes continued compliance with existing regulations, such as maintaining the required setbacks from homes, continued compliance with the Odor Control Plan outlined in the County’s Animal Confinement Ordinance, and adhering to mosquito control guidelines. Given that these requirements are already in place during baseline conditions and the DEIR determined that the impact would be significant with these baseline requirements already in place, it is essential to adopt additional, proactive measures to safeguard community well-being. The dairy should enhance its fly control practices by implementing advanced fly bait systems, improving drainage to eliminate standing water, and maintaining rigorous daily inspections of manure and feed. Additionally, it is vital for the dairy to be transparent and communicative with local residents. Establishing a dedicated hotline or feedback system for reporting fly-related issues, and clearly informing the community about the process for submitting complaints, will help address concerns promptly and effectively. By proactively engaging with the community and exceeding baseline requirements, Silva Dairy Farms can better secure a healthy environment and foster positive relations with its neighbors.

**D-21**

## **VI. The DEIR Fails to Analyze Impacts to Hydrology & Water Quality or Provide Adequate Mitigation Measures**

### **A. The DEIR Fails to Provide an Adequate or Accurate Analysis of Impacts to Groundwater Quality**

---

<sup>64</sup> Cal. OSHA, Department of Industrial Relations, *Protection from Valley Fever*, available at <https://www.dir.ca.gov/dosh/valley-fever-home.html>.

<sup>65</sup> Cal. OSHA, Department of Industrial Relations, *Protection from Valley Fever*, available at <https://www.dir.ca.gov/dosh/valley-fever-home.html>.

The DEIR fails to properly analyze or mitigate impacts to groundwater quality related to the proposed project. In particular, the analysis and mitigation measures related to discharge of nitrate to groundwater are insufficient.

**D-22**

**i. The Analysis of the Regulatory Framework Applicable To Discharge Of Nitrate Is Inaccurate and Insufficient**

The DEIR mischaracterizes the way in which the Dairy will be regulated by the Central Valley Regional Water Quality Control Board (the “Regional Board”) if it expands as proposed. Specifically, according to the DEIR, the discharge of nitrate to groundwater is currently regulated under the Reissued Waste Discharge Requirements General Order for Existing Milk Cow Dairies (Order R5-2013-0122).<sup>66</sup> Order R5-2013-0122 only regulates “existing milk cow dairies,” defined to mean dairies that have not expanded their mature cow herd size 15% beyond its size in 2005.<sup>67</sup> The DEIR thus concludes that the proposed expansion would result in loss of regulatory coverage under Order R5-2013-0122, subjecting the Dairy to regulation pursuant to individual waste discharge requirements issued by the Regional Board.<sup>68</sup>

There are at least two problems with the DEIR’s analysis of regulation of groundwater. First, the DEIR fails to recognize that Order R5-2013-0122, which presently regulates the Dairy, prohibits the expansion of dairies beyond 15% of its mature herd size in 2015.<sup>69</sup> As such, the Regional Board’s Order prohibits the project.

The second problem is that the DEIR incorrectly concludes without analysis or evidence that, since the expansion of mature cows would exceed 15 percent, “the CVRWQCB should issue Individual WDRs for the Silva Dairy Farms Expansion.”<sup>70</sup> It then relies on certain groundwater quality protections that would purportedly be contained in the individual waste discharge requirements, including “[d]ischarge reporting, [g]roundwater monitoring, [w]astewater sampling and application monitoring, [i]rrigation application monitoring, [f]acility and land application visual inspections, [c]rop nitrogen/phosphorus uptake monitoring, and [f]ield specific nutrient budgeting.”<sup>71</sup>

The DEIR’s analysis is inaccurate and misleading, as well as internally inconsistent, because the Regional Board is highly unlikely to issue individual waste discharge requirements for Silva

<sup>66</sup> DEIR at 10-5.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> Order R5-2013-0122 at 14,

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2013-0122.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0122.pdf).

<sup>70</sup> DEIR at 10-5.

<sup>71</sup> DEIR at 10-5 to 10-6.

Dairy. The Regional Board has confirmed to commenters<sup>72</sup> that it does not have staff capacity to develop and issue individual waste discharge requirements for new or expanded dairies that are not covered by the general order.<sup>73</sup> Rather, new and expanded dairies are unlikely to be subject to any waste discharge requirements or waiver of waste discharge requirements at all, though they may be subject to a revised dairy general order. In the significant interim period, the dairy would be operating illegally without waste discharge requirements despite causing or contributing to pollution or nuisance.

**D-22**

Specifically, without coverage under Order R5-2013-0122 or individual waste discharge requirements or a waiver of waste discharge requirements, the Porter Cologne Water Quality Control Act only authorizes one more avenue for discharge of nitrate to groundwater, and this procedure is inapplicable here. Rather, Water Code § 13264(a)(2) authorizes discharge if 140 days have passed since report of the discharge and certain additional conditions are met. One condition<sup>74</sup> is that the discharge “does not create or threaten to create a condition of pollution or nuisance.” As explained more fully below, and as acknowledged by the DEIR, Silva Dairy cannot comply with this requirement because its operations are currently causing or contributing to nitrate pollution and resulting nuisance. This problem will only get worse if the Dairy expands and generates additional manure, as proposed, especially with the proposed reduction in cropland to apply that manure to.

Because the DEIR inaccurately discusses the regulatory framework and coverage related to discharge of nitrate, because individual waste discharge requirements are unlikely to issue, and because the discharge resulting from expansion is prohibited by Order R5-2013-0122 and Water Code, § 13264, the DEIR is insufficient.

**ii. The DEIR’s Analysis Of Impacts To Groundwater Quality Is Inaccurate And Insufficient.**

The DEIR concludes that there will be significant and unavoidable impacts to groundwater quality associated with the project.<sup>75</sup> While it is accurate that the proposed herd size expansion would have significant impacts on groundwater quality, due to increased discharge of nitrate to

**D-23**

---

<sup>72</sup> This confirmation occurred during ex parte stakeholder discussions involving the Regional Board, State Water Resources Control Board, dairy industry representatives, and drinking water advocates. Ex Parte, [https://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/wc\\_13287\\_disclosures.html](https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wc_13287_disclosures.html).

<sup>73</sup> See also [https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/#Discharge](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/#Discharge) [List of orders adopted by the Regional Board showing that just one dairy (a dairy serving the Corcoran State Prison) is subject to individual waste discharge requirements issued since 2010]; <https://ceqanet.opr.ca.gov/Search/serp?q=%22dairy+expansion%22> [Ceqanet search for “dairy expansion” shows many dairy expansions during the period from 2010 to present].

<sup>74</sup> A second condition under § 13264(a)(2) is that the Regional Board serves as the lead or a responsible agency for purposes of CEQA.

<sup>75</sup> DEIR at 10-38.

groundwater, the analysis of these impacts is misleading and inaccurate. Silva Dairy proposes to expand its herd size from 2,953 to 7,300 cows while reducing cropland from approximately 364 acres to 357 acres.<sup>76</sup> Yet, the DEIR concludes that the ratio of applied versus removed nitrogen will actually decrease, from 1.38 to 1.31.<sup>77</sup>

## D-23

This result is based solely or in large part based on additional “exportation of manure offsite.”<sup>78</sup> Specifically, the DEIR notes that the project will involve increasing export of liquid and dry manure from 215,324 pounds per year to 914,385 pounds per year, a four-fold increase.<sup>79</sup> However, the ability to export an additional 699,061 pounds of liquid and solid manure per year is questionable at best.

Thus, the DEIR’s analysis of impacts on groundwater quality is inadequate because it improperly minimizes the challenges associate with exporting manure, especially liquid manure. While the DEIR properly recognizes that “exporting excess manure nitrogen to non-dairy cropland is hampered by several factors, including demand for raw manure being limited because of concerns about pathogens, which compromise food safety, and weed seeds...,” it then fails state the necessary conclusion that export of an additional 699,061 pounds of liquid and solid manure per year may not be possible. Rather, the DEIR notes that *solid* manure may be composted off site to resolve the challenges associated with export, and that there are at least six agricultural composting sites in Merced County that take dairy manure for processing and sale.<sup>80</sup>

There are at least two problems with this analysis. First, the DEIR does not state that any contracts for additional solid manure export have been secured. Because “[f]ormulation of mitigation measures shall not be deferred until some future time,”<sup>81</sup> the DEIR’s reliance on manure export to mitigate impacts on groundwater quality is inadequate. And second, the existence of composting sites that accept solid manure does not provide any additional evidence that exporting additional liquid manure is feasible. As the Summary Representative Monitoring Report (SRMR) concluded:

Even if all solid manure could be easily exported from dairies, a significant amount of manure nitrogen stored on dairies is in the liquid form. While liquid manure presents certain advantages – including the ability to apply it via fertigation throughout the crop growing season and not just pre-plant – it is extremely difficult and expensive to export excess liquid manure. New technologies are

<sup>76</sup> DEIR at 3-11, 10-48

<sup>77</sup> DEIR at 10-26.

<sup>78</sup> DEIR at 10-31, 10-48.

<sup>79</sup> DEIR at 10-26.

<sup>80</sup> DEIR at 10-49.

<sup>81</sup> 14 C.C.R., § 15126.4(a)(1)(B)

developing that could more easily extract nitrogen from liquid manure to facilitate export, but their economic and technical feasibility remains untested in California.<sup>82</sup>

The DEIR does not discuss extension of pipelines to new fields for export off-dairy, as recommended by the SRMR, and the truck trip generation analysis does not contemplate liquid manure export by truck.<sup>83</sup> Thus, to the extent liquid manure export is contemplated by the DEIR, the ability to export the amount of manure stated in the DEIR is speculative.

**D-23**

Additionally, the DEIR is inadequate as an informational document because it incorrectly implies that the nitrogen applied to removed ratio of 1.4 required by Order R5-2013-0122 is protective of groundwater quality.<sup>84</sup> This conclusion is directly contradicted by the SRMR.<sup>85</sup> It also presumes that the ratio of applied nitrogen to removed is accurate, a conclusion that should be subject to significant doubt given the SRMR's finding that dairies are miscalculating and underreporting manure nitrogen produced by the dairy and applied to crops.<sup>86</sup>

It is important to note that nitrate contamination disproportionately impacts small, rural, disadvantaged communities of color,<sup>87</sup> which also tend to be very low-income<sup>88</sup> and pay on average three times the cost for water considered affordable by the U.S. Environmental Protection Agency.<sup>89</sup> The health impacts of nitrate pollution are links to cancer, and the

---

<sup>82</sup> SRMR at 12, available at <https://leadershipcounsel.org/wp-content/uploads/2019/10/Dairy-report.pdf>.

<sup>83</sup> SRMR at 71; DEIR at 3-21.

<sup>84</sup> DEIR at 10-31.

<sup>85</sup> SRMR at 6-7 ["To date, implementation of [Order R5-2013-0122] does not appear to have resulted in a trend to lower nitrate-N concentrations across the industry."].

<sup>86</sup> SRMR, pg 10 ["Evidence garnered from annual reports to the Regional Board by individual dairies suggests a substantial amount of "unaccounted-for" manure nitrogen exists on many dairies. This unaccounted for portion is essentially the difference between nitrogen excreted by cows (supply) and what is reported as being applied to agricultural fields to fertilize crops (demand) and/or exported from the dairy. Some of the unaccounted-for portion of nitrogen can be attributed to volatilization of nitrogen as ammonia and other gases, but those pathways don't fully explain the difference between excreted nitrogen and applied nitrogen. Large amounts of unaccounted-for nitrogen, combined with imprecision in measurement of applied nitrogen and irrigation water, can result in overapplication of nitrogen to crops..."].

<sup>87</sup> Balazs et al., "Social Disparities in Nitrate Contaminated Drinking Water in California's San Joaquin Valley," *Environmental Health Perspectives*, 19:9 (September 2011), available at <https://ehp.niehs.nih.gov/doi/full/10.1289/ehp.1002878>

<sup>88</sup> 2 Jonathan London et al., *The Struggle for Water Justice in California's San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities*, UC Davis Center for Regional Change, at 29 (Feb. 2018), <https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inlinefiles/The%20Struggle%20for%20Water%20Justice%20FULL%20REPORT%200.pdf>.

<sup>89</sup> Eli Moore et al., *The Human Costs of Nitrate-contaminated Drinking Water in the San Joaquin Valley*, Pacific Institute, at 7 (Mar. 2011), <https://pacinst.org/wp>



potentially fatal “blue baby syndrome.”<sup>90</sup> As acknowledged in the DEIR, there are domestic wells on site, and at least one on-site well exceeded drinking water standards for nitrate.<sup>91</sup> There are also nearby domestic wells off-site of the Dairy that may be impacted by nitrate pollution. Expansion of the Dairy will exacerbate nitrate pollution, and potentially expose people to unsafe drinking water.

As the DEIR fails to adequately analyze the impact on groundwater quality associated with increasing manure production, it is insufficient and fails as an informational document.

### **iii. The DEIR Fails To Include Mitigation Measures Related To Groundwater Quality.**

As discussed above, the proposed project will result in additional nitrate reaching groundwater in concentrations that will exacerbate pollution and nuisance. The DEIR concludes that “[i]t is not feasible for one dairy operation in Merced County, such as the Silva Dairy Farms Expansion project, to develop and implement appropriate measures identified by the CVDRMP before a unified approach is adopted by the CVRWQCB,” and thus proposes as a mitigation measure that the Regional Water Quality Control Board should revise its regulations.<sup>92</sup> While these commenters agree that the Regional Water Quality Control Board should strengthen its regulations, this is an inadequate deferral of mitigation measures and there is no evidence that effective mitigation measures are infeasible.

**D-24**

As an example acknowledged by the DEIR, effective denitrification measures exist, including “vermiculture (cultivating worms in a bed of organic material to which diluted liquid manure is added) that could denitrify manure on the dairy, converting reactive nitrogen compounds into harmless, inert nitrogen gas.”<sup>93</sup> The DEIR does not include denitrification as a mitigation measure because “vermiculture comes with high costs and its ability to generate offsetting revenue streams has not yet been demonstrated, especially in California.”<sup>94</sup> The mere fact that a mitigation measure is costly and does not generate additional revenue is not evidence that the mitigation measure is infeasible. As such, the mitigation measures required by the DEIR are inadequate.

## **B. The DEIR Fails to Analyze and Mitigate Groundwater Depletion**

<sup>90</sup> California Department of Public Health, Nitrate Fact Sheet (May 2014), available at [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/documents/nitrate/Fact%20Sheet%20-%20Nitrate\\_May2014%20update.pdf](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/nitrate/Fact%20Sheet%20-%20Nitrate_May2014%20update.pdf)

<sup>91</sup> DEIR at 10-35.

<sup>92</sup> DEIR at 10-34, 10-35.

<sup>93</sup> DEIR at 10-33.

<sup>94</sup> *Id.*

The DEIR analysis of baseline and projected groundwater use at the Dairy is insufficient because it: (a) fails to analyze possible impacts to nearby domestic water well levels; (b) incorrectly characterizes the role of the Sustainable Groundwater Management Act (SGMA) and implementation of the Merced Subbasin's GSP; (c) inaccurately states that impacts on groundwater supply will be less than significant; and (d) neglects to propose mitigation measures that would reduce the impacts to less than significant in violation of CEQA. This is despite the acknowledgement in the DEIR groundwater extraction will increase by 23 million gallons per year (or 70.58 acre feet).<sup>95</sup>

**i. Proposed Project is in Conflict with Groundwater Sustainability Plan**

**D-25**

The Project's likely impact to groundwater directly conflicts with the Merced Subbasin Groundwater Sustainability Plan (GSP), the GSP covering the area where the dairy is located. The GSP states that the Groundwater Sustainability Agencies (GSAs) will "implement a demand reduction program to gradually reduce pumping at a consistent annual rate during the 20-year implementation period in order to reach the Native Groundwater allocation objective by 2040" to make up for the deficit in groundwater inflows versus outflows (overpumping).<sup>96</sup> However, the significant increase of groundwater extraction associated with the project reflects the opposite of demand reduction, especially when its impacts are considered cumulatively alongside the several other dairy expansions undergoing environmental review in Merced County at this time. The project therefore directly conflicts with the goals outlined in the Merced Subbasin GSP and cannot proceed. Additionally, the project's potential conflict with the Merced Subbasin GSP must be analyzed in the context of the many other dairy expansions or installations that have recently been approved or are under review at this time.

**ii. The DEIR Fails to Include an Analysis of Impacts to Nearby Wells**

**D-26**

The DEIR has not adequately analyzed impacts to nearby domestic water wells. While the DEIR notes that the closest public water system is 2.2 miles from the project site, it contains no similar analysis of nearby domestic water wells. This is especially concerning given that domestic wells are generally shallower, and thus more susceptible to the impacts of groundwater overdraft. Because the DEIR fails to identify the locations and depths of domestic wells near the project site, and because the DEIR does not project how increasing groundwater extraction from the project would impact nearby domestic drinking water sources, much less propose any mitigation measures to reduce or eliminate impacts to surrounding drinking water sources, it is inadequate and incomplete.

---

<sup>95</sup> DEIR at 10-40.

<sup>96</sup> Merced Subbasin Groundwater Sustainability Plan, Section 6.2.2, pg. 6-6.

**iii. The DEIR Incorrectly Concludes that Impacts of Groundwater Depletion are Less Than Significant.**

**D-27**

The DEIR concludes that, though groundwater extraction will increase by 23 million gallons per year (or 70.58 acre feet),<sup>97</sup> the impacts of this increased water extraction will be less than significant.<sup>98</sup> The DEIR reasons that “there would be a decrease in irrigation water demand” and “increased process wastewater generated at the dairy would be used for irrigation, which could result in groundwater recharge via irrigation percolation.”<sup>99</sup> As to the first argument, the small decrease in irrigation water demand will not offset groundwater depletion, as the DEIR acknowledges that the dairy’s crops are irrigated primarily with surface water rather than new groundwater extraction.<sup>100</sup> As to the second argument, the DEIR acknowledges that any additional groundwater recharge associated with the Project will constitute only a “minor offset” of the additional groundwater extraction.<sup>101</sup>

Because the DEIR inaccurately minimizes the potential impacts of additional groundwater extraction on local groundwater supply, it fails as an informational document.

**iv. The Applicant Incorrectly Claims that No Mitigation Measures are Required for the Significant Impacts to Groundwater Levels**

Since the DEIR provides an inadequate, incomplete, and inaccurate analysis of groundwater impacts, and because the DEIR fails to include any mitigation measures for groundwater supply,<sup>102</sup> the DEIR is inadequate.

**VII. Greenhouse Gas Emissions**

**A. National, State and Local Policies Require Reductions, not Increases, in Methane Emissions from Manure Management.**

**D-28**

The DEIR fails to acknowledge the Project’s inconsistency with national and state programs requiring methane reductions. The Intergovernmental Panel on Climate Change (IPCC) predicts global temperatures will rise by more than 1.5 degrees Celsius above pre-industrial levels in the next two decades and points to two gases as the biggest culprits: carbon dioxide and methane. Methane is a short-lived climate pollutant that accounts for about half of the 1.0 degree Celsius net rise in global average temperature since the pre-industrial era, making methane action an essential complement to climate stabilization.

<sup>97</sup> DEIR at 10-40.

<sup>98</sup> DEIR at 10-41.

<sup>99</sup> *Id.*

<sup>100</sup> DEIR at 10-40.

<sup>101</sup> *Id.*

<sup>102</sup> DEIR at 10-41.

Every level of government—federal, state, and local--has mandated cuts to methane emissions. The proposed expansion increases them and the DEIR fails to address the project’s inconsistency with adopted plans, including Senate Bill 1383.

The DEIR inaccurately concludes that there are no adopted plans with which the Project might be inconsistent.<sup>103</sup> The EIR thus fails to adequately address inconsistencies with adopted plans, including the SB 1383 methane reduction strategy for dairy methane. The EIR also fails to address inconsistency with state climate goals and policy, including new legislation establishing a goal of “net zero” GHG emissions by 2045.<sup>104</sup>

#### **i. National Priorities to Cut Methane**

In 2021, the United States committed to cut methane emissions by 30% from 2020 levels by 2030 as part of a global pledge. Over one hundred countries followed the United States and EU’s leadership following World Leaders Summit at the 26th UN Climate Change Conference (COP-26) this November in Glasgow, United Kingdom. **D-28**

The Inflation Reduction Act (“IRA”) of 2022 creates the Methane Emission Reduction Program imposing a first-time federal fee on methane emissions and building on US EPA’s existing Greenhouse Gas Reporting Program (“GHGRP”).<sup>105</sup> Although the fee primarily affects petroleum and natural gas facilities, the program underscores national priorities in reducing methane emissions. The DEIR fails to analyze and reconcile the project’s increase in methane when national policy calls for reductions.

#### **ii. California Methane Reduction Requirements**

With climate change and the increased potential for more frequent and severe droughts, less water stored in the Sierra snowpack, increased pests and invasive species, heat waves, and other impacts, California agriculture is vulnerable to increasing risks.<sup>106</sup> At the same time, dairy and livestock operations account for more than half of California’s methane emissions.<sup>107</sup> In 2016, the California Legislature passed Senate Bill 1383, which required methane emissions reductions by 40 percent by 2030. DEIR incorrectly characterizes these reductions as voluntary.<sup>108</sup> SB 1383 made the following findings:

- (1) Short-lived climate pollutants, such as black carbon, fluorinated gases, and **methane**, are powerful climate forcers that have a dramatic and detrimental effect on air quality, public health, and climate change.

---

<sup>103</sup> DEIR at 8-29.

<sup>104</sup> AB 1279, Stats. 2022, ch. 337, § 2 [adding Health & Safety Code § 38562.2, subd. (c)(1)]; *see also* Executive Order B-55-18

<sup>105</sup> President Biden signed into law the Inflation Reduction Act of 2022, a bill which provides \$369 billion in tax or other incentives for clean energy technology in transportation, energy generation, requirements to reduce of methane emissions from industrial sources, and incentives to increase carbon sequestration and reduce GHG emissions in the agricultural sector.

<sup>106</sup> DEIR at 8-15.

<sup>107</sup> CARB Dairy and Livestock Greenhouse Gas Emissions Working Group, available at <https://ww2.arb.ca.gov/our-work/programs/dairy-and-livestock-wg>.

<sup>108</sup> DEIR at 8-21.

- (2) These pollutants create a warming influence on the climate that is **many times more potent than that of carbon dioxide.**
- (3) Short-lived climate pollutants that are toxic air contaminants also are a significant environmental risk factor for premature death.
- (4) Reducing emissions of these pollutants can have an immediate beneficial impact on climate change and on public health.
- (5) To the extent possible, efforts to reduce emissions of short-lived climate pollutants should **focus on areas of the state that are disproportionately affected by poor air quality.**<sup>109</sup>

D-28

In March 2022, CARB issued its *Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target* as required by SB 1383. CARB concluded that the dairy and livestock sector is on pace to achieve just over half of the methane reductions to achieve the 40 percent reduction target by 2030 and that through additional installation of anaerobic digesters and herd size population decreases, California could achieve the 2030 target.<sup>110</sup> Thus, considerable additional methane reductions are needed to meet the 2030 target of 40 percent below 2013 levels, and this project would *increase* emissions.<sup>111</sup> Thus, the project is inconsistent with Senate Bill 1383 implementation and the DEIR fails to provide an analysis of such inconsistency.

#### **B. The DEIR Presents Analyses of GHG Emissions that is not Supported by Substantial Evidence**

D-29

The DEIR fails to fully, accurately, and clearly analyze greenhouse gas emissions from the proposed Silva expansion. The DEIR does not accurately account for all GHG emissions likely to occur on the dairy, likely to occur for dairy operations broadly, and likely to occur from the installation and use of an offsite digester.

The DEIR does not account for full lifecycle GHG emissions from the dairy. The DEIR does not account for the impacts that will result from exporting manure to other fields, including the greenhouse gas emissions from the export of and application of manure to fields beyond the dairy.<sup>112</sup> This omission severely undercounts both methane and nitrous oxide emissions from the transport and application of manure.

The DEIR incorrectly asserts that management practices have a greater influence on GHG emissions than the size of a dairy.<sup>113</sup> While it is true that management practices have a substantial impact on overall GHG emissions, herd size is linked with management practices. When a dairy confines thousands of animals, it limits the available management practices to those that produce

<sup>109</sup> SB 1383, Stats. 2016, ch. 336, § 4 [adding Health & Safety Code § 39730.7. Emphasis added.

<sup>110</sup> *Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target*, available at <https://ww2.arb.ca.gov/resources/documents/dairy-livestock-sb1383-analysis>.

<sup>111</sup> DEIR at 8-19.

<sup>112</sup> DEIR Appendix F-1 at Page 1.

<sup>113</sup> DEIR at 8-21, referencing Paustian, et al. 2006.

significant methane because there is more manure that the land can process. As the DEIR itself acknowledges, “methane production [from manure] will only occur under anaerobic conditions, such as anaerobic lagoons.”<sup>114</sup> More dairy animals produce more methane than fewer animals.

Finally, the DEIR fails to consider the greenhouse gas impacts of the planned-for digester cluster. Specifically, the DEIR fails to assess the increased nitrous oxide emissions from digester operations. The Holly analysis discussed above found that composted digestate produced from a manure digester emitted so much additional nitrous oxide that the climate benefit of capturing methane was canceled.<sup>115</sup> As discussed previously, the DEIR’s piecemealing precludes the analysis and mitigation of increased nitrous oxide emissions from a digester and understates the project’s climate impact. A revised EIR must disclose such climate impacts.

**D-30**

### **C. The Proposed Expansion is In Fact Inconsistent With State Plans and Goals to Reduce Short Lived Climate Pollution from Livestock Operations**

The DEIR states that the proposed expansion is not inconsistent with any plans or policies,<sup>116</sup> however the DEIR itself discusses the state’s goal of reducing short lived climate pollutants generally, and short lived climate pollutants from dairies specifically. By increasing methane emissions and other GHG emissions from this dairy and the dairy sector generally, the proposed Silva expansion is absolutely in conflict with state plans and goals.

**D-31**

The DEIR asserts that CEQA limits the applicability of mitigation measures on any specific project because they are cumulative impacts, not the result of the proposed project specifically.<sup>117</sup> However, the provision the DEIR cites merely says that “with some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.”<sup>118</sup> Simply asserting that methane emissions from dairies contribute to the cumulative impact of climate change and that current and future regulations does not end the analysis.<sup>119</sup>

Similarly, the DEIR asserts that the Scoping Plan goals are not meant to be applied to this project.<sup>120</sup> However, that same section of the Scoping Plan also warns that “[s]ome agencies have improperly attempted to use compliance with statewide regulatory programs to determine that

---

<sup>114</sup> DEIR at 8-12.

<sup>115</sup> See Michael A. Holly et al., *Greenhouse gas and ammonia emissions from digested and separated dairy manure during storage and after land application* Agriculture, Ecosystems & Environment (2017).

<sup>116</sup> DEIR at 8-26.

<sup>117</sup> DEIR at 8-24.

<sup>118</sup> Cal. Code Regs. tit. 14 §15130(c)

<sup>119</sup> DEIR at 8-24.

<sup>120</sup> DEIR at 8-28; 2022 Scoping Plan Appendix D, Section 3.2.2.

their projects' GHG impacts are mitigated or are otherwise consistent with the Scoping Plan.”<sup>121</sup> That is precisely that the DEIR does here, in defiance of policy to reduce methane emissions.

In defense of its conclusion that this expansion is not in conflict with any state policy, the DEIR relies upon a misunderstanding of California climate policy. It asserts that “[t]he 2022 Scoping Plan assumes animal population will continue to decrease based on existing trends. The Scoping Plan does not recommend or require the decrease of animal population as a strategy for GHG emissions reduction.”<sup>122</sup> In fact, the Scoping Plan relies upon reductions in dairy herds in order to achieve SB 1383 reductions.<sup>123</sup> The DEIR is not considering decreasing animal populations. It is considering the exact opposite. Choosing not to authorize a herd expansion is not the same as requiring a herd reduction. This analysis and the project are in clear conflict with California climate policy.

#### **D. The DEIR's Alternatives Analysis Confuses Mitigation Measure With Project Alternatives**

**D-32**

The DEIR is inconsistent throughout with respect to mitigation measures for GHG emissions and project alternatives. The DEIR includes three alternative mitigation measures for greenhouse gas emissions but fails to analyze them as part of the project and instead analyzes them - and rejects them - as project alternatives.<sup>124</sup> The DEIR must assess mitigation measures as part of the project.

#### **E. Mitigation Measure GHG-1 Does Not Comply with CEQA**

**D-33**

The DEIR requires that expansion “shall not occur until the manure digester hub is operational” and requires “documentation of the use of the dairy digester hub” before expanding.<sup>125</sup> The DEIR acknowledges that “[d]elaying expansion of the herd until the dairy digester hub is operational would ensure GHG emissions would be reduced consistent with the Scoping Plan mitigation strategy.”<sup>126</sup> The DEIR then claims that Merced County does not control the installation of the digester hub, and therefore the effectiveness is uncertain. However, the DEIR also acknowledges that the digester hub is currently under consideration with the County.<sup>127</sup> These circumstances indicate that the County should instead determine if the digester hub will be effective before permitting the Silva expansion which, by the DEIR's own admission, must rely on the effectiveness of the digester hub to mitigate its own GHG emissions. At present, the County

<sup>121</sup> 2022 Scoping Plan Appendix D, Section 3.2

<sup>122</sup> DEIR at 8-28.

<sup>123</sup> 2022 Scoping Plan at 231, available at <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>.

<sup>124</sup> DEIR 13-1 to 13-2.

<sup>125</sup> DEIR at 8-23.

<sup>126</sup> DEIR at 8-24.

<sup>127</sup> DEIR at 8-23.

cannot ensure that the digester hub would mitigate the project's increased GHG emissions. As noted above, CEQA requires mitigation measures be formulated.<sup>128</sup>

#### F. Nitrous Oxide Emissions

Manure decomposition produces N<sub>2</sub>O emissions.<sup>129</sup> Digested solids produce more emissions than raw manure.<sup>130</sup> Yet, the DEIR “does not include N<sub>2</sub>O emissions from application of exported manure at offsite locations.”<sup>131</sup> The DEIR justifies this exclusion with methodological uncertainties and assertions that the manure would replace other fertilizers, thus not increases N<sub>2</sub>O emissions. Neither of these justifications is conclusive or persuasive. Even if they were, the scale of additional exported manure, increasing from 9,300 to 49,200 tons, will produce substantial N<sub>2</sub>O emissions,<sup>132</sup> which the DEIR cannot reasonably exclude from its GHG analysis.

D-34

#### VIII. Cumulative Impact Analysis Inappropriately Tiers from the 2002 ACO EIR

The DEIR does not perform a cumulative impact analysis. Instead, the DEIR tiers from the cumulative impact analysis in the Program Environmental Impact Report for the Merced County Animal Confinement Ordinance Revision (“ACO EIR”).<sup>133</sup> The DEIR concludes that tiering from the ACO EIR is appropriate because the 2017 total San Joaquin Valley dairy herd falls within the range of the summary of projections cumulative impact approach for 2003 and 2005 total San Joaquin Valley dairy herd, and that the DEIR may appropriately tier from the ACO EIR's analysis.<sup>134</sup> However, the DEIR does not disclose the current total Merced County dairy herd and does not discuss whether the total Merced County herd is consistent or not consistent with the summary of projections for the total Merced County dairy herd in the ACO EIR.<sup>135</sup> This missing information prevents consideration of whether cumulative impacts are more severe in Merced County than that which the ACO EIR considered, and thus tiering off the ACO EIR would no longer be appropriate.

D-35

Additional data missing from the DEIR suggests that relying on the ACO EIR's cumulative impact analysis does not comport with CEQA. For instance, the Merced Planning Department posts recently prepared environmental documents on the Merced County website.<sup>136</sup> Based solely on the information on this website, Merced County has permitted, or is in the process of permitting (1) Correia Family Dairy Farms, (2) Azevedo Dairy #2, (3) Martins View Dairy, (4) Toste Dairy, (5) Nunes Dairy, (6) Silva Dairy, (7) Borba Dairy Farms, (8) Vierra Dairy, (9)

<sup>128</sup> 14 C.C.R. § 15126.4. “Formulation of mitigation measures shall not be deferred until some future time.” Id. § 15126.4(a)(1)(B).

<sup>129</sup> DEIR at 8-13.

<sup>130</sup> See Michael A. Holly et al., *Greenhouse gas and ammonia emissions from digested and separated dairy manure during storage and after land application Agriculture, Ecosystems & Environment* (2017).

<sup>131</sup> DEIR at 8-19.

<sup>132</sup> DEIR at 3-17.

<sup>133</sup> DEIR at 12-6.

<sup>134</sup> DEIR at 12-5.

<sup>135</sup> Id.

<sup>136</sup> See Environmental Documents, available at <https://www.countyofmerced.com/414/Environmental-Documents> (last visited September 9, 2024).



Hillcrest Dairy, (10) Antonio Azevedo Dairy #4, and (11) Azevedo Dairy Farms LLC. In addition to these expansions, the County has seen expansive growth of biomethane infrastructure in the past several years, which is still ongoing. The biogas cluster and pipeline projects facilitate dairy expansions to monetize and incentivize increased dairy herds and manure generation. The total additional number of dairy cows (milk cows and support stock) from the above-listed projects totals at least an additional 25,000 cows. This DEIR should not tier off the twenty-one-year-old ACO EIR when the DEIR for this Project does not provide data on Merced County dairy herd growth and instead relies on San Joaquin Valley data.

**D-35**

Moreover, the DEIR should not tier off the ACO EIR and should instead perform a cumulative impact analysis of current conditions and projections for growth, especially recognizing the County's authorization of biogas cluster and pipeline projects and over 25,000 additional cows in recently approved or pending projects. The cumulative effect of these projects on local environmental conditions, such as air and water quality, has not been analyzed. This omission compromises the accuracy of the impact assessment for the Silva Dairy Farm, as it fails to account for the broader context of current dairy developments.

Additionally, since the 2003 and 2013 ACO and General Plan EIRs, there have been substantial changes in environmental conditions, regulatory frameworks, and technological advancements, including the passage of SGMA in 2016, the development and deployment of dairy biomethane infrastructure throughout Merced County, and the State Water Board's adoption of the Salt and Nitrate Control Program in 2019. Relying on these older documents fails to consider these (and many other) recent developments, which are crucial for an accurate and comprehensive assessment.

A compliant cumulative analysis would look at the several, proposed increase in herd sizes across multiple dairy projects, including the Silva Dairy Farm, and identify significant environmental impacts on air quality, water resources, local ecosystems, greenhouse gas emissions, quality of life, and public health. A compliant DEIR must also look at the cumulative impacts of this project in conjunction with the planned dairy biogas cluster to which it plans to connect, which will generate significant truck traffic for daily manure transportation and processing. As a result, the DEIR must consider significant regional air quality and traffic impacts. It must also accurately describe *current* baseline environmental and regulatory conditions. The EIR's reliance on outdated analyses does not adequately address these specific requirements.

Given the outdated nature of the ACO EIR and the General Plan EIR, along with the failure to include current data on pending dairy and biomethane projects, the DEIR is inadequate. To ensure that all potential impacts are accurately assessed and mitigated, a new and comprehensive environmental review is necessary. This updated analysis should incorporate current regulations, recent data, and the cumulative effects of all dairy projects in Merced County to address the full scope of environmental impacts associated with the Silva Dairy Farm expansion and related developments.

**IX. The DEIR Is Incorrectly Tiered from the Animal Confinement Ordinance (ACO) and General Plan EIRs**

The DEIR incorrectly concludes that Merced County’s Animal Confinement Ordinance (ACO) and General Plan EIRs adopted mitigation measures, evaluated baseline environmental conditions, and analyzed cumulative impacts that apply to this project.<sup>137</sup> Thus, as explained below, tiering the DEIR to the ACO and General Plan does not comply with CEQA.

**A. The ACO Does Not Impose Valid Mitigation Measures–It Merely Sets Forth Requirements in the Merced County Municipal Code** **D-36**

The ACO cannot outline mitigation measures because it is simply a list of local baseline legal requirements for animal confinement facilities. Under CEQA, a mitigation measure must modify the project in a way that will avoid, minimize, rectify, reduce, eliminate, or compensate for the impact.<sup>138</sup> A baseline legal obligation is not a mitigation measure because it is already *required* to be a part of the project as proposed. As a local requirement, the actions outlined by the ACO are already a part of the original project as proposed and are therefore not mitigation measures. Mitigation measures must propose something additional to the project as proposed in order to address its impacts.

**B. The General Plan EIR Does Not Accurately Describe Baseline Conditions or Cumulative Impacts** **D-37**

The Merced County General Plan EIR was certified in 2013, making its assessment of baseline environmental conditions and any discussion of cumulative impacts outdated. Under CEQA, the baseline “normally” consists of “the physical environmental conditions in the vicinity of the project, as they exist at the time . . . environmental analysis is commenced . . .”<sup>139</sup> The General Plan’s assessment of the baseline environmental conditions is outdated and inaccurate. For example, the General Plan EIR was written and adopted prior to the passage of the Sustainable Groundwater Management Act and the Central Valley Water Board’s acceptance of a regional Salt and Nitrate Management Plan, meaning it lacks the technical analysis and modeling of groundwater levels and quality now available in the Merced Subbasin Groundwater Sustainability Plan (GSP) and Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) plans.

---

<sup>137</sup> DEIR at 1-5.

<sup>138</sup> 14 C.C.R. § 15370

<sup>139</sup> 14 C.C.R. § 15125(a)

Furthermore, groundwater levels have severely declined since the General Plan EIR's 2013 adoption date. The project site is located in a critically overdrafted subbasin which is currently enduring its second period of drought since the EIR was drafted. Additionally, the Merced County General Plan EIR was adopted before the California Air Resources Board approved the state's Short-Lived Climate Pollution Strategy in 2017, which requires a 40% reduction in methane emissions by 2030, meaning it does not adequately describe the baseline environmental conditions of the region in light of state climate goals, nor can it provide any cumulative analysis of the implications of widespread dairy expansions throughout the region on reaching this state climate goal. Lastly, the General Plan EIR was adopted prior to the 2019 Central Valley Representative Dairy Monitoring Report. Thus, the General Plan EIR's description of baseline conditions is not based on current groundwater quality monitoring, and any discussion of cumulative impacts from regional herd size growth trends is not based on accurate groundwater quality monitoring data.

#### **X. The Project Objectives Are Impermissibly Narrow**

The project objectives are so narrow as to preclude any reasonable alternative other than the project as proposed by the proponent. An EIR must contain a statement of the project objectives.<sup>140</sup> The lead agency must then use this statement to help it, among other things, develop a reasonable range of alternatives to the proposed project to evaluate in the EIR. *Id.* “As our Supreme Court has explained, “[t]he process of selecting the alternatives to be included in the EIR begins with the establishment of project objectives by the lead agency. ‘A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings . . . ’”<sup>141</sup>

**D-38**

Here, the project objectives include: “[t]o fully use land and facilities currently owned and operated by the project applicant without the need to purchase additional land”; “[t]o use all available land (which is not otherwise used for the dairy) for the production of feed for the herd.”; “[t]o maintain a modern, efficient, and competitive dairy operation that operates in full compliance with applicable county, state, and federal laws and regulations”; and “[t]o provide year-round employment opportunities, at competitive wages, for Merced County residents. Unlike other agricultural operations, which provide only seasonal employment, dairies provide year-round employment.”<sup>142</sup>

<sup>140</sup> 14 C.C.R. § 15124 “The objectives identified above “will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary”

<sup>141</sup> *We Advoc. Through Env't Rev. v. Cnty. of Siskiyou* (2022) 78 Cal. App. 5th 683, 691 (quoting *In re Bay-Delta etc.* (2008) 43 Cal. 4th 1143, 1163).

<sup>142</sup> DEIR at 3-9 to 3-10.

These objectives are, in essence, defined as pursuing the proposed project itself. For example, the project must include “land and facilities owned and operated by the project applicant,” which severely limits any range of reasonable alternatives to the project. By limiting the project objective in this manner: “the County ensured that the results of its alternatives analysis would be a foregone conclusion. It also, as a result, transformed the EIR's alternatives section—often described as part of the ‘core of the EIR’ [citation omitted]—into an empty formality.”<sup>143</sup> Indeed, the DEIR’s narrow definitions of the project objectives is prejudicial. For instance, the DEIR rejects the “no project” alternative based on its speculation that not expanding the dairy would be less profitable and would not provide “year round” employment—even though the DEIR acknowledges that the project will not increase the amount of jobs available at the dairy.<sup>144</sup> The other alternatives are rejected for similar reasons due to the narrowly defined project objections.<sup>145</sup> Courts have rejected substantially similar DEIR’s with flawed project objectives because they “prejudicially prevented informed decision making and public participation.”<sup>146</sup>

## **XI. Conclusion**

Considering the disparate impact the project would cause on protected classes, the DEIR’s inadequate analysis of Environmental Impacts, conflicting state and federal regulations and climate goals, and the significant, unmitigated impacts expansion would cause, Merced County must reject the requested Conditional Use Permit for the expansion of Silva Dairy. Please do not hesitate to reach out to us should you have any questions regarding the contents of this letter.

**D-39**

Respectfully Submitted,

Alicia Rivera  
Madeline Harris  
Jamie Katz  
Michael Claiborne  
Leadership Counsel for Justice & Accountability

Anastacio Rosales  
Merced County Resident

Leonard Moreno  
Merced County Resident

Cathy Moreno  
Merced County Resident

---

<sup>143</sup> We Advoc. Through Env’t Rev., 78 Cal. App. at 692.

<sup>144</sup> DEIR at 13-8.

<sup>145</sup> See DEIR at 13-14, 13-18, 13-19, & 13-23.

<sup>146</sup> We Advoc. Through Env’t Rev., 78 Cal. App. at 694.

Patricia Ramos- Anderson  
Merced County Resident

Maria Arevalo  
Tulare County Resident

## Response to Letter D

**Commenter** Leadership Counsel for Justice & Accountability  
September 9, 2024

---

- D-1 The commenter provides background on their organization, and objects to the proposed project due to its significant and unavoidable environmental effects. The comment states the project would add pollution to the San Joaquin Valley air basin and the San Joaquin River watershed, and those burdens would be disproportionately carried by the community of Stevinson. The comment states that the DEIR fails to accurately analyze the full scope of impacts on the region, and that the DEIR expressly concedes unmitigable, cumulative environmental harm through ozone precursor emissions, and cumulative air quality, GHG emissions, and hydrology/water quality impacts.

Merced County acknowledges receipt of these comments from the representatives of the Leadership Counsel for Justice & Accountability. The Planning Commission will consider the views expressed in these comments in their review and actions on the proposed dairy expansion. Because these comments raise no questions or concerns regarding the analysis in the Draft EIR, no additional responses are necessary in this EIR. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no modification of the EIR is necessary.

- D-2 The commenter summarizes the purposes of CEQA, including to inform decision makers and the public regarding environmental impacts, and to reduce environmental impacts when feasible.

The comment summarizes the intent of CEQA accurately, citing CEQA sections in regard to informing decision makers and public of the environmental consequences of a project, and the requirement to avoid or reduce environmental impacts, when feasible. Because the comment does not raise any concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- D-3 The comment states that the project would have disparate impacts on protected classes in violation of fair housing and civil rights law.

Merced County acknowledges the comment. The Planning Commission will consider the views expressed in these comments in their review and actions on the proposed dairy expansion. Because these comments raise no questions or concerns regarding the analysis in the Draft EIR, no additional responses are necessary in this EIR. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no modification of the EIR is necessary.

- D-4 The comment states that the project raises concerns related to ammonia emissions and PM<sub>2.5</sub> particles.

The Silva Dairy Expansion DEIR includes background information on ammonia as a precursor to PM<sub>2.5</sub> formation and associated health effects in DEIR pages 5-14 to 5-15. An

evaluation of ammonia as a precursor to PM<sub>2.5</sub> formation is included in *Impact AQ-4: PM<sub>10</sub> and PM<sub>2.5</sub> emissions from fugitive dust during project operations* (DEIR p. 5-31 to 5-32). In addition, the DEIR assesses the potential risk to the adjacent residents and workers attributable to emissions of hazardous air pollutants (including ammonia) from construction and operation of the proposed dairy in the Health Risk Assessment (HRA) located in Appendix G of the DEIR and summarized in *Impact AQ-5: Expose nearby residents to substantial pollutant concentrations from the emissions of toxic air contaminants from project construction and operations* (DEIR pp. 5-34 to 5-36).

Since no new or modified environmental effect is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-5 The comment states that the DEIR does not adequately assess odor and air quality impacts, nor does it propose mitigation that would address additional impacts that would result from expansion of the dairy.

The County acknowledges the comment. Project-related impacts to air quality and odors are evaluated in Chapter 5, *Air Quality and Odors*, of the DEIR, and mitigation measures have been included to reduce project-related impacts to air quality and odors. Because the comment does not raise any specific concerns regarding the content or environmental conclusions of the DEIR, no changes to the DEIR are necessary.

- D-6 The comment states that DEIR Mitigation Measure AQ-7 does not reduce odor impacts associated with the increase in herd size. The comment states that the ACO Odor Control Plan and improved notification to the nearby community are not adequate and do not reduce the magnitude of the impact.

The comment neglects to recognize Merced County's setback requirements as a means to minimize odor effects from dairies. Merced County regulates dairy locations using two complementary provisions of the Zoning Code: Section 18.10.020 C, Agricultural Zone Land Uses and Permit Requirements, and Section 18.64.040, Locational Criteria. Summarily, these two sections of the Zoning Code require a 0.5-mile setback between the active areas of a dairy and various sensitive uses, including: large and small locations of urban uses; residentially designated property in the General Plan or residentially zoned property; schools, hospitals, jails, public or private recreational areas, parks, or all wildlife refuges; or concentrations of five or more off-site residences. No provision of the Zoning Code allows the waiver or modification of this setback requirement.

For isolated rural residences, the Code requires a minimum setback of 1,000 feet between an off-site residence and active areas of a dairy. However, this setback may be lessened by a dairy operator in favor of an off-site property owner seeking to construct a new residence nearer to the dairy than 1,000 feet, or by an existing resident in favor of an existing dairy seeking to construct an active area of the dairy within the 1,000-foot setback. At the Silva Dairy, the closest off-site residences are located approximately 700 feet and 895 feet west of active animal facilities at the north dairy. See Figure 3-7 in Chapter 3, *Project Description*, of the DEIR.

Finally, both Sections 18.10.020 C and 18.64.040 establish a regulatory setback for determining what level of County review would be required to evaluate a proposed new or expanded dairy. A windshed diagram (duplicated as Figures 2-1 and 4-4 in the Zoning Code) establishes an

area of concern that extends between 1,320 feet ( $\frac{1}{4}$  mile) upwind and 2,640 feet ( $\frac{1}{2}$  mile) downwind from active areas of a proposed dairy. The windshed diagram was developed to incorporate prevailing wind directions into Merced County's dairy regulatory framework in order to include considerations of odor transport, dust, and other aspects of dairy operations that could result in nuisances in the County's review. As adopted in the windshed diagram, the primary wind direction in the County is from the northwest to southeast. (See Figure 3-4 in Chapter 3, *Project Description*, of the DEIR for the windshed diagram for the Silva Dairy Farms.) Thus, it would be unlikely that the community of Stevenson, located approximately 2.4 miles to the east-northeast of the Silva Dairy Farms site would be adversely affected by an expansion of the dairy at its current location, despite the increase in animals.

The comment also questions the efficacy of the County's reliance on a complaints system as a means to control odors. However, the comment fails to consider the full breadth of the measures of the County's regulatory scheme with respect to odors associated with dairies. Rather than relying solely on the presence/absence of odor complaints for a particular dairy submitted to either the SJVAPCD or the County Division of Environmental Health (DEH), the odor regulatory scheme: (1) requires setbacks between dairies and sensitive land uses; (2) requires implementation of a number of mandatory operational requirements set forth in the ACO;<sup>1</sup> (3) requires preparation, approval, and implementation of an Odor Control Plan; (4) encourages the use of odor-reducing operations and equipment; and, (5) implements a notification and response system to address outstanding odor complaints.

In the case of the Silva Dairy Farms, the operator has identified a series of best management practices known to reduce odor emissions as discussed on page 5-39 of the DEIR. These measures, to the extent that they are not currently being implemented, would be implemented as required by the Odor Control Plan should the proposed expansion be approved. Additionally, there is an existing mechanical manure separator at the south facility, and a separator also would be installed at the north facility to separate liquid manure from solid manure. Solid separation is considered to be moderately effective in reducing odor.<sup>2,3</sup> Additionally, operation of an anaerobic digester is considered to be highly effective in reducing odor generation, in some cases reducing the concentration of odor-generating compounds in the digestate by an average of 80 percent.<sup>4</sup> As of the date of this FEIR, the Silva Dairy Farms operator has entered into a digester project contract<sup>5</sup> to participate in a centralized dairy

---

<sup>1</sup> For a discussion of these measures, see DEIR pages 5-38 through 5-39, in Chapter 5, *Air Quality and Odors*.

<sup>2</sup> The odor reduction effectiveness of manure management practices is indicated as "low," "moderate," or "high." A low effectiveness assumes a reduction in odor generation of less than 20%; moderate, between 20 and 50%; and high, greater than 50% relative to the base line unit.

<sup>3</sup> Garcia, A., Tjardes, K., Stein, H., Ullery, C., Pohl, S., Schmit, C. (Garcia et al), Undated. Recommended Strategies for Odor Control in Dairy Operations. South Dakota State University, undated. Accessed at: <<https://nutrition.ansci.illinois.edu/sites/default/files/ESS803-B.pdf> >

<sup>4</sup> Cornell College of Agriculture and Life Sciences, Dairy Environmental Systems Program (Cornell), 2020. Dairy Manure Odor Perception and Management Series. Accessed at: <<https://cals.cornell.edu/pro-dairy/our-expertise/environmental-systems/climate-environment/odor-air-quality> >

<sup>5</sup> The DEIR (July 2024) noted that the applicant planned to participate in a centralized dairy digester cluster under review with the County. As of the date of this FEIR (January 2025), the Silva Dairy Farms operator has entered into a separate digester project contract to participate in an alternate dairy digester cluster project. See Chapter 4 of this FEIR for additional information included in a revised Impact GHG-1.



digester cluster project currently in development with the County, which could result in additional odor reduction at the dairy.

With respect to publicizing the complaint process, Mitigation Measure AQ-7 details the notification procedure to be included in the Odor Control Plan beyond the ACO requirements. This includes a description of the County's odor complaint procedures, including contact information for the County DEH. As required by Mitigation Measure AQ-7, all potentially affected *residents* (including occupying tenants) will be notified of their rights to file a complaint and, as modified, an explanation of the filing process. As stated in the DEIR, no odor complaints have been reported at the Silva Dairy Farms and submitted to the DEH or the SJVAPCD within the last five years (DEIR p. 5-38).

In summary, Merced County's odor regulation seeks to eliminate or reduce odor generation based on the implementation of best management practices, robust setbacks between dairies and sensitive uses, encouragement to modify operations and install equipment that reduce dairy odor generation, and operation of a notification and response system to address outstanding odor complaints. No aspect of the comment specifies how the County's existing odor regulation policies are inadequate or inappropriate.

Thus, the potential impacts from odors have been fully evaluated in the DEIR, and no new or additional evaluation or mitigation would be necessary. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-7 The comment states that the recommended odor control measures predominantly address construction impacts. The comment states that additional odor control measures should be considered.

See response to comment D-6 above. Merced County's odor regulation seeks to eliminate or reduce odor generation based on the implementation of best management practices, robust setbacks between dairies and sensitive uses, encouragement to modify operations and install equipment that reduce dairy odor generation, and operation of a notification and response system to address outstanding odor complaints. None of these measures are related to construction as the comment asserts. No aspect of the comment specifies how the County's existing odor regulation policies are inadequate or inappropriate, nor does the comment suggest measures that are different or more effective than those identified in the DEIR.

Thus, the potential impacts from odors have been fully evaluated in the DEIR, and no new or additional evaluation or mitigation would be necessary. Since no new or modified impacts are identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-8 The comment heading states that odor impacts violate the terms of the WDRs, but the following paragraph states that enhanced odor mitigation strategies and community engagement are essential to reduce impacts to public health and quality of life.

See response to comment D-6 above regarding odors. The comment heading that odor impacts violate the terms of the WDRs appears to be an error, and no changes to the DEIR would be required.

- D-9 The comment states that the DEIR fails to identify feasible mitigation measures for VOC and NO<sub>x</sub> emissions. The comment states that consultation with the SJVAPCD regarding a Voluntary Emissions Reduction Agreement (VERA) is not effective mitigation.

As stated in the regulatory setting for Chapter 6, *Air Quality and Odors*, for nonattainment criteria pollutants, the SJVAPCD has attainment plans in place that identify strategies to bring regional emissions into compliance with federal and state air quality standards. Projects and uses that are consistent with the assumptions used to develop the plans, and implement strategies to implement the plans, would not jeopardize attainment of the air quality levels identified in the plans.

Local General Plan land use designations and population projections form the basis of SJVAPCD attainment planning. The proposed Silva Dairy Expansion project is a use consistent with the 2030 Merced County General Plan land use designation for the project site and area used to generate air emission projections incorporated into the SJVAPCD attainment plans. Thus, implementation of the project would not conflict with the assumptions and emissions estimates contained within the plans as approved by the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA). The SJVAPCD regulates air emissions at the Silva Dairy through its Authority to Construct (ATC)/Permit to Operate (PTO) permit process, and has required operational mitigation measures to reduce air emissions at the dairy. All regulatory requirements to reduce VOC and NO<sub>x</sub> have been applied to the existing and proposed dairy operations. (DEIR p. 5-46)

*Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic* (DEIR pp. 5-24 to 5-28) evaluates the proposed dairy expansion project impacts as a result of ozone precursor emissions (VOC and NO<sub>x</sub>). Estimated VOC emission from the project were found to exceed SJVAPCD significance thresholds, and the impact would be considered significant. NO<sub>x</sub> emissions estimates were found not to exceed SJVAPCD significance thresholds. While offsets are generally required for new or expanding businesses subject to SJVAPCD Rule 2201 that exceed air quality standards, agricultural sources are generally exempt from offsets (DEIR, p. 5-7). Mitigation Measure AQ-3 requires the project applicant to consult with the SJVAPCD regarding the establishment of a Voluntary Emissions Reduction Agreement consistent with Merced County General Plan Policy. DEIR pages 5-30 to 5-31 provide an extensive explanation as to why it is infeasible to *require* a VERA for the proposed dairy expansion, as it would violate both Merced County policy and the SJVAPCD's own policies. Dairies do not result in substantial surplus emissions outside of the SJVAPCD's regulatory authority (DEIR, p. 5-31). Even with adoption of Mitigation Measure AQ-3, because of the uncertainty of whether a VERA will be established, the impacts of ozone precursor emissions would be considered significant and unavoidable. Approval of the Silva Dairy Expansion project will require the adoption of a statement of overriding considerations pursuant to Section 15093 of the CEQA Guidelines. This guideline requires a decision-making agency such as the Merced County Planning Commission or Board of Supervisors to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve a project. According to the

guideline, if the economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”

Since no new or modified environmental effect is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-10 The comment states that the DEIR does not accurately evaluate or mitigate ammonia as a PM<sub>2.5</sub> precursor.

The Silva Dairy Farms Expansion DEIR *Impact AQ-4: PM<sub>10</sub> and PM<sub>2.5</sub> emissions from fugitive dust during project operations* provides an analysis of anticipated fugitive dust emissions resulting from the proposed dairy expansion. The impact analysis indicates that the proposed project would result in an overall reduction in PM emissions due to changes in animal housing and cropping patterns. The DEIR includes a discussion of ammonia as a precursor to PM<sub>2.5</sub> formation on DEIR page 5-15 and as part of the analysis in Impact AQ-4 (DEIR p. 5-32). As stated in the DEIR:

CARB and the SJVAPCD have concluded emissions of ammonia do not contribute significantly to ambient PM<sub>2.5</sub> levels in the San Joaquin Valley since it is limited by the amount of NO<sub>x</sub> present in the air.<sup>6,7</sup> As described in Impact AQ-3, NO<sub>x</sub> emissions are not anticipated to exceed SJVAPCD significance criteria. Though ammonia is not designated as a precursor pollutant under the CAA, the SJVAPCD Rule 4570 requirements to limit VOC emissions at confined animal facilities also work to reduce ammonia emissions for dairies, which may be an effective PM<sub>2.5</sub> mitigation practice in certain areas and climatic conditions.<sup>8</sup> While the proposed dairy expansion project would result in an increase in ammonia emissions (see DEIR Appendix F-1), based on the available information, it is not anticipated to substantially contribute to PM<sub>2.5</sub> formation for the reasons stated above.

<sup>6</sup> CARB 2022. CARB Withdrawal Letter and SJVAPCD Concurrence Letter. October 27, 2022. Accessed at: <<https://ww2.arb.ca.gov/resources/documents/2018-san-joaquin-valley-pm25-plan>>

<sup>7</sup> SJVAPCD 2022. Concurrence on State’s Withdrawal of 2012 PM<sub>2.5</sub> SIP portions of the 2018 PM<sub>2.5</sub> Plan. October 27, 2022. Accessed at: <<https://ww2.arb.ca.gov/resources/documents/2018-san-joaquin-valley-pm25-plan>>

<sup>8</sup> Hristov, A. N., 2011. Technical note: Contribution of ammonia emitted from livestock to atmospheric fine particulate matter (PM<sub>2.5</sub>) in the United States. Dairy Sci. 94:3130-3136. Accessed at: <<https://www.sciencedirect.com/science/article/pii/S0022030211003006>>

In practice, the SJVAPCD has implemented the best available control measures on livestock operations that have already achieved approximately 25 percent reduction from ammonia through Rule 4570. CARB is not aware of controls that would achieve greater reductions on the order needed to achieve an overall 30 percent reduction of ammonia emissions in the Valley; nevertheless, CARB is pursuing further research specific to California and the Valley to improve our understanding of ammonia emissions from various sources as a necessary prerequisite to identifying potential effective measures to achieve additional emissions reductions.<sup>9</sup>

In documentation regarding the SIP, the EPA concurred with the CARB and SJVAPCD conclusion that emissions of ammonia do not contribute significantly to ambient PM<sub>2.5</sub> levels in the San Joaquin Valley<sup>10</sup>. Based on the extensive information presented by the CARB and the SJVAPCD in their submittal to the EPA, the DEIR evaluation of ammonia as a precursor to PM<sub>2.5</sub> formation would be considered adequate, and no additional analysis would be required. There would be no change in the DEIR or environmental conclusions presented in the DEIR as a result of this comment.

- D-11 The comment states that the EIR does not evaluate NO<sub>x</sub> emissions from the use of nitrogen applied to cropland.

The DEIR includes a discussion of NO<sub>x</sub> emissions from soil in *Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic* (DEIR p. 5-26). The DEIR includes reference to several studies, including a recent study by researchers at CARB that “found that soil NO<sub>x</sub> is a relatively minor fraction of the total NO<sub>x</sub> emissions in California and has a minor effect on atmospheric concentrations of particulate nitrate in the San Joaquin Valley”.<sup>11,12</sup> Despite the fact that studies report a wide range of soil NO<sub>x</sub> emissions, and there are no currently adopted emission factors for NO<sub>x</sub> emissions from the soil due to the wide number of variables, the episodic nature of N gases from soil, and lack of extensive assessment, the DEIR provides an estimate for onsite emissions of NO<sub>x</sub> as a result of the project.

A lead agency is not required “to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors” (CEQA Guidelines Section 15204(a)). EIRs do not require “technical perfection,” “scientific certainty,” and “exhaustive analysis”. Rather, EIRs require only “adequacy, completeness and a good-faith effort at full

---

<sup>9</sup> CARB 2023. Ammonia: Supplemental Information for EPA in Support of 15 µg/m<sup>3</sup> Annual PM<sub>2.5</sub> Standard. March 2023. Accessed at: <<https://ww2.arb.ca.gov/sites/default/files/2023-04/AmmoniaSupplementalInformation.pdf>>

<sup>10</sup> Federal Register/Vol. 88, No. 134/Friday, July 14, 2023/Proposed Rules. Accessed at: <<https://www.federalregister.gov/documents/2023/07/14/2023-14687/air-quality-state-implementation-plans-approvals-and-promulgations-california-1997-annual-fine>>

<sup>11</sup> CARB 2024. NO<sub>x</sub> Emissions from California Lands. Accessed at: <<https://ww2.arb.ca.gov/our-work/programs/soil-emissions-california-lands/nox-emissions-california-lands>>

<sup>12</sup> Guo, L, et. al. 2020. Assessment of nitrogen oxide emissions and San Joaquin Valley PM<sub>2.5</sub> impacts from soils in California. *Journal of Geophysical Research: Atmospheres*. Vol. 125, Issue 24. December 27, 2020. Guo, L; Chen, J; Luo, D; Liu, S; Lee, HJ; Motallebi, N; Fong, A; Deng, J; Rasool, QZ; Avise, JC; Kuwayama, T; Croes, BE; FitzGibbon, M. Accessed at: <<https://doi.org/10.1029/2020JD033304>>

disclosure.” (*The Claremont Canyon Conservancy v. Regents of the University of California* (2023) 92 Cal.App.5th 474). Merced County has determined that this standard has been met.

The comment suggests that the EIR analyze the impact of NO<sub>x</sub> emissions from both onsite and offsite fields. As noted in the DEIR, the proposed operations would result in increased solid manure exported for off-site application to cropland. However, the County can’t control where the manure is sold and how it is applied to cropland. Considering these factors, and due to the complexity of soil NO<sub>x</sub> dynamics, it would be considered speculative to assess project-level emissions at off-site fields (DEIR, p. 5-26). However, impacts from NO<sub>x</sub> emissions throughout the County are considered in the cumulative analysis of the EIR.

Since the environmental analysis and conclusions of Impact AQ-3 presented in the DEIR would be unchanged by these modifications, no further revision to the EIR would be required.

- D-12 The comment states that the EIR does not evaluate or mitigate NO<sub>x</sub> emissions from the project. The comment also states that the analysis should include soil NO<sub>x</sub> emissions and increased truck emissions from exporting manure off-site to the planned dairy digester cluster, and its impact on ambient air quality.

*Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic* (DEIR pp. 5-24 to 5-28) evaluates the proposed dairy expansion project impacts as a result of ozone precursor emissions (VOC and NO<sub>x</sub>). NO<sub>x</sub> emissions estimates were found not to exceed SJVAPCD significance thresholds; therefore, no mitigation would be required to reduce NO<sub>x</sub> emissions. See response to comment D-9 for an overall discussion of Impact AQ-3. See response to comment D-11 for a discussion of NO<sub>x</sub> emissions from soil.

Regarding NO<sub>x</sub> emissions from operations related to the planned dairy digester cluster, the dairy digester cluster is not a part of the project under review in this EIR prepared for the dairy expansion project. Chapter 13, *Alternatives Analysis*, of the DEIR, includes an evaluation of the environmental effects of the proposed project with the addition of an anaerobic digester as part of a dairy digester cluster, which would include similar impacts to the planned dairy digester cluster in the project area.

A project may be considered separately from potential future projects when the two “have different proponents, serve different purposes or can be implemented independently.” (*Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209; *Make UC a Good Neighbor v. Regents of University of California* (2023) 88 Cal.App.5th 656). The proposed dairy expansion project assessed in this EIR has independent utility. The successful implementation of the proposed dairy expansion does not depend upon the construction and operation of the digester cluster, and the digester cluster may or may not be constructed and operated for reasons other than the status of the dairy expansion, even if the two are related in some other respects (*Planning & Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210; *Sierra Club v. West Side Irrigation Dist.* (2005) 128 Cal.App.4th 690). For these reasons and pursuant to Section 15165 of the State CEQA Guidelines, there is no need to fully assess the individual impacts of implementing the digester cluster in this EIR. The discussion in DEIR Chapter 13, *Alternatives Analysis* evaluates the combined effects of implementing the proposed dairy expansion and a digester. No additional evaluation is necessary. The above addition is for clarification purposes only and does not alter the conclusions of the EIR. Therefore, no

modification of the DEIR's evaluation of environmental effects or environmental conclusions would be necessary.

- D-13 The comment states that the EIR addresses only truck trips for feed and commodity deliveries, and fails to include truck trips to transport manure to the planned dairy digester cluster in Stevinson.

The comment is incorrect, as the DEIR analysis addresses emissions from vehicle trips shown in DEIR Table 3-4 (DEIR, p. 3-21), which includes heavy truck trips from solid manure transport to off-site fields (see DEIR Appendix F-1 for air emissions modeling). Regarding environmental impacts associated with the planned dairy digester cluster, see response to comment D-12 above.

- D-14 The comment states that the EIR does not adequately evaluate human health impacts resulting from the project's substantial air emissions based on the *Sierra Club* decision.

The Silva Dairy Farms Expansion DEIR includes an evaluation of human health effects from significant air quality impacts in *Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic* (DEIR pp. 5-26 to 5-27), though it is important to note that the dairy expansion project does not exceed SJVAPCD significance thresholds for criteria air pollutants, including VOC or NO<sub>x</sub>. The discussion provides a detailed explanation as to why it is not feasible to provide such an analysis, and based on existing guidance, provides a qualitative discussion of direct health impacts as a result of the proposed project's mass emissions. As stated in response to comment D-11 above, EIRs require only "adequacy, completeness and a good-faith effort at full disclosure" (*The Claremont Canyon Conservancy v. Regents of the University of California* (2023) 92 Cal.App.5th 474).

The comment states that there is extensive information in the scientific literature regarding the health impacts of air emissions from concentrated animal feeding operations. However, this comment confuses health impacts from site-specific air emissions from a dairy (evaluated in DEIR *Impact AQ-5: Expose nearby residents to substantial pollutant concentrations from the emissions of toxic air contaminants* and *Impact AQ-6: Expose nearby residents to substantial pollutant concentrations from emissions of criteria air pollutants* (DEIR pp. 5-34 to 5-37)) with the analysis of health impacts as a result of mass emissions from a dairy (evaluated in *Impact AQ-3: Ozone precursor emissions from dairy operations, farm equipment, and increased traffic* (DEIR pp. 5-26 to 5-27)).

Based on the extensive information presented by the SJVAPCD and the South Coast Air Quality Management District in their amicus briefs<sup>13</sup> on the Friant Ranch case, the DEIR evaluation of human health effects from significant air quality impacts would be considered adequate, and no additional analysis would be required. There would be no changes in the environmental conclusions presented in the DEIR as a result of this comment.

- D-15 The comment states that the EIR does not assess the disproportionate health impacts of implementing the proposed project on the already overburdened community of Stevenson.

A “disproportionate health impact” on a nearby community from implementation of a project means that the negative health effects of the project will be significantly greater for that community compared to others, often due to factors like existing health disparities, socioeconomic status, or environmental vulnerabilities, leading to a more severe impact on their wellbeing than would be experienced by a wider population. As defined by the State of California, environmental justice is the equal treatment of people of all races, cultures, and incomes when it comes to environmental laws, regulations and policies. (Government Code Section 65040.12(e))

The California Environmental Quality Act does not explicitly require analyses of environmental justice. The California Public Resources Code (PRC Section 21002) requires that an environmental document prepared to meet CEQA requirements evaluate adverse effects to the physical environment, and the ways in which project alternatives and mitigation measures could reduce such effects. An agency is required to find that a “project may have a ‘significant effect on the environment’” if, among other things, “[t]he environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly[.]” (PRC Section 21083(b)(3)). CEQA documents may identify existing adverse environmental conditions in the document’s discussion of the environmental setting, or in a discussion of cumulative impacts.

Beginning in 1999, the State of California enacted a series of bills that incorporated the concepts of environmental justice into state law. As a result of these enactments, the term and concept of “environmental justice” has been defined in the California Government Code. Government Code Section 65040.12 (e) defines “environmental justice” as:

The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies.

California legislation, state agency programs, and guidance have been issued in recent years that aim to more comprehensively address environmental justice issues, including: SB 1000

---

<sup>13</sup> South Coast Air Quality Management District, 2014, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.  
SJVAPCD, 2014, Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.

(2016); SB 535 (2012) and Assembly Bill (AB) 1550 (2016); AB 617 (2017); the California Department of Justice Bureau of Environmental Justice; the California Communities Environmental Health Screening Tool (CalEnviroScreen); and the Governor's Office of Planning and Research's (OPR) 2020 General Plan Guidelines, Environmental Justice Element.

As authorized by the California Global Warming Solutions Act of 2006 (AB 32), a cap-and-trade program was developed to reduce GHG that cause climate change. The program has been modified to target 25 percent of the proceeds to fund projects that provide a benefit to disadvantaged communities (DAC). The California Environmental Protection Agency (CalEPA) identifies Stevenson and its surrounding census tract as a DAC.<sup>14</sup>

As identified by the CalEPA and the Office of Environmental Health Hazard Assessment (OEHHA), understanding and addressing the cumulative vulnerability of communities most impacted by pollution is critical to minimizing environmental health and justice disparities. The agencies define cumulative vulnerability as “the exposure, public health, or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released accounting for sensitive populations and socio-economic factors”.

To assess varying levels of vulnerability throughout the state, the OEHHA has developed a screening tool (CalEnviroScreen or CES) that can be used to develop a comprehensive picture of the burdens California communities face from environmental pollutants and their vulnerability to health and economic impacts. The tool uses environmental, health, and socioeconomic information to produce scores for every census tract<sup>15</sup> in the state. The scores are mapped so that different communities can be compared. For example, an area with a high score is one that experiences a much higher pollution burden than areas with low scores. The fourth iteration of this tool, CalEnviroScreen 4.0 was released in October 2021. Rural Merced County-specific information developed by CalEnviroScreen for the Pollution Burden Summary and Population Characteristics Summary Scores, together with the Overall CES 4.0 Score, are set forth in Table 3-1.

---

<sup>14</sup> CalEPA; Office of Environmental Health Hazard Assessment, 2024. SB 535 Disadvantaged Communities Map. Accessed at: <<https://oehha.ca.gov/calenviroscreen/sb535>>

<sup>15</sup> As defined by the federal Department of Commerce, Census Bureau, census tracts are a small, relatively permanent statistical subdivision of a county delineated by a local committee of census data users for the purpose of presenting data. Census tracts nest within counties, and their boundaries normally follow visible features, but may follow legal geography boundaries and other non-visible features in some instances. Census tracts ideally contain about 4,000 people and 1,600 housing units.



**Table 3-1 CalEnviroScreen Scores for Merced County Rural Census Tracts**

Census Tract	Nearest Community	Pollution Burden Percentile	Population Characteristics Percentile	Overall CES 4.0 Percentile
6047001901	Planada	54	80	74
6047000901	El Nido	92	65	83
6047002000	Gustine	79	79	84
6047000402	Hilmar	85	44	64
6047001902	Le Grand	62	82	78
6047000303	Livingston South	84	49	68
6047002100	Los Banos S/W	82	79	85
6047002600	Merced East	62	65	68
6047001002	Merced NW	66	82	80
6047002500	Snelling	73	77	81
6047000401	Stevinson	69	74	77
6047001801	UC Merced	19	52	37
6047000503	Winton	86	54	72
<b>All</b>	<b>Median</b>	<b>73</b>	<b>74</b>	<b>77</b>

Note: The highest value in each column is indicated in **red** font. The lowest value in each column is indicated in **green** font.

Sources: CalEnviroScreen 4.0 Results for 13 census tracts in Merced County obtained on April 8, 2022.

According to CalEnviroScreen data, Stevinson residents and those in surrounding rural areas are exposed to high levels of air pollution, lead from housing, pesticide use, drinking water contaminants, impaired waters, and groundwater threats.<sup>16</sup> In general, residents of the census tract containing Stevinson are exposed to relatively low levels of diesel particulate matter, toxic releases from facilities, traffic impacts, cleanup sites, hazardous waste generators and facilities, and environmental effects from solid waste. As measured by CalEnviroScreen, the Stevinson area is exposed to environmental contaminants at a level that averages greater than the level of exposures shared by all census tracts throughout California.

CalEnviroScreen evaluates the susceptibility of populations to the adverse effects of environmental stressors. Residents of the Stevinson census tract exhibit median level of population characteristics that would result in a sensitivity to pollution compared to the rest of Merced. For Stevinson and the larger project area, the most significant population characteristic is the percentage of the population suffering from cardiovascular disease. Risk factors include age, sex, family history, smoking, unhealthy diet, high blood pressure, high

<sup>16</sup> As set forth in the CalEnviroScreen 4.0 Report, “Many activities can pose threats to groundwater quality. These include the storage and disposal of hazardous materials on land and in underground storage tanks at various types of commercial, industrial, and military sites. ... Storage tanks are of particular concern when they can affect drinking water supplies. ... Dairy farms and concentrated animal-feeding operations, which produce large quantities of animal manure pose a threat to groundwater. Other activities that pose threats to groundwater quality include produced water ponds, which are generated as a result of oil and gas development.” (OEHHA 2021)

cholesterol, diabetes, obesity, and lack of exercise.<sup>17</sup> Significantly fewer persons within Stevinson and the surrounding area suffer from low birth weight.

To establish a comprehensive CalEnviroScreen score that considers both the pollution burden and population characteristics, the model combines the individual scores to derive an overall result. For the residents of the census tract containing Stevinson, the combined score indicates that residents of this census tract are exposed to a cumulative environmental justice burden than is greater than that for 77 percent of all census tracts in California.

In general, residents of the census tract containing Stevinson have a relatively high overall pollution burden. On balance, the Overall CES 4.0 percentile score indicates that the Stevinson area is burdened with adverse environmental effects typical of the other rural areas of Merced County<sup>18</sup> as described in Table 3-1.

In conclusion, the pollution burden and population characteristics for the community of Stevinson as identified by CalEnviroScreen indicate that the Silva Dairy project area has a similar environmental burden than all similarly situated rural communities within Merced County. Nothing in this finding conflicts with the DEIR, and no modification of the DEIR and the County's environmental conclusions would be necessary. Merced County acknowledges the comment, and the Planning Commission will consider the views expressed in these comments in their review and actions on the proposed dairy expansion.

D-16 The comment states that the EIR does not assess the health impacts from bioaerosols.

The comment is incorrect, as the DEIR includes a discussion of bioaerosols in DEIR Chapter 6, *Air Quality and Odors*, page 5-18, and assesses the health impact from bioaerosols in *Impact AQ-9: Health effects as a result of exposure to bioaerosols during dairy operations* (DEIR p. 5-45). As described in Impact AQ-4, the proposed project would result in an overall reduction in PM emissions due to changes in animal housing and cropping patterns, which would also be anticipated to reduce the emissions of bioaerosols. This combined with implementation of SJVAPCD rules and regulations would reduce exposure to bioaerosols and associated public health impacts for on-site workers and nearby residents, and a less-than-significant impact would occur.

Thus, the potential health impacts from bioaerosols emitted as a result of the project have been fully evaluated in the DEIR, and no new or additional evaluation or mitigation would be necessary. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

---

<sup>17</sup> Mayo Clinic, 2024. Heart Disease. Accessed at: <<https://www.mayoclinic.org/diseases-conditions/heart-disease/symptoms-causes/syc-20353118>>

<sup>18</sup> With the notable exception of U.C. Merced. The university is located primarily in an undeveloped area with a limited amount of agricultural activities; thus, the pollution burden is quite low. Similarly, because the population is primarily made up of students, the population characteristics score is also relatively low.

D-17 The comment states that the EIR does not assess the health impacts from ammonia.

The comment is incorrect, as the DEIR assesses the potential risk to the adjacent residents and workers attributable to emissions of hazardous air pollutants (including ammonia) from construction and operation of the proposed dairy in the Health Risk Assessment (HRA) located in Appendix G of the DEIR and summarized in *Impact AQ-5: Expose nearby residents to substantial pollutant concentrations from the emissions of toxic air contaminants from project construction and operations* (DEIR pp. 5-34 to 5-36). The HRA evaluates emissions from numerous toxic air pollutants, including ammonia and hydrogen sulfide. While the proposed dairy expansion is not anticipated to exceed health risk thresholds, mitigation is included to ensure the implementation of SJVAPCD-approved control measures sufficient to reduce potential cancer risk to acceptable levels. In terms of impacts from ammonia, the HRA found the maximum predicted acute non-cancer hazard risks and chronic non-cancer hazard risks, which are primarily attributable to emissions of ammonia, were below the significance level for chronic and acute non-cancer hazard risks.

According to CEQA, project-related impacts are considered the physical changes in the environment which may be caused by the project (CEQA Guidelines Section 15064(d)). To determine whether an impact is significant, a “baseline” set of environmental conditions is required against which agencies can assess the significance of project impacts. For the Silva Dairy, the existing herd size and dairy configuration accurately depicts the environmental baseline with which to identify the changes in the physical environment caused by the proposed project pursuant to Section 15064(d) of the State CEQA Guidelines (see Chapter 3 pp. 3-22 to 3-24 of the DEIR for a discussion of baseline for the project). While the comment states that total ammonia emissions must be evaluated for health impacts, CEQA requires only the emissions from the dairy herd expansion be evaluated to determine the increase in impacts as a result of the project. Mitigation measures can only address impacts associated with the proposed project and not preexisting environmental conditions. Though ammonia is not designated as a precursor pollutant under the Clean Air Act, SJVAPCD Rule 4570 includes ammonia emission controls for dairies, which applies to existing operations and the proposed expansion. Compliance with SJVAPCD Rule 4570 during the permitting process would further act to reduce ammonia concentrations from proposed operations.

Thus, the potential health impacts from the increase in ammonia emissions have been fully evaluated in the DEIR, and no new or additional evaluation or mitigation would be necessary. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

D-18 The comment states that the EIR does not assess the health impacts from PM<sub>10</sub> and PM<sub>2.5</sub>.

As stated in response to comment D-17, project-related impacts are considered to be the physical changes in the environment that may be caused by the project. While the comment is correct in that particulate matter from dairies can result in health impacts, there would be an overall decrease in particulate matter emissions with implementation of the proposed dairy improvements due to changes in animal housing and cropping patterns. Emissions would not exceed SJVAPCD significance criteria for PM<sub>10</sub> or PM<sub>2.5</sub> (see *Impact AQ-4: PM<sub>10</sub> and PM<sub>2.5</sub> emissions from fugitive dust during project operations*, DEIR pp. 5-31 to 5-34).

Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-19 The comment states that the EIR does not assess the health impacts from hydrogen sulfide.

As stated on DEIR page 5-34 to 5-35, the HRA addresses emissions from hydrogen sulfide. Hydrogen sulfide emissions occur from liquid manure in the lagoon. Consistent with SJVAPCD methodology, hydrogen sulfide emissions calculations are based on the surface area of a lagoon. The proposed lagoon's hydrogen sulfide (H<sub>2</sub>S) emissions calculations were based on its surface area.

Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-20 The comment states that the EIR does not study or mitigate Valley Fever exacerbated by the project.

The comment is incorrect, as the DEIR includes a discussion of Valley Fever in DEIR Chapter 6, *Air Quality and Odors*, page 5-18, and assesses the health impact due to Valley Fever in *Impact AQ-8: Health impacts due to Valley Fever* (DEIR pp. 5-43 to 5-44). As described in the DEIR, soil disturbing construction activities associated with the Silva Dairy Farms Expansion project could expose workers to spores known to cause Valley fever. Because existing regulations would minimize health effects to construction workers, this would be a less-than-significant impact.

Thus, the potential health impacts due to Valley Fever emitted as a result of the project have been fully evaluated in the DEIR, and no new or additional evaluation or mitigation would be necessary. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-21 The comment states that the DEIR must provide adequate mitigation measures for insects. The comment states that the EIR must include mitigation beyond requirements of the ACO.

Impact HAZ-1 in Chapter 9, *Nuisance Conditions from Insects*, evaluates the nuisance effects of flies (DEIR pp. 9-8 to 9-11). As stated in the DEIR, Merced County has sought to prevent agricultural nuisances by the use of setbacks between potential sources of nuisance insects and adjoining sensitive land uses. Under existing regulations, Merced County enforces a setback of 1,000 feet between animal confinement facilities (such as ponds, corrals, barns) and rural residences. According to Merced County Code Chapter 18.64.040 (B)(2), the modification or expansion of an existing facility must not decrease the existing separation distance from off-site residences that are less than 1,000 feet unless the off-site property owner provides written permission. At the Silva Dairy, there are two off-site residences within 1,000 feet of existing facilities at the north dairy. Construction of the proposed facilities would not reduce the existing separation distances to either of the off-site residences within 1,000 feet.

What the comment neglects to recognize is that the reason a significant impact was identified is because of the increased *potential* for nuisance conditions since there are off-site residences located less than the Merced County setback of 1,000 feet from existing and proposed active animal confinement facilities. That does not mean that if a residence is located within 1,000 feet of facilities, there are flies, and the amount of flies would increase with the proposed expansion. At the time of DEIR preparation, no current or active fly complaints have been reported and submitted to DEH at the Silva Dairy Farms (Merced County DEH May 2024).

Design features of the Silva Dairy Farms that reduce fly development include freestall barns with flush lanes and appropriate grades for pens. The use of manure separators at this facility also results in lower fly numbers as the resulting manure solids are removed promptly. The Vector Control Plan in place for the proposed project includes Best Management Practices for vector control, and applicant would be required to continue to implement all measures within the approved Vector Control Plan throughout the active life of the dairy. Further, the ACO and the Vector Control Plan are *responsive* if nuisance conditions are reported at the dairy – the DEH would visit the site to assess the problem, and may impose additional measures to reduce flies as necessary. Should the condition persist, the Division would initiate an enforcement action against the offending operator. No aspect of the comment specifies how the County’s existing regulation policies regarding nuisance flies are inadequate or inappropriate.

The comment further states that a baseline legal obligation such as ACO measures is not a mitigation measure. CEQA “best practice” is to avoid repeating federal, state, or local legal requirements as mitigation. In general, if there is already a law that addresses the impact, compliance with the law is discussed in the analysis, but does not need to be a mitigation measure. In the Silva Dairy Farms Expansion project DEIR, there are several impacts that were determined to be less-than-significant, though recommended measures have been included to ensure that compliance with regulatory measures is documented in the Mitigation Monitoring and Reporting Program (MMRP) for the project (e.g., *Impact AQ-1: Construction-related emissions*, in Chapter 5, *Air Quality and Odors*, of the DEIR). However, in accordance with CEQA Guidelines Section 15126.4 (a)(1)(B), compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards. As set forth by Mitigation Measure HAZ-1 (Mitigation Measure AQ-7), the applicant would be required to revise the Odor Control Plan to include a description of the County’s odor complaint procedures, including contact information for the County DEH. As required by Mitigation Measure AQ-7, all potentially affected *residents* (including occupying tenants) will be notified of their rights to file a complaint and an explanation of the filing process. Since the comment does not identify any particular mitigation measure in the EIR that the commenter finds problematic, no additional response is necessary, and no changes to the EIR would be required.

Thus, the potential impacts from nuisance flies have been fully evaluated in the DEIR, and no new or additional evaluation or mitigation would be necessary. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-22 The comment generally states that the EIR analysis of impacts to groundwater quality is inadequate. The comment states that the EIR does not accurately identify and discuss dairy regulations under the authority of the CVRWQCB, and that the dairy expansion is prohibited.

Merced County acknowledges that the regulation of groundwater quality and confined animal facilities such as dairies solely rests with the RWQCB. The County further encourages the RWQCB to develop a regulatory and permitting protocol to evaluate and mitigate the adverse effects of dairies and other Confined Animal Feeding Operations (CAFO) on water quality.

*Impact HYD-3: Groundwater contamination from expanded dairy project operations* includes an evaluation of potential impacts to groundwater quality, primarily due to the continued application of wastewater to cropped fields (DEIR pp. 10-30 to 10-38). Impact HYD-3 details potential mitigation strategies that may be applied by the revised General Order, or its equivalent, and individual WDRs for the proposed dairy expansion, and details extensive measures to protect groundwater quality. As of the date of these response to comments (January 2025), the California Water Board has issued a Draft Order<sup>19</sup> in which the State Water Board reviews the existing Dairy General Order, and concludes the Dairy General WDRs should be remanded to the CVRWQCB for reconsideration and revisions. This mandated revision to the Dairy General Order is precisely the type of regulation identified in Mitigation Measures HYD-3a-k. These mitigation measures reinforce CVRWQCB requirements to quantify and evaluate water quality and determine necessary measures to remediate water quality conditions as required to meet water quality standards. However, because of the demonstrated history of groundwater contamination as a result of animal confinement facilities, and the determination that the above-stated mitigation measures are within the responsibility and jurisdiction of other public agencies and not the County of Merced, the DEIR found that potential impacts to groundwater quality would be significant and unavoidable.

Implementation of HYD-3a would place the responsibility of evaluating and minimizing potential effects to groundwater quality on the CVRWQCB and its regulatory framework. HYD-3a would permit a CAFO applicant to construct structures and processes necessary to support a herd, but would prohibit the actual expansion of the herd until Individual WDRs or similar approvals are obtained from the RWQCB. As stated above, the California Water Board has since issued a Draft Dairy General Order for written review.

Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no additional modification of the EIR is necessary.

- D-23 The comment states that the EIR analysis of impacts to groundwater quality is inaccurate, and further, the DEIR does not analyze off-site export of manure. The comment states that dairies are miscalculating and underreporting manure nitrogen applied to crops. The comment states that excess nitrogen in water sources, such as in one of the onsite domestic wells, will disproportionately impact small, rural, disadvantaged communities of color.

---

<sup>19</sup> Accessed at: <  
[https://content.govdelivery.com/attachments/CAWRCB/2024/10/01/file\\_attachments/3017958/Draft%20Dairy%20Order\\_October%201%202024\\_ADA.pdf](https://content.govdelivery.com/attachments/CAWRCB/2024/10/01/file_attachments/3017958/Draft%20Dairy%20Order_October%201%202024_ADA.pdf)>

The comment questions the DEIR statement that the applied to removed ratio would decrease with the proposed project. The additional manure generated by the expanded herd would not lead to additional manure placed on the dairy fields, since excess manure would be exported offsite. The rate at which manure is applied to crop fields is regulated by the RWQCB and the Merced County ACO. According to the proposed NMP prepared for the expanded dairy, there would be no significant change in wastewater nutrients applied to the dairy cropland compared to existing conditions.

The DEIR *Impact HYD-9: Impacts to water quality at off-site locations as a result of project operations* (DEIR pp. 10-48 to 10-50) includes an evaluation of impacts to water quality from manure exported for application to cropland not owned by the dairy. The comment uses the generalized conclusions of the SRMR to state that the analysis is inadequate, and the ability of the dairy operator to export the manure is questionable. However, while the issues the SRMR identifies may be generally true for dairy operations in the San Joaquin Valley, they do not necessarily apply to the Silva Dairy Farm project individually. Just because the commenter states the DEIR analysis is incorrect or inadequate does not make it so. As provided by the applicant, all solid manure that leaves the Silva Dairy facility is handled by a contracted third party who sells the solid manure as fertilizer to a client base. The client uses the solid manure as a nutrient source in place of synthetic fertilizer for their farmland (DEIR p. 10-49). There are at least six agricultural manure composting sites in Merced County that take dairy manure for processing and sale, and the County has found that dairy operators do not find any difficulty in exporting excess manure. No liquid manure is exported from the facility. Nitrogen can also be exported as lagoon water via pipeline owned by Stevinson Corporation to Stevinson Corporation fields northwest of the project site, as long as nitrogen export requirements are met. No additional wastewater pipeline is proposed as part of the project, nor would wastewater be trucked offsite. The DEIR provided mitigation measures to the extent feasible for potentially significant off-site impacts to water quality based on the regulatory framework currently in place. Because the County can't control where the manure is sold and how it is applied to cropland, potential impacts to groundwater quality from the off-site export of manure would be significant and unavoidable.

The comment states that the DEIR is inadequate because it implies that the nitrogen applied to removed ratio of 1.4 as required by the Dairy General Order is protective of groundwater. This statement is incorrect. The DEIR evaluates the impacts resulting from the *increment of increase* from the dairy expansion. As stated above, there would be no significant change in wastewater nutrients applied to the Silva dairy cropland compared to existing conditions. The DEIR repeatedly discusses the findings of the CVDRMP and the potential for overapplication of nutrients on the crop fields by miscalculating or misrepresenting application of manure. For a discussion of mitigation measures intended to improve the regulatory framework that the SRMR determined inadequate to protect water quality, see response to comment D-22 above. See response to comment D-15 for a discussion of disproportionate health impacts to the community of Stevinson.

Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no additional modification of the EIR is necessary.

- D-24 The comment states that the DEIR does not include adequate mitigation for additional nitrate reaching groundwater. The comment states that the DEIR must evaluate additional mitigation, such as denitrification.

See response to comment D-22 above. Given the uncertainties in identifying, let alone quantifying the impact of any single project on groundwater quality, and the good-faith efforts made to reduce water quality impacts from the project through implementation of the ACO and existing General Order regulations, in accordance with CEQA Section 15130, any further feasible water quality controls would be accomplished through CVRWQCB regulations adopted in a revised Dairy General Order. There is no doubt that the RWQCB is committed to mitigating impacts to water quality to the extent it feasibly can by adopting and implementing a revised Dairy General Order. Thus, requiring the RWQCB to adopt the revised Dairy General Order as a mitigation measure would not be an improper deferral of formulating mitigation (*Center for Biological Diversity v. Department of Fish and Wildlife* (3d Dist. 2015) 234 Cal.App.4th).

Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no additional modification of the EIR is necessary.

- D-25 The comment states that the DEIR does not sufficiently evaluate groundwater use and depletion. The comment states that the project conflicts with the GSP, since it would increase groundwater use.

Changes in water use as a result of the project and potential impacts to groundwater supplies were evaluated in DEIR *Impact HYD-4: Decrease groundwater supplies*. According to consultation with Merced Subbasin GSA representatives, the Merced GSA's current knowledge and understanding is that it is, on average, the western area of the subbasin is a net recharger of the aquifer, and individual project increases such as the Silva Dairy Expansion are not anticipated to have significant impacts to the overall groundwater basin. Irrigation return flows, including recharge of applied surface water in the western Subbasin, are a source of recharge to the Merced Subbasin (Merced SGMA 2022). This includes the Silva Dairy crop irrigation operations potentially contributing to groundwater recharge. Consistency with SGMA and the Merced Subbasin GSP developed for the area is evaluated in Impact HYD-10 of Chapter 10, *Hydrology and Water Quality*, of the DEIR (DEIR pp. 10-51 to 10-52).

The comment states that the Merced Subbasin GSP will implement a demand reduction strategy to gradually reduce pumping, and the increase in groundwater use at the Silva Dairy would conflict with this strategy. Demand reduction strategies are a broad and strategic set of actions, including methods such as: establishing a per-acre pumping allocation for water users, establishing fee structures tied to extracted volumes, and voluntarily establishing easement or contract programs to pay for reduced groundwater use. The GSP-identified strategies are intended to meet the sustainability goals for the Merced Subbasin over the 20-year implementation period. Water allocations determinations may include specific dairy operation elements, such a water usage and demand reduction incentive for dairy milk houses. Should these allocation determinations occur, the Silva Dairy would be expected to comply with all applicable requirements of the GSP as revised.

Based on consultation with the Merced Subbasin GSA, the proposed project would not conflict with the Merced Subbasin GSP. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.



- D-26 The comment states that the EIR does not analyze impacts to nearby domestic wells.

The anticipated increased extraction of groundwater from the existing domestic dairy well is not likely to interfere with the production and functioning of existing nearby wells. This generally occurs when the wells are too close or there is excessive pumping and an overall lowering of the water table. First, it is not anticipated that the dairy expansion project would affect the broader groundwater basin levels or overdraft conditions (see response to comment D-25, above). In addition, Merced County water well standards require a minimum 300-foot setback between agricultural wells and water wells or public wells. There are no existing irrigation wells or public wells within 300 feet of the existing domestic dairy well (see Figure 3-6a in Chapter 3, *Project Description*, of the DEIR). Therefore, the proposed project is not anticipated to impact nearby domestic wells.

Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no modification of the EIR is necessary.

- D-27 The comment states that the DEIR incorrectly concludes that impacts to groundwater depletion are less than significant, and mitigation measures are required.

This comment is addressed in comment D-25, above. The Merced GSA's current knowledge and understanding is that it is, on average, the western area of the Subbasin is a net recharger of the aquifer, primarily from irrigation return flows (DEIR p. 10-41). While the comment is correct that irrigation water is sourced from surface water over groundwater, the increased process wastewater generated at the dairy (sourced from groundwater) would be used for irrigation, which could result in groundwater recharge via irrigation percolation (DEIR p. 10-41). Since individual project increases such as the Silva Dairy Expansion are not anticipated to have significant impacts to the overall groundwater basin, project impacts to groundwater depletion were determined to be less than significant, and no mitigation would be required. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no additional modification of the EIR is necessary.

- D-28 The comment states that the project conflicts with national, state, and local plans and policies since it increases methane.

The comment is incorrect in its statement that the project would be inconsistent with plans and policies to reduce short lived climate pollutants since the project would result in an increase in methane and other GHG emissions. The DEIR includes a description of the Regulatory Framework applicable to GHG emissions on pages 8-1 to 8-7. While national programs such as the Inflation Reduction Act of 2022 and the EPA's Greenhouse Gas Reporting Program seek to reduce methane emissions, as stated by the commentor, the programs do not include actionable policies to reduce emissions that directly apply to the proposed dairy expansion project.<sup>20</sup> As described in *Impact GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency* (DEIR pp. 8-26 to 8-29), CARB's Climate Change Scoping Plan represents the primary plan to reduce GHG emissions and promote

<sup>20</sup> Congressional action has blocked the Greenhouse Gas Reporting Program application to livestock manure management.

alternative energy use throughout California. In general, these state planning documents consider the larger trends in growth and do not assume individual projects must meet a zero-increase standard. The Scoping Plan, SB 1383, and other GHG emissions reduction, renewable energy, and energy efficiency plans and regulatory measures do not include regulatory requirements immediately applicable to the agricultural sector; rather, as a result of these plans, agencies may establish rules in the future that could apply to the proposed dairy project. There is no requirement that the proposed project emissions be reduced by the same percentage as the statewide percentage in order for the state to achieve these targets. Therefore, the proposed project's GHG emissions increases do not conflict with the Scoping Plan's provisions to meet the statewide targets.

To accomplish methane reduction goals, the State is encouraging near-term actions by dairies to reduce emissions through market support and financial incentives – at this time, these are voluntary measures, contrary to the commentor's assertion. As identified in the 2022 Scoping Plan strategies for the reduction of Dairy and Livestock Methane, CARB states that considering the current rate of reduction from methane mitigation strategies and complimentary incentives, the CARB should “consider regulation development to ensure that the 2030 target is achieved.”<sup>21</sup> As described in Impact GHG-1, the Silva Dairy already implements a number of CARB-identified GHG emission mitigation strategies to reduce GHG emissions, and the use of the manure separators at the dairy would further reduce GHG emissions consistent with Scoping Plan mitigation strategies. Therefore, the proposed project would not conflict with any plans or regulations adopted for the purpose of reducing the emissions of greenhouse gases.

Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-29 The commenter states that the DEIR does not account for full lifecycle GHG emissions from the dairy, including the export of manure to offsite fields.

As set forth in CEQA Guidelines Section 15064.4(c), the lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. Where direct quantification of emissions is not possible, they may be described qualitatively. Appendix F-3 of the DEIR explains the rationale for selecting a direct emissions approach for the proposed dairy expansion, and describes how these estimates were calculated. While the comment finds fault with various identified errors and omissions, including calculation of N<sub>2</sub>O emissions and the need for a full life-cycle assessment, Merced County has made a “good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project” (CEQA Guidelines Section 15064.4 (a)). In its review of various modeling tools and methodologies, the County selected an emission factor system in efforts to estimate emissions that would capture large increases in GHG emissions, and would also be appropriate for the identified significance thresholds (see DEIR pages 8-17 to 8-18 and Appendix F-4 for a discussion of the selected GHG emission thresholds specific to dairies. Appendix F-3 also includes SJVAPCD calculator emission factors, which are based on CARB California GHG Emission Inventory Data). It is

---

<sup>21</sup> 2022 Scoping Plan, p. 232.

understood that while there is nuance lacking in an emission factor methodology and available resources, Merced County has made a good-faith effort based on the available resources, given that “quantifying all emissions from a given farm or production system is essentially impossible and prohibitively expensive.”<sup>22</sup>

The comment also states that the DEIR does not account for impacts that would result from exporting manure to off-site fields. A discussion of these impacts is included on DEIR page 8-19. Studies have found that “estimating the nutrient content of manure is difficult because manure is not biologically or chemically stable. It is a living, dynamic material and continuously undergoes transformations depending on the character of the material and the conditions under which it is collected, stored, managed and applied.”<sup>23</sup> As stated in the DEIR, practices designed to reduce emissions of one form of N may result in emissions of another form, resulting in a high level of uncertainty and inaccuracy in estimating emission levels. Because the County can’t control where the manure is sold and how it is applied to cropland, and due to the complexity of soil N<sub>2</sub>O dynamics, it would be considered speculative to assess emissions at off-site fields. Based on research completed for the Merced County ACO EIR, for new and expanding dairy operations in the County, animal wastes used as fertilizer would replace all or a portion of existing synthetic fertilizers used on existing cropland, and no feature of general best practices in the San Joaquin Valley would require the application of greater amounts of fertilizer than those currently used. Therefore, it is assumed that N<sub>2</sub>O emissions from offsite agricultural fields would not change dramatically.

The comment states that the DEIR incorrectly asserts that management practices have a greater influence on GHG emissions than the size of a dairy. The County hereby modifies the cited paragraph on page 8-21 to be more transparent.

Studies have shown that the use of best management practices on the farm rather than the size or location of the dairy farm, makes the biggest difference are effective in reducing GHG emissions (Paustian et. al. 2006). No provisions of the ACO or SJVAPCD regulations directly address methane or CO<sub>2</sub> emissions, but Chapter 18.64.050 U of the ACO applies to air emissions in general (see Appendix C). Because the decomposition of manure is one source of methane emissions, measures to comply with ROG limitations required by Chapter 18.64.050 U of the Merced County Code and a SJVAPCD Permit to Operate would also reduce methane emissions. Examples of management practice type mitigation measures are feed manipulation, frequent scraping of animal housing, and covering of silage piles (as outlined in Appendix D of the EIR).

The above modification is for clarification purposes only and does not alter the conclusions of Impact GHG-1 presented in the EIR. Therefore, no modification of the DEIR’s evaluation of environmental effects or environmental conclusions would be necessary.

<sup>22</sup> Rotz, A. 2018. Modeling greenhouse gas emissions from dairy farms. J. Dairy Sci. 101:6675–6690. July 01, 2018. Accessed at: <<https://doi.org/10.3168/jds.2017-13272>>

<sup>23</sup> Kaffka, Williams, Marvinney and Smith 2022. Manure Nutrient Recovery, Removal, and Reuse on California Dairies. Stephen Kaffka, Rob Williams, Elias Marvinney, Cole Smith. October 15, 2022. Accessed at: < [https://www.cdfa.ca.gov/oefi/research/docs/cbc\\_manure\\_nutrient\\_report.pdf](https://www.cdfa.ca.gov/oefi/research/docs/cbc_manure_nutrient_report.pdf)>

- D-30 The commenter states that the EIR does not include GHG emissions from the planned-for digester.

The manure digester is not a part of the project under review in this EIR prepared for the dairy expansion project. For a discussion of “piecemealing” in regards to the manure digester, see response to comment D-12.

- D-31 The comment states that the DEIR is inconsistent with State plans and goals to reduce short lived climate pollution from livestock operations, particularly relative to the Scoping Plan.

See response to comment D-28 above. In addition, the comment fails to note that the significance threshold established in the DEIR includes several components. Appendix F-4 of the DEIR contains a survey discussion of threshold options and identifies the selected GHG emissions threshold for the Silva Dairy Expansion project EIR. In determining the significance of a project’s impacts, the lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies. While the 2022 Scoping Plan identifies various actions and concepts that would lead to an increase in climate-smart agricultural management actions, at this stage it does not include regulatory requirements that would reduce greenhouse gas emissions. Since there is no adopted regulatory program by which the proposed project can be measured, Merced County has chosen to review the project’s environmental impacts using more than one threshold of significance. In the case of the Silva Dairy, the analysis uses both a numeric threshold to establish significance, and also recognizes that if the dairy implements a voluntary Scoping Plan methane mitigation strategy, such as a manure separator or dairy digester, then the project’s contribution to GHG emissions would be considered to be less than significant (DEIR p. 8-17). The commenter misconstrues overall Scoping Plan goals with strategies specific to the dairy sector. As stated in the DEIR, in 2022 CARB estimated that if the remaining reductions needed to achieve the 2030 target are met through a mix of half dairy digesters and half alternative manure management program (AMMP) projects, then at least 420 additional combined digester and AMMP projects may be necessary.<sup>24</sup> The existing AMMP mechanical solid separators at the Silva Dairy facilities would represent a methane emissions reduction project necessary to achieve the 2030 GHG emissions reduction target for the Dairy and Livestock sector (DEIR page 8-5).

As stated in the DEIR, the proposed herd expansion would result in an estimated increase of 30,615 metric tons/year CO<sub>2</sub>e (see DEIR Table 8-2), which is greater than the 10,000 mt/yr CO<sub>2</sub>e significance threshold, and a significant effect was identified in the EIR. As described in Impact GHG-1, mechanical manure separators funded through the AMMP program are currently used at the north and south facility, with an estimated overall potential reduction of 7,293 metric tons CO<sub>2</sub>e per year.<sup>25</sup> The use of mechanical manure separators would be consistent with the voluntary Scoping Plan methane mitigation strategy for dairy and livestock operations as discussed in response to comment D-28 above. GHG emissions from the Silva

---

<sup>24</sup> CARB, 2022. Final Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target. March 2022. Accessed at: <<https://ww2.arb.ca.gov/resources/documents/dairy-livestock-sb1383-analysis>>

<sup>25</sup> California, State of, Department of Food and Agriculture, 2024. Information on the Dairy Digester Research and Development Program and the Alternative Manure Management Program. Accessed at: <<https://www.cdffa.ca.gov/oefi/>>

Dairy would be further reduced with Best Management Practices that control enteric methane (diet management/feed manipulation, herd management and breeding, cow comfort and well-being); manure management measures (solid separation and storage, manure composting, nutrient and water recovery, renewable fertilizers); and energy efficiency measures (LED lighting, milk pre-cooling technology, and variable speed pumps, solar PV system). The proposed dairy digester cluster planned to be constructed to serve the Silva Dairy and additional dairies in the vicinity would further reduce GHG emissions consistent with Scoping Plan methane mitigation strategies. As updated in the FEIR Chapter 4, the Silva Dairy Farms operator has entered into a digester project contract to participate in a dairy digester cluster project currently in development, different from that discussed in the DEIR. Application for a 2024 DDRDP grant for the digester cluster has been submitted on behalf of the dairy. With funding assistance, this could be considered a feasible mitigation strategy. Additional application has been completed for the Dairy PLUS<sup>26</sup> grant money for a secondary solid separation system assisted by flocculants.<sup>27</sup> According to the California Department of Food and Agriculture (CDFA) website, results of these applications are anticipated by March 2025. According to application materials, the dairy digester and Dairy PLUS secondary solid separation system would result in an estimated GHG emission reduction of 12,932 metric tons of CO<sub>2</sub>e annually, beyond the existing reductions from the AMMP mechanical separators discussed above.

The comment states that because the project includes an increase in herd size, it would conflict with the overall decreasing animal population assumed in the 2022 Scoping Plan. As a competitive farm business, dairy operations are continually implementing operations to increase production efficiency. The Silva Dairy existing and proposed operations include measures to increase animal productivity, including adjusting feed rations to maximize animal productivity and feed efficiency, herd management to improve longevity, and managing cow comfort and well-being. While the proposed project would result in an increase in dairy herd size, the state is seeing an overall decrease in cow numbers,<sup>28</sup> generally coupled with consolidation of facilities (fewer dairies overall) and individual cow milk production increases.<sup>29</sup> Due to economies of scale, larger dairy farms are more likely to generate positive net returns, and continue to have strong incentives to expand, and expansion will place downward pressures on milk prices, while small commercial dairy operations are likely to remain at financial risk.<sup>30</sup>

<sup>26</sup> The Dairy PLUS grant program provides incentives for dairy producers to adopt advanced manure management practices, reduce GHG emissions, and improve nutrient benefits associated with implemented practices (reduction of nitrogen and salt surplus). These grants are awarded in association with current or past AMMP and/or DDRDP projects.

<sup>27</sup> Flocculants are a substance that promotes clumping of particles, in this instance in wastewater.

<sup>28</sup> In California, the number of dairy cattle has declined by 0.7 percent per year between 2012 and 2022. United States Department of Agriculture, National Agricultural Statistics Service, 2022 Census of Agriculture. Accessed at: < <https://www.nass.usda.gov/AgCensus/> >

<sup>29</sup> EPA, 2023. Practices to Reduce Methane Emissions from Livestock Manure Management. Accessed at: < <https://www.epa.gov/agstar/practices-reduce-methane-emissions-livestock-manure-management> >

<sup>30</sup> United States, Department of Agriculture, 2020. Scale Economies Provide Advantages to Large Dairy Farms. James M. MacDonald. August 3, 2020. Accessed at: <<https://www.ers.usda.gov/amber-waves/2020/august/scale-economies-provide-advantages-to-large-dairy-farms/>>

Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-32 The comment states that the DEIR is inconsistent with respect to mitigation measures for GHG emissions and project alternatives.

The comment confusingly states that the DEIR includes three alternative mitigation measures for GHG emissions and then rejects them as project alternatives. The comment references DEIR pages 13-1 and 13-2, though it is unclear how these pages relate to the comment. CEQA case law recognizes that “there is a strong relationship between alternatives and mitigation measures” – the “chief goal” of both being “mitigation or avoidance of environmental harm” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 403). The DEIR appropriately includes separate considerations of a digester in the alternatives analysis, and as a component of mitigation. The comment fails to note that the alternatives analysis evaluates two dairy digester alternatives, including the On-Site Anaerobic Digester Alternative, and the Dairy Digester Cluster Alternative (DEIR pp. 13-10 to 13-21). Impact GHG-1 recognizes that a dairy digester hub is under consideration with the County, and DEIR Mitigation Measure GHG-1 simply requires a delay in the proposed herd expansion until the manure digester is operational to ensure GHG emissions would be further reduced consistent with the Scoping Plan strategy. In both cases the discussion of a digester was appropriate, despite the commentor’s protest. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-33 The comment states that Mitigation Measure GHG-1 does not comply with CEQA.

See response to D-31 and D-32 regarding significance thresholds for GHG emissions as established in the DEIR and Mitigation Measure GHG-1. As discussed in Impact GHG-1, while the proposed project would exceed the established significance threshold of 10,000 mt/y CO<sub>2</sub>e GHG emissions, the use of the manure separators at the dairy would reduce GHG emissions consistent with Scoping Plan mitigation strategies. GHG emissions from the Silva Dairy would be further reduced with Best Management Practices, energy efficiency measures and use of renewable solar energy onsite, and the use of manure management strategies.

Not all measures that have been determined promising or possible but not yet feasible by CARB are included in the EIR discussion since there are a numerous measures and Scoping Plan strategies already being implemented. While not part of the project, the proposed dairy digester cluster planned to be constructed would further reduce GHG emissions. Because the digester project would be considered a feasible mitigation strategy in the early stages of development, participation in the cluster was included as mitigation prior to expansion of the herd. The DEIR’s determination that Impact GHG-1 was *significant and unavoidable* was not due to the efficacy of the measures in reducing methane emissions, but rather whether the measure could be implemented, since it is not under control of the project applicant or Merced County. Since no new or modified impact is identified by the comment and no new or modified mitigation would be necessary or appropriate, no revision of the EIR would be required.

- D-34 The comment states that the DEIR analysis does not include N<sub>2</sub>O emissions from application of exported manure at off-site locations.

See response to comment D-29 above for a discussion of N<sub>2</sub>O emissions from offsite agricultural fields.

- D-35 The comment states that the cumulative impact analysis should not be tiered from the 2002 ACO EIR.

As described in DEIR Chapter 12, *Required CEQA Analyses*, the projections used for the cumulative analysis for the Silva Dairy Expansion project were described and evaluated in the Program Environmental Impact Report for the Merced County Animal Confinement Ordinance Revision (ACO EIR), certified by Merced County on October 22, 2002. The 2030 Merced County General Plan EIR, certified by Merced County on December 10, 2013, updated and expanded the environmental analyses and conclusions presented in the 2002 ACO EIR regarding the cumulative effects for all project types, including proposed and expanding dairy facility projects such as the Silva Dairy Expansion project. The 2030 General Plan EIR contained two levels of cumulative analysis: the countywide evaluation of the potential effects of implementing the General Plan and its policies contained in Chapters 5 through 20 of the General Plan EIR; and a cumulative evaluation of planned development within unincorporated Merced County, cities within Merced County, and adjacent cities and counties set forth in Chapter 22 of the 2030 General Plan EIR. Therefore, the cumulative impact analysis for the Silva Dairy EIR incorporates the analyses contained in the 2030 General Plan EIR and the ACO EIR as summarized in the DEIR, and as modified to reflect current environmental conditions in the county.

The comment statement that the cumulative analysis does not address recent dairy projects in Merced County and dairy digester growth is incorrect. The DEIR includes additional analysis, including a comparison of pending dairy applications since issuance of the ACO EIR (which covers all dairy projects listed in the comment letter and also projects not listed in the comment letter), demonstrating that while the proposed dairy expansion project is well outside of the 2010 herd forecast timeframe set forth in the ACO EIR, the most recent 2022 United States Department of Agriculture (USDA) estimated herd is well within ACO EIR cumulative herd forecast for both the San Joaquin Valley and Merced County. As shown in DEIR Table 12-4, the 2022 USDA estimated herd count of 609,733 cows in Merced County is somewhere between the ACO EIR 2005 and 2010 herd forecasts of 534,842 and 676,133 cows, respectively. Even with the commenter's assertion that the listed projects would result in the addition of 25,000 cows, the herd count would still be within the ACO EIR projected herd. As updated, the ACO EIR analysis of cumulative effects for new and expanding animal confinement facilities in Merced County is still applicable and relevant. The cumulative analysis in the DEIR also includes a discussion regarding the tangential cumulative impacts of dairy digester development (DEIR pp. 12-5 to 12-6).

The comment notes that the ACO and General Plan EIR were written and adopted prior to the passage of the Sustainable Groundwater Management Act, CVRWQCB acceptance of a Salt and Nitrate Management Plan, and development of dairy biomethane infrastructure throughout Merced County. These more recent regulations and resources are included as integral components of the Silva Dairy Farms Expansion project DEIR analysis and establish the basis for many of the project-level significance conclusions. To determine background characteristics of the groundwater at the project site as described in DEIR Chapter 10, *Hydrology and Water Quality*, information was reviewed from the Merced Subbasin Groundwater

Sustainability Plan (revised in 2022) and the California Department of Water Resources Sustainable Groundwater Management Act (SGMA) Portal, along with project site water quality data from on-site supply well samples. As described in DEIR Chapter 8, *Greenhouse Gas Emissions and Energy Use*, the 2022 Scoping Plan for Achieving Carbon Neutrality strategies includes considerations of regulation development. Programs being evaluated include methane mitigation strategies beyond complimentary incentives for dairy and livestock operations in order to meet 2030 GHG emission targets included in the Short-Lived Climate Pollutant Reduction Strategy, though the CARB is only authorized to implement these regulations provided that they are determined technologically and economically feasible, and cost-effective. To facilitate the permitting of dairy digesters in the Central Valley, the Central Valley Regional Water Control Board adopted the Waste Discharge Regulatory Program for Dairy Manure Digester and Co-Digester Facilities, and evaluated the potential environmental impacts of the program and cumulative effects of dairy digester development in the Dairy Manure Digester and Co-Digester Facilities Draft Program EIR. While these regulations were not in place as part of the 2030 General Plan EIR and ACO EIR baseline, they are well documented and considered in the Silva Dairy Farms Expansion project DEIR analysis. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no modification of the EIR is necessary.

- D-36 The comment states that the Animal Confinement Ordinance (ACO) sets forth regulatory measures that cannot be considered mitigation in the DEIR since compliance with ACO regulations is already required.

The comment further states that a baseline legal obligation such as ACO measures is not a mitigation measure. CEQA “best practice” is to avoid repeating federal, state, or local legal requirements as mitigation. In general, if there is already a law that addresses the impact, compliance with the law is discussed in the analysis, but does not need to be a mitigation measure. In the Silva Dairy Farms Expansion project DEIR, there are several impacts that were determined to be less-than-significant, though recommended measures have been included to ensure that compliance with regulatory measures is documented in the Mitigation Monitoring and Reporting Program (MMRP) for the project (e.g., *Impact AQ-1: Construction-related emissions*, in Chapter 5, *Air Quality and Odors*, of the DEIR). However, in accordance with CEQA Guidelines Section 15126.4 (a)(1)(B), compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards. Since the comment does not identify any particular mitigation measure in the EIR that the commenter finds problematic, no additional response is necessary, and no changes to the EIR would be required.

- D-37 The commenter states that because the Merced County General Plan EIR was certified in 2013, it does not include up-to-date environmental baseline conditions, and should not be used for cumulative analysis.

General Plan adequacy is a policy and legal judgment. A policy decision regarding the adequacy of the Merced County General Plan is the sole purview of the Board of Supervisors. The consideration of legal adequacy is the responsibility of the courts. Neither the Merced County Board of Supervisors nor a court of competent jurisdiction have rendered a decision stating



that the current Merced County General Plan is inadequate. Until such time as either body does render such a decision, the existing General Plan is the constitution for land use and development within the County, including dairies, and may properly serve as the foundation for reviewing land use projects that come before the County for consideration.

See response to comment D-35 for a description of tiering included in the DEIR. Response to comment D-35 also includes a discussion of cited regulations that were not in place as part of the 2030 General Plan EIR baseline, which are well documented and considered in the Silva Dairy Farms Expansion project DEIR analysis. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no modification of the EIR is necessary.

- D-38 The commenter states that the EIR project objectives are too narrowly defined, which does not allow for any reasonable alternative to be selected.

Project objectives as defined by CEQA Guidelines Section 15124(b) “will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary”. These alternatives should “feasibly attain most of the basic objectives of the project but ... avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines Section 15126.6). The DEIR identifies six project objectives that include the underlying purpose of the project and the project benefits (DEIR pp. 3-9 to 3-10). Based on the project’s significant effects, four alternatives were developed that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the project’s significant effects. DEIR Chapter 13, *Alternatives Analysis*, evaluates the environmental impacts of these four alternatives, including the No Project Alternative, the On-Site Anaerobic Digester Alternative, the Dairy Digester Cluster Alternative, and the Air Emissions Limited Herd Size Alternative. This is after considering but eliminating four additional alternatives from consideration, predominantly due to the inordinate cost and lack of land availability required to implement these alternatives.

The commenter’s reasoning that the project objectives are too narrow is problematic; Merced County finds that it is permissible for the underlying purpose of the project to efficiently use existing dairy facilities (instead of constructing an entirely new facility) and use all of the existing, available land owned by the applicant (instead of requiring purchase of adjacent lands, which has been discussed in the alternatives considered and rejected and determined to be infeasible). Additional objectives include business and development goals, meeting applicable regulations and permitting requirements, and project benefits. The stated objectives do not preclude consideration of various onsite alternatives that could potentially reduce significant impacts, including GHG emissions and water quality. While the EIR analysis identifies how each of the project alternatives does not fully meet the objectives of the project applicant, it does not prevent the County from considering selection of the alternative; rather it provides the information necessary to adequately weigh all of the factors involved. The lead agency’s selection of alternatives is generally considered adequate unless the opponent can “(1) demonstrate the alternatives are manifestly unreasonable and do not contribute to a reasonable range of alternatives and (2) identifies evidence of a potentially feasible alternative that meets most of the basic project objectives” (*Save Our Access-San Gabriel Mountains v. Watershed Conservation Authority* (2021) 68 Cal.App.5th 8). The comment does not suggest any

environmentally superior, potentially feasible project alternative that meets most of the basic project objectives beyond those considered in the DEIR.<sup>31</sup>

The comment repeatedly cites the court case of *We Advocate Thorough Environmental Review v. County of Siskiyou, et al. (Crystal Geyser Water Company, Real Party in Interest)* (2022) 78 Cal.App.5th to argue that the objectives are too narrow, though there are a number of cases that support upholding the project objectives. CEQA Guidelines Section 15126.6 states that “an EIR need not consider every conceivable alternative to a project; [r]ather it must consider a reasonable range of potentially feasible alternatives.” “Absolute perfection” is not required in analyzing the alternatives (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376).

In choosing a preferred project, Merced County is required to make written findings regarding its choice of a project to implement, including the reasons why it chose not to implement an environmentally superior alternative or alternatives, if the selected project is not the environmentally superior alternative. These will be found in Merced County Findings of Fact and Statement of Overriding Considerations. There would be no change in the environmental conclusions presented in the DEIR as a result of this comment.

- D-39 The comment reiterates the opinion that Merced County must reject the requested CUP for the expansion of the Silva Dairy.

Merced County acknowledges receipt of these comments from the representatives of the Leadership Counsel for Justice & Accountability. The Planning Commission will consider the views expressed in these comments in their review and actions on the proposed dairy expansion. Because these comments raise no questions or concerns regarding the analysis in the Draft EIR, no additional responses are necessary in this EIR. Since there would be no change in the environmental conclusions presented in the DEIR as a result of this comment, no modification of the EIR is necessary.

---

<sup>31</sup> Blog posts by Arthur F. Coon, of Miller Starr Regalia. Accessed at: <<https://www.ceqadevelopments.com>>

---

## 4 CHANGES TO TEXT OF THE ENVIRONMENTAL DOCUMENTS

---

### 4.1 CHANGES TO THE ENVIRONMENTAL IMPACT REPORT

Consistent with the requirements of Section 15088(d) of the State CEQA Guidelines, this section serves to set forth any substantive changes to the Environmental Impact Report (EIR) that might have occurred after publication of the Draft EIR (DEIR). Such changes update or correct misinformation or errors in the text noted by Merced County, as well as changes made in response to public and agency comment on the DEIR. Within this chapter, additions to text are indicated by underlining; deletions of text are designated by ~~striking through~~. The chapter and section references are ordered as they appear in the DEIR. If a DEIR chapter or section does not appear in this Chapter 4, no corrections or modifications were necessary. There would be no change in the residual significance of identified impacts with the updated information presented below, and no further modification of the EIR would be necessary. Any changes to information that would appear in the Summary Table (Table 2-1 of the DEIR) appear in the revised summary presented in Table 2-1 of this Final EIR.

---

The text of *Impact BIO-5: Loss of nesting habitat for tricolored blackbird*, in DEIR Chapter 6, *Biological Resources*, Section 6.3.2, *Environmental Impacts*, page 6-21 to 6-22, Mitigation Measure BIO-5b is hereby revised to require a 300-foot nest protection buffer around any tricolored blackbird colonies as recommended in the CDFW comment letter. This correction would not lead to any change in the environmental conclusions set forth in the DEIR.

#### **Mitigation Measure BIO-5b:**

1. Ground clearing and initiation of construction activities shall occur outside the breeding season, if feasible (September 15 to February 1).
  2. If construction outside the breeding season is not feasible, a preconstruction survey shall be conducted within 10 days prior to the start of ground disturbance or vegetation removal to determine presence / absence of TCBB within 500 feet of project activities. If a lapse in construction of greater than 10 days occurs, another focused survey shall be conducted before reinitiating construction (This measure is also required for all MBTA protected nesting birds, as set forth in Mitigation Measure BIO-6a.)
  3. If a TCBB nest colony is discovered during preconstruction surveys, a minimum 300-foot buffer shall be applied around the nesting colony and all disturbance within the buffer area will be prohibited until the breeding season has ended or the qualified biologist has determined that there are no active nests remaining in the colony and the young have fledged and are no longer reliant on the colony or parental care for survival.
  4. If implementation of the above measures to avoid take is not feasible, the applicant shall obtain an Incidental Take Permit from the CDFW pursuant to Fish and Game Code section 2081 prior to construction.
-

The text of *Impact GHG-1: Greenhouse gas emissions from project construction and operation*, in DEIR Chapter 8, *Greenhouse Gas Emissions and Energy Use*, Section 8.3.2, *Environmental Impacts*, page 8-21 to 8-24, is hereby revised to update the EIR with information regarding the status of the digester cluster and other potential Scoping Plan mitigation strategies that may be implemented at the dairy. Mitigation Measure GHG-1 is also modified to reflect this updated information. Implementation of this modification to Mitigation Measure GHG-1 would not lead to any change in the environmental conclusions set forth in the DEIR, and would allow for the applicant to implement feasible strategies that are available to reduce GHG emissions. The modified measure would not require any measures to be implemented outside of the dairy site as assessed in the DEIR. Therefore, no further response or modification of the EIR is necessary.

### ***Applicability and Feasibility of GHG Emission Reduction Measures***

At this time, there is no adopted methodology specifically for mitigating GHG emissions for a dairy operation either locally or through the SJVAPCD. As described in the regulatory setting above, the 2022 Scoping Plan reference SB 1383 and the resulting Short-Lived Climate Pollutant Reduction Strategy as “a mix of voluntary, incentive-based, and potential regulatory actions to achieve significant emissions reductions from these sources. A variety of techniques can attain the best results for each specific farming operation; effectively implementing a broad mix of strategies will reduce the GHG emissions from the agricultural sector significantly<sup>1</sup>”. The Legislature has determined that GHG emissions reductions from dairies statewide will remain voluntary for the time being, though one of the 2022 Scoping Plan strategies includes consideration of regulation development for methane mitigation strategies beyond complimentary incentives for dairy and livestock operations in order to meet 2030 GHG emission targets. As reported by CARB in the *Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target* (March 2022), while the dairy and livestock sector has made significant progress, the sector must still achieve considerable methane emissions reductions to meet the 2030 target of 40 percent below 2013 levels. The report identifies two primary methods for reducing manure methane emissions, including installation of anaerobic digesters and alternative manure management practices. Recent funding for Livestock Methane Reduction has prioritized AMMP projects to allow for a greater number of AMMP projects. In 2022, CARB estimated that if the remaining reductions needed to achieve the 2030 target are met through a mix of half dairy digesters and half AMMP projects, then at least 420 additional projects may be necessary (CARB 2022a).

Studies have shown that the use of best management practices on the farm ~~rather than the size or location of the dairy farm~~, makes the biggest difference in reducing GHG emissions (Paustian et. al. 2006). No provisions of the ACO or SJVAPCD regulations directly address methane or CO<sub>2</sub> emissions, but Chapter 18.64.050 U of the ACO applies to air emissions in general (see Appendix C). Because the decomposition of manure is one source of methane emissions, measures to comply with ROG limitations required by Chapter 18.64.050 U of the Merced County Code and a SJVAPCD Permit to Operate would also reduce methane emissions. Examples of management practice type mitigation measures are feed

---

<sup>1</sup> 2022 Scoping Plan p. 85.

manipulation, frequent scraping of animal housing, and covering of silage piles (as outlined in Appendix D of the EIR).

Many water quality and soil health Best Management Practices (BMP) commonly used on a dairy farm are also good GHG emission reduction practices. The Silva Dairy Farms operations include the following GHG emission mitigation strategies to reduce GHG emissions from enteric methane, manure management, and energy sources as identified by the CARB and other resource papers:

<u>Enteric Methane</u>	<u>Manure Management</u>	<u>Energy</u>
✓ Diet management	Anaerobic digestion <sup>2</sup>	✓ LED lighting
✓ Herd management	✓ Composting	✓ Milk pre-cooling technology
✓ Cow comfort and well-being	✓ Solid separation and storage	✓ Variable speed pumps
	✓ Nutrient and water recovery	✓ Renewable energy from solar
	✓ Renewable fertilizers	

The digestibility of feed has a strong effect on the GHG emissions per pound of milk product; a 10 percent increase in feed digestibility in an intensively managed<sup>3</sup> system can reduce GHG emissions by approximately 10 percent (FAO 2010). In practice, however, the quality of the feed is interrelated with milk production and growth, so looking at the combined effect of changes in feed quality, milk production, and growth is more realistic. If an increase in milk production by 10 percent is assumed, parallel to the increased digestibility, the GHG emissions are reduced by 15.4 percent. In the situation where the growth rate is also increased, the GHG emissions are further reduced (FAO 2010). Today, many producers, including the Silva Dairy, already reduce enteric methane emissions by maximizing feed efficiency and increasing production per cow. Herd health and breeding practices also increase production, which reduce GHG emissions. Feed additives are an additional methodology for enteric emission reductions that are promising but have made limited progress in overcoming both technical or market barriers; no feed additives with demonstrated long-term methane mitigation potential have been approved by the U.S. Food and Drug Administration and are commercially available, though there may be in the near future (CARB 2022a). In the Budget Act of 2022 (AB 179), \$10 million was allocated to CDFA to fund the dairy and livestock sectors for demonstration projects to supplement feed with additives or ingredients, such as seaweed, that have scientifically demonstrated efficacy in reducing methane emissions and research dietary modifications that are intended to reduce methane emissions from livestock.

Energy efficiency upgrades can help reduce indirect GHG emissions from the dairy. The Silva Dairy uses LED lighting, milk pre-cooling technology, and variable speed pumps. With the recent installation of a solar photovoltaic (PV) system on the farm, it is estimated that 98 percent of electricity use is offset by renewable energy. For an evaluation of electricity use and energy efficiency on the proposed Silva Dairy Farms Expansion project, please refer to Impact GHG-2.

<sup>2</sup> The applicant has entered into a digester project contract to participate in a centralized dairy digester cluster project currently in development with the County, but it has not yet been completed.

<sup>3</sup> Intensive dairy systems typically involve large numbers of animals raised on limited lands.

Composting and solid separation and storage practices result in a relatively significant methane reduction from manure (EPA 2023c). It is estimated that AMMP solid separation systems have the methane potential reduction of approximately 17 to 45 percent, depending on separation type and manure composition (Mitloehner 2021). Both the north and south facilities were recent recipients of CDFA AMMP grants; the north facility was awarded AMMP funds for mechanical separators, processing pits, and composting, and the south facility was awarded AMMP funds for a mechanical separator and composting, both of which have been completed and are in operation. The CDFA AMMP data indicates an estimated annual GHG Emissions Reduction of 5,830 metric tons CO<sub>2</sub>e per year from the north facility and 1,463 metric tons CO<sub>2</sub>e per year from the south facility, with an overall potential reduction of 7,293 metric tons CO<sub>2</sub>e per year (CDFA 2023). The installation of mechanical manure separators to reduce methane emissions is included as a voluntary strategy for the agricultural sector in the CARB Scoping Plan. The use of the manure separators under proposed conditions would be consistent with the voluntary Scoping Plan methane mitigation strategy for dairy and livestock operations, as identified in the significance threshold discussion above. The existing mechanical manure management systems combined with the GHG emission reduction from the solar PV system would reduce GHG emissions by approximately 7,593 metric tons CO<sub>2</sub>e per year.

The use of dairy manure digesters is often discussed as a method of reducing methane emissions from manure because it has been recognized as the most effective means of reducing animal-related emissions, which represent the most significant source of dairy-related GHG emissions. Due to the high cost of operations, incentives are needed for California's dairy sector to adopt these methane reduction strategies (CARB 2022a). CDFA has awarded a total of \$195 million for 117 dairy digester projects from 2015 through 2021. CDFA estimates that 21.02 million metric tons of CO<sub>2</sub>e would be reduced over the span of ten years with the implementation of these digester projects, resulting in a reduction of 21 percent of the methane emissions from manure management in California, and 6.6 percent of total GHG emissions from all of California agriculture (CDFA 2023).

The DEIR (July 2024) noted that the applicant planned to participate in a centralized dairy digester cluster under review with the County. As of the date of this FEIR (January 2025), the Silva Dairy Farms operator has entered into a separate digester<sup>4</sup> project contract to participate in an alternate dairy digester cluster project currently in the early stages of development. Application for a 2024 DDRDP grant for the digester project has been submitted on behalf of the dairy. With this funding assistance, the digester could be considered a feasible mitigation strategy. Additional application has been completed for the Dairy PLUS<sup>5</sup> grant money for a secondary solid separation system assisted by flocculants<sup>6</sup>. According to the CDFA website, results of these applications are anticipated by March 2025. According to application materials, the dairy digester and Dairy PLUS secondary solid separation system would result in an estimated GHG emission reduction of 12,932 metric tons of CO<sub>2</sub>e annually, beyond the existing reductions from the AMMP mechanical

---

<sup>4</sup> This digester cluster project includes installation of a dairy digester pond on-site at the Silva Dairy Farms.

<sup>5</sup> The Dairy PLUS grant program provides incentives for dairy producers to adopt advanced manure management practices, reduce GHG emissions, and improve nutrient benefits associated with implemented practices (reduction of nitrogen and salt surplus). These grants are awarded in association with current or past AMMP and/or DDRDP projects.

<sup>6</sup> Flocculants are a substance that promotes clumping of particles, in this instance in wastewater.

separators discussed above. The Silva Dairy has no current plans to install an anaerobic digester on-site, though the applicant plans to participate in a centralized dairy digester cluster project currently under review with the County. This joint anaerobic dairy digester system would function as a hub for eight dairies in the Stevinson/Livingston area. Manure from these dairies would be trucked to the digester for biogas production, upgrading to renewable natural gas (RNG), compression, and then compression and truck transport of the RNG (“virtual pipeline”) to a pipeline injection point. Chapter 13, *Alternatives Analysis*, of the DEIR, includes an evaluation of the environmental effects of the proposed project with the addition of an anaerobic digester as part of a dairy digester cluster, which would include similar impacts to the planned dairy digester cluster, ~~considered by the County.~~ Once constructed, the Silva Dairy participation in the planned dairy digester cluster would be consistent with one of the voluntary Scoping Plan methane mitigation strategy for dairy and livestock operations.

Not all GHG reduction measures that have been determined promising or possible but not yet feasible by CARB are included in this discussion since there are a numerous measures and Scoping Plan strategies already being implemented. For an evaluation of an Organic Dairy Farm Management Alternative (including increased pasture for grazing), Solid-Scrape Manure Management Alternative, and Compost-Bedded Pack Barn Alternative, see EIR Chapter 13, *Alternatives Analysis*. Should additional Best Management Practices for the reduction of GHGs from dairy operations be adopted, the Silva Dairy Farms Expansion would likely be required to meet those standards, as adopted by the State, SJVAPCD, or County.

While the proposed project would exceed the established significance threshold of 10,000 mt/y CO<sub>2</sub>e GHG emissions, the use of the manure separators at the dairy would reduce GHG emissions consistent with Scoping Plan mitigation strategies, and the project’s contribution to GHG emissions would be considered less than significant as identified in the EIR Significance Thresholds. GHG emissions from the Silva Dairy would be further reduced with Best Management Practices, energy efficiency measures and use of renewable solar energy onsite, and the use of manure management strategies. The proposed dairy digester cluster planned to be constructed to serve the Silva Dairy and additional dairies in the vicinity would further reduce GHG emissions consistent with Scoping Plan methane mitigation strategies. ~~Because~~ With funding assistance, this is a feasible mitigation strategy currently ~~under consideration~~ in the initial stages of development with the County. To ensure the digester cluster or other potentially feasible mitigation strategies under consideration become operational and include the Silva Dairy Farm, the following measure would be required.

**Significance of Impact:** Significant.

#### **Mitigation Measure GHG-1:**

The proposed herd expansion shall not occur until the manure digester cluster is operational, or other alternate feasible Scoping Plan mitigation strategies are implemented, should the digester be determined infeasible due to changes in funding conditions. Once operational, the dairy operator shall use the digester to store manure from the existing and proposed herd in order to capture methane for energy use to displace fossil fuel use and reduce GHG emissions from the dairy. The project sponsor shall provide documentation of use of the

dairy digester cluster or other alternate Scoping Plan mitigation strategies to Merced County prior to herd expansion.

**Potential Environmental Effects of Measures:** All physical improvements or activities that could result in changes to the physical environment required by this measure would be located within the project area. The impacts of implementing such measures, if any, would be similar to those identified for the project in Chapters 5-11 of this EIR.

**Significance after Mitigation:** Significant and Unavoidable.

Delaying expansion of the herd until the dairy digester cluster (or other feasible alternate Scoping Plan mitigation strategies) is operational would ensure GHG emissions would be further reduced consistent with the Scoping Plan mitigation strategy. The combination of these voluntary GHG emission reduction strategies could result in significant emissions reductions at the Silva Dairy Farm beyond the emissions reduction from the existing AMMP mechanical manure separators. However, because installation of the dairy digester cluster (or other feasible) alternate Scoping Plan mitigation strategies) is not under the control of the project applicant or Merced County, the ultimate success and hence effectiveness of the measure is uncertain.

CEQA Guidelines Section 15130(c) states that with some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis. Global climate change is considered a cumulative impact, since the causes and effects are not just regional or statewide, but also worldwide. At this time, the reduction of methane emissions from dairy operations will continue to be voluntary, as set forth by CARB in the 2022 Scoping Plan. While this analysis uses a numeric threshold to assist in determining potential significance pursuant to CEQA, given the uncertainties in quantifying the impact of any single project on global warming and climate change, and also the uncertainties in quantifying GHG reduction from project design and BMPs, any further feasible emissions reductions would be accomplished through CARB regulations adopted pursuant to AB 32.

**Implementation and Monitoring:** Implementation of these measures would be the responsibility of the project applicant. The Merced County Community and Economic Development Department shall monitor for compliance. Mitigation Measure GHG-1 shall be implemented prior to expansion of the herd and ongoing operations.

---

The following text of *Impact HYD-3: Groundwater contamination from expanded dairy project operations* of the DEIR Chapter 10, *Hydrology and Water Quality*, Section 10.3.2, *Environmental Impacts*, page 10-31, is hereby amended to include additional information from the groundwater separation study. These changes would not lead to any change in the environmental conclusions set forth in the DEIR.

**Wastewater Ponds.** The existing settling basin and wastewater ponds receive wastewater as described in the project NMP/WMP. Pond construction information was not available for review. According to the project applicant, the ponds are earthen embankment structures. The existing dairy wastewater ponds have the potential to impact groundwater because they



contain elevated concentrations of inorganic and organic constituents, and because hydraulic pressure and gravity force liquids downward through soils to groundwater.

In March 2019, the CVRWQCB issued a directive to complete a groundwater study since groundwater may be present below the project site and may intersect with the bottoms of existing ponds. A Technical Memorandum for Silva Dairy Farms dated July 2019 was provided in response to the directive. The Technical Memorandum used groundwater data obtained from the CVDRMP for surrounding dairies for years 2012-2018 and compared it with surveyed elevations of land surface adjacent to the wastewater ponds and previously measured pond depth included in the WMP. Based on the results of the Technical Study, it was determined there was potential for groundwater intersection with the bottoms of the existing ponds. The CVRWQCB required the installation of piezometers on the existing ponds to collect data on depth to groundwater beneath the ponds. In June 2021, Sousa Engineering submitted water level sampling data for April 2021 to September 2021<sup>7</sup>. The investigation effort used piezometer groundwater readings compared to pond bottom elevations to provide site-specific data for separation between groundwater levels and the bottoms of the existing ponds. The data indicated that pond bottoms intersected with groundwater levels for some piezometer readings. After less than a year of collected data, in December 2021 the CVRWQCB temporarily suspended implementation of the Piezometer Installation and Sampling Plan while the State Water Board is in the process of reviewing a petition of the Dairy General Order<sup>8</sup>. The Directive may be resumed by the CVRWQCB at some time in the future.

The flux of liquid through the base of the existing pond has been estimated based on the soil permeability at the base of the ponds (estimated as  $10^{-6}$  centimeters per second or 1 foot per year). Based on the existing combined wastewater ponds size of approximately 289,000 square feet of the existing three ponds, the total leakage through the sides and base of the ponds is estimated at 2.2 million gallons per year. However, since no changes to the existing ponds construction or operation are proposed with the dairy modification, the hydraulic pressure within the existing ponds and overall pond leakage would stay the same. The new ponds would be built to the CVRWQCB Tier 1 pond standard, using a double 60-mil HDPE liner. Therefore, there would be no anticipated increase to groundwater quality impacts from the existing and proposed ponds with implementation of the proposed project.

The following text of *Impact HYD-9: Impacts to water quality at off-site locations as a result of project operations* of the DEIR Chapter 10, *Hydrology and Water Quality*, Section 10.3.2, *Environmental Impacts, Mitigation Measure HYD-9*, page 10-50, is hereby amended to include recommended language from the CVRWQB comment letter. The environmental conclusions of Impact HYD-9 presented in the

<sup>7</sup> Piezometer Post Construction Report, Silva Dairy Farms, Merced County, CA. Sousa Engineering, dated 9/9/2021.

<sup>8</sup> As of the date of this FEIR (January 2025), the California Water Board has issued a Draft Order in which the State Water Board reviews the existing Dairy General Order, and concludes the Dairy General WDRs should be remanded to the CVRWQCB for reconsideration and revisions. Accessed on October 3, 2024 at: [https://content.govdelivery.com/attachments/CAWRCB/2024/10/01/file\\_attachments/3017958/Draft%20Dairy%20Order\\_October%201%202024\\_ADA.pdf](https://content.govdelivery.com/attachments/CAWRCB/2024/10/01/file_attachments/3017958/Draft%20Dairy%20Order_October%201%202024_ADA.pdf)

DEIR would be unchanged by these modifications. The below revision is for clarification purposes only and would not lead to any change in the environmental conclusions set forth in the DEIR.

**Mitigation Measure HYD-9:**

Over the course of operations, the project sponsor shall obtain written agreement from the recipients of manure exported off site to require demonstrated compliance with the following:

- The recipient must be explicitly authorized by the appropriate RWQCB to discharge exported manure and/or wastewater in any manner or location that could impact or threaten to impact water quality. Such authorization may be granted via issuance of individual WDRs or waiver of WDRs, enrollment under a general WDRs order or waiver, or other action of the RWQCB.
- The recipient belongs to an approved third-party group or coalition compliant with the Long-term Irrigated Lands Regulatory Program General Orders adopted by the RWQCB, is covered by an Individual Discharger General Order, or is otherwise covered by Confined Animal Facility WDRs as adopted by the RWQCB.
- All manure shall be applied to cropland at rates and times that are reasonable for the crop, soil, climate, special local situations, and management system. Manure applications shall be timed and managed to minimize nitrogen movement below the root zone and to minimize percolation of waste constituents to groundwater.
- All stormwater that is or has been in contact with manure shall be maintained on site. No storm drainage that has been in contact with manure shall be allowed to flow or seep onto adjacent properties or public roads, or into any waterway.
- Where the commingling of water containing manure can take place with irrigation wells and irrigation and/or drainage district facilities, these facilities must be protected from pollution by a backflow device or method that is approved by the Division of Environmental Health and/or the appropriate irrigation/drainage district. It is the obligation of the property owner to install and maintain or cause to be installed and maintained the backflow device or method.
- Manure shall not be applied within 100 feet of any domestic well, irrigation well, or surface water body. Surface water bodies include creeks, streams, lakes and reservoirs, but do not include canals constructed above grade. Adequate protection of surface water bodies or irrigation wells shall prevent discharge or infiltration of manure constituents to the water body or well.
- The project sponsor shall provide the most recent analysis of the liquid or dry manure, in writing, to the manure recipient. The signed agreement between the project sponsor and the recipient of manure exported off site shall be submitted to the Merced County Division of Environmental Health for review.