

**CEQA FINDINGS OF FACT**  
and  
**STATEMENT OF OVERRIDING CONSIDERATIONS**  
OF THE  
**MERCED COUNTY PLANNING COMMISSION**  
FOR THE  
**VIERRA DAIRY EXPANSION PROJECT**  
**ENVIRONMENTAL IMPACT REPORT**

**JANUARY 2014**

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## I. INTRODUCTION

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The Environmental Impact Report (“EIR”) prepared for the Vierra Dairy Expansion project (the “Project”) addresses the potential environmental effects associated with constructing and operating the Project. These findings have been prepared to comply with requirements of the California Environmental Quality Act (“CEQA”) (Public Resources Code Section 21000 *et seq.*) and the CEQA Guidelines (Cal. Code Regs., tit. 14, Section 15000 *et seq.*). These findings refer to the Initial Study/ Notice of Preparation (IS/NOP) or Final EIR (“FEIR”) where the material appears in either of those documents. Otherwise, references are to the Draft EIR (“DEIR”).

CEQA, Public Resources Code Section 21000 *et seq.*, generally requires that a lead agency must take reasonable efforts to mitigate or avoid significant environmental impacts when approving a project.

CEQA treats the approval of a Conditional Use Permit as a project that requires environmental review. The “Project” for purposes of CEQA is the issuance of a Conditional Use Permit by Merced County to permit the construction and operation of the Vierra Dairy Expansion project. If the Project can be defined as having significant impacts on the environment, then an EIR must be prepared. For the Vierra Dairy, an Initial Study (IS) was completed in November 2012 to assess the potential environmental effects resulting from the Project. On the basis of this IS, it was determined that preparation of an EIR was necessary pursuant to the requirements of CEQA.

In order to effectively evaluate any potentially significant environmental impacts of the proposed project, an EIR has been prepared. The EIR is an informational document that serves to inform the agency decision-making body and the public in general of any potentially significant environmental impacts. The preparation of an EIR also serves as a medium for identifying possible methods of minimizing any significant effects and assessing and describing reasonable alternatives to the project.

The EIR for this Project was prepared by the Merced County Community and Economic Development Department (Planning Department) as the “lead agency” in accordance with CEQA and has been prepared to identify and assess the anticipated effects of the Project.

## II. TERMINOLOGY OF FINDINGS

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Section 15091 of the CEQA Guidelines requires that, for each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three allowable conclusions. Once an EIR has been completed which identifies one or more potentially significant environmental impacts, the approving agency must make one or more of the following findings for each identified area of impact:

1. Changes or alterations which avoid or mitigate the significant environmental effects as identified in the EIR have been required or incorporated into the project; or,
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or,

3. Specific economic, legal, social, technological, or other considerations, including consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR. (Public Resources Code Section 21081)

For purposes of these findings, the terms listed below will have the following definitions:

- The term “mitigation measures” shall constitute the “changes or alterations” discussed above.
- The term “avoid or substantially lessen” will refer to the effectiveness of one or more of the mitigation measures or alternatives to reduce the severity of an environmental effect.
- The term “feasible,” pursuant to the CEQA Guidelines, means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

When the Merced County Planning Commission (“Planning Commission”) finds a measure is not feasible, it will provide evidence for its decision and may adopt substitute mitigation that is feasible, and designed to reduce the magnitude of the impact. In other cases, the Planning Commission may decide to modify the proposed mitigation. Modifications generally update, clarify, streamline, or revise the measure to comport with current engineering practices, budget conditions, market conditions or existing Merced County policies, practices, and/or goals. Modifications achieve the intent of the proposed mitigation without reducing the level of protection. In many instances, the modifications actually improve the effectiveness of the mitigation. Thus, the County may have modified the language of some of the mitigation measures set forth herein for purposes of clarification and consistency, to enhance enforceability, to defer more to the expertise of agencies with jurisdiction over the affected resources, to summarize or strengthen their provisions, and/or make the mitigation measures more precise and effective, all without making any substantive changes to the mitigation measures.

### III. DEFINITIONS

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“AAQA” means Ambient Air Quality Analysis

“AAQS” means Ambient Air Quality Standards

“ACO” means Merced County Animal Confinement Ordinance as adopted on October 22, 2002 and amended on February 8, 2005

“APN” means Assessor’s Parcel Number

“ATC” means Authority to Construct

“BACT” means Best Available Control Technology

“BARCT” Best Available Retrofit Control Technology

“BMP” means best management practices

“Board of Supervisors” refers to the Merced County Board of Supervisors

“BPTC” means best practicable treatment or control

“CARB” means California Air Resources Board

“CEQA” means California Environmental Quality Act

“CESA” means California Endangered Species Act

“Commission” or “Planning Commission” refers to the Merced County Planning Commission

“CDFW” means California Department of Fish and Wildlife, previously California Department of Fish and Game

“CNDDDB” means California Natural Diversity Database

“CO” means carbon monoxide

“CO<sub>2</sub>” means carbon dioxide

“CUP” means Conditional Use Permit

“CVRWQCB” means Central Valley Regional Water Quality Control Board

“DEH” means Merced County Division of Environmental Health

“DEIR” means Draft Environmental Impact Report for the Vierra Dairy Expansion project, dated November 2013

“District” means San Joaquin Valley Air Pollution Control District

“EIR” means Environmental Impact Report for the Vierra Dairy Expansion project, including the DEIR and the FEIR

“EPA” means U.S. Environmental Protection Agency

“FEIR” means Final Environmental Impact Report for the Vierra Dairy Expansion project, dated **January 2014**

“GHG” means Greenhouse Gas

“HRA” means Health Risk Assessment

“IS” means Initial Study

“MMRP” means Mitigation Monitoring and Reporting Program for the Vierra Dairy Expansion project, dated January 2014

“NAHC” means Native American Heritage Commission

“NOP” means Notice of Preparation

“NO<sub>x</sub>” means nitrogen oxides

“NRCS” means California Natural Resource Conservation Service

“Planning Commission” or “Commission” means the Merced County Planning Commission

“PM<sub>10</sub>” means particulate matter with a diameter of 10 microns or less

“PM<sub>2.5</sub>” means particulate matter with a diameter of 2.5 microns or less

“PRD” means Permit Registration Documents

“PTO” means Permit to Operate

“ROG” means reactive organic gases

“ROWD” means Report of Waste Discharge

“SJVAPCD” means the San Joaquin Valley Air Pollution Control District

“SWPPP” means Storm Water Pollution Prevention Plan

“SWRCB” means State Water Resources Control Board

“TID” means Turlock Irrigation District

“TDS” means Total Dissolved Solids

“USFWS” means United States Fish and Wildlife Service

“VOC” means Volatile Organic Compounds

“WDRs” means Waste Discharge Requirements

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## IV. PROJECT DESCRIPTION

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### A. PROJECT LOCATION

The existing active dairy facilities of the Vierra Dairy Farm are located on 68.5 acres of a farm totaling approximately 683 acres on 16 parcels in an unincorporated area of Merced County. The project site is located on the northwest corner of Williams Avenue and Washington Road near the community of Hilmar. The project’s location is within the central California region (see DEIR Figures 3-1 and 3-2). The active dairy facilities are located on a five-parcel portion of the project site, and the majority of cropland application areas are located on 11 parcels in the area that are non-contiguous with the active dairy facility site (see DEIR Figure 3-3 and DEIR Table 3-1 for Merced

County Assessor's Parcel Numbers (APN)). The project site is located in Section 19, Township 6 South, Range 10 East, Mount Diablo Base and Meridian; 37°23'25.00"N, 120°54'21.00"W (DEIR, pps. 3-1 to 3-4).

## **B. EXISTING SITE CONDITIONS**

The existing dairy facilities are located on a 68.5-acre portion of the project site and include the following:

- three freestall barns
- milk barn
- 35 corrals
- manure drying area
- 12 on-site employee residences
- raised calf hutches
- three commodity barns
- shop
- office
- feed/silage areas
- four solid settling ponds
- one wastewater storage pond
- equipment area

Approximately 582 acres of the total 683-acre project site are currently used for the production of crops and application of liquid and dry manure, including application areas on portions of parcels adjacent to the existing dairy facility (see DEIR Figures 3-2 and 3-3 and DEIR Table 3-1). The remaining 32.5 acres consist of ancillary dairy facilities (DEIR, pps. 3-1 to 3-5).

Domestic water to the site and dairy barns is provided by on-site water wells. Irrigation water is supplied by surface water sources from Turlock Irrigation District (TID) canals.

As established at the time of Initial Study preparation (November 2012), there are approximately 3,375 animals at the dairy (1,550 milk cows and 1,825 support stock) (see DEIR Table 3-3 below for a breakout of existing dairy herd by age-class). All cows housed at the dairy are Holsteins.

The existing facility consists of flush and scrape systems that are used to collect and process wastewater and solid manure. Animal wastes from freestall and other concrete-surfaced areas are flushed to an on-site waste management system that consists of four settling basins and one wastewater storage pond. The area of active dairy facilities has been graded to direct corral runoff to the existing waste management system. Stormwater runoff from most roofed areas is routed to the wastewater ponds, though runoff from the west half of the heifer shade structure drains to a field. Solid manure within corral areas is scraped (DEIR, p. 3-5).

Wastewater is mixed with irrigation water and applied to cropland. Receiving fields are graded to guide excess applied irrigation water to an existing tailwater retention and/or return system. Collected tailwater is recycled and returned to the nearest field pipe access for reapplication.

Dry manure is separated from liquids, accumulated on site, and processed for application to cropland or hauled off site as piles accumulate for use as fertilizer and soil amendments. Corrals are scraped approximately eight times per year. Solid manure currently is stockpiled in uncovered piles and windrows on soil. Some of the solid manure is used as bedding, applied on the project site, or hauled off site to fields in the project vicinity.

All of the crops grown on site are used for dairy feed crops and supplement imported grain and hay. Feed is stored in silage piles and in an on-site commodity barn.

Operations at the dairy are 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. The dairy currently employs a staff of approximately 25 workers.

Currently, the site is served by heavy trucks (milk tankers, commodity deliveries) and other vehicles. Existing daily trips include approximately 165 average daily trips, with the majority consisting of auto and light truck trips. All trips currently access Williams Avenue or Washington Road. Regional access is provided by Highway 165 to the east. The dairy currently provides 25 parking spaces and one handicap space. The dairy facility stores diesel fuel for agricultural use in a 1,500-gallon aboveground tank located on site behind the existing shop (DEIR, p. 3-6).

There are single-family residences associated with other off-site agricultural operations located on parcels to the north, west, and east of the project site (see DEIR Figure 3-4 and DEIR Table 3-2). There are several off-site residences located within the windshed of the dairy (defined as an area of 1,320 feet upwind to 2,640 downwind of the periphery of the animal facility). The closest residences are located approximately 85 feet and 285 feet north of active animal facilities along Washington Road near the northeast corner of the project area (see DEIR Figure 3-4). Other surrounding uses include additional dairy facilities, with one facility located approximately 0.1 miles to the north and another 0.25 miles to the east of the project site. The community of Hilmar is located approximately 2.6 miles to the northeast of the existing active dairy facilities. There are twelve employee residences – four residences are within the windshed of the dairy (one of these residences is currently unoccupied), and eight additional employee residences are situated on the dairy agricultural fields shown on DEIR Figure 3-2 (DEIR, pps. 3-6).

## **C. PROJECT DESCRIPTION**

The project sponsor has applied for a new Conditional Use Permit (CUP12-005) from Merced County to bring the existing dairy facility into compliance with Merced County's permit requirements, and to expand the existing dairy so that the modified dairy would house a total of 5,600 animals (see DEIR Table 3-3). This would represent an increase of 2,225 animals from existing numbers (DEIR, p. 3-9).

The proposed project would include reconfiguration of the existing dairy facilities, including the removal of two corrals, and the construction of a freestall barn and a 72-stall rotary dairy barn between the corrals and the commodity barns. Additional ancillary improvements would include an entrance driveway, a parking area with 40 spaces and two handicap spaces, landscaping, and a perimeter road located west of the proposed freestall barn. Both the entrance driveway and perimeter road would be accessed along Williams Avenue. Construction of the proposed structures would convert approximately three acres of agricultural land from field crops to active dairy facilities within APN 045-190-017, thereby increasing the area of active dairy operations from 68.5 to 71.5 acres. See DEIR Figure 3-5 for the dairy site plan and DEIR Figure 3-6 for the layout of the dairy fields and other facilities. DEIR Figure 3-7 shows a cross-section of a freestall dairy barn and DEIR Figure 3-8 illustrates the processes that occur at a dairy farm.

Animal wastes from freestall and other concrete-surfaced areas would continue to be flushed to an on-site waste management system, except for solid manure within corral areas, which would

continue to be scraped. Liquid manure would continue to be directed to the four settling basins and then treated in the wastewater storage pond (DEIR, pps. 3-9 to 3-14).

Wastewater would continue to be mixed with irrigation water and applied to the land. With conversion of 3 acres of existing cropland for construction of new active dairy facilities, there would be approximately 579 acres remaining for oats, silage-soft dough, corn, and other silage cropland available for disposal of dairy wastewater and/or dry manure within the main project area. Dry manure would continue to be separated from liquids, accumulated on site, and processed for bedding material, or sold and hauled off site for use as fertilizer and soil amendments. Corrals would be scraped eight times a year. An increased amount of dry manure would be exported off site with the proposed dairy expansion.

Most of the necessary utilities for the dairy expansion are currently available on site. Additional electric service would be provided from Washington Road, and a new well would be drilled for increased water use for the herd expansion.

Operations at the dairy would continue to occur 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. With implementation of the proposed project, the number of employees would increase from 25 to approximately 30 to 32 workers (DEIR, p. 3-15).

### *Circulation and Parking*

The project site would continue to be served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Daily trips by all classes of vehicle are estimated to increase from approximately 165 to 190 average daily trips, with of the majority consisting of mainly auto and light truck trips (see DEIR Table 3-4). All trips would continue to access Williams Avenue or Washington Road. Highway 165 provides regional access for the project site to the east (DEIR, pps. 3-15 to 3-16).

## **D. PROJECT OBJECTIVES**

The objectives of the project applicant are:

- To maintain a modern, efficient, and competitive dairy operation that operates in full compliance with applicable county, state, and federal laws and regulations.
- To fully use land and facilities currently owned and operated by the project applicant without the need to purchase additional land.
- To use all available land (which is not otherwise used for the dairy) for the production of feed for the herd. This allows for the application, at appropriate agronomic rates, of dairy process water from dairy operations, which in turn reduces the need for imported fertilizers.
- To generate dry manure that can be land applied and/or sold as a commodity for use as fertilizer in the region.
- To construct improvements that could be permitted within a reasonable time frame and would represent commensurate benefit with cost.
- To 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 (DEIR, pps. 3-8 to 3-9).

## **E. DISCRETIONARY ACTIONS**

In order to approve the Vierra Dairy Expansion project, the Planning Commission must:

- Certify the Environmental Impact Report; and,
- Approve Conditional Use Permit No. CUP12-005.

The Commission's actions are final unless appealed to the Board of Supervisors.

In order for the Vierra Dairy Expansion project to be constructed and operated, the State of California, Regional Water Quality Control Board, Central Valley Region must:

- Adopt findings on the Environmental Impact Report; and,
- Issue Individual Waste Discharge Requirements.

In order for the Vierra Dairy Expansion project to be constructed and operated, the San Joaquin Valley Air Pollution Control District (SJVAPCD) must:

- Adopt findings on the Environmental Impact Report; and,
- Approve an Authority to Construct (ATC) and Permit to Operate (PTO) for the Vierra Dairy Expansion project.

## **F. MINISTERIAL ACTIONS**

In order for the Vierra Dairy Expansion project to be constructed, the State Water Resources Control Board must:

- Approve a General Construction Activity Storm Water Permit for the Vierra Dairy Expansion project.

In order for the Vierra Dairy Expansion project to be constructed and operated, the California Department of Fish and Wildlife must:

- Respond to consultation with the project applicant if threatened, endangered, or candidate species are discovered at the proposed project from the California Natural Diversity Database (CNDDDB) database, or other environmental study, or are discovered during the protocol survey and issue California Endangered Species Act (CESA) 2081 Management Authorization, if required, prior to the issuance of the first building permit and the start of construction-related activities.

In order for the Vierra Dairy Expansion project to be constructed and operated, the SJVAPCD must:

- Approve a modification to the existing Conservation Management Practices Plan for the Vierra Dairy Expansion project.

In order for the Vierra Dairy Expansion project to be constructed and operated, the Merced County Community and Economic Development Department must:

- Issue a building permit for the proposed dairy expansion.
- Issue an encroachment permit to allow the applicant to improve all driveways used by heavy truck operations associated with the dairy with either paved or concrete approaches onto the adjacent County roadway, in accordance with Chapter 7 of the Merced County Department of Public Works Improvement Standards and Specifications.

In order for the Vierra Dairy Expansion project to be constructed and operated, the Merced County Department of Public Works, Road Division must:

- Approve a Roadway Impact Agreement with the project applicant to establish a payment schedule to mitigate potential effects to roadway integrity from heavy truck traffic.

In order for the Vierra Dairy Expansion project to be constructed and operated, the Merced County Division of Environmental Health will require:

- Filing of a Hazardous Material Business Plan (HMBP), which is required for the storage of any hazardous material stored on site over threshold quantities (55 gallons; 200 cu. ft.; or 500 pounds). Any quantity of hazardous waste generated on site also requires that a HMBP be filed.

## **V. BACKGROUND**

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### **PROJECT HISTORY**

According to the project applicant, the existing dairy began operations in October 1976. An application to Merced County in 1989 permitted the dairy for an undefined herd size. To bring the existing dairy facility in compliance with Merced County permit requirements and allow for future growth, the applicant has submitted an application for issuance of a new Conditional Use Permit (CUP12-005) from the County. It is the application for the Conditional Use Permit that has triggered the need for compliance with CEQA, and preparation of the EIR. Both the SJVAPCD and the Central Valley Regional Water Quality Control Board (CVRWQCB) will be required to use the County's EIR in their consideration of the proposed dairy expansion as responsible agencies.

In November 2012, an Initial Study (IS) was completed to assess the potential environmental effects resulting from the Vierra Dairy Expansion project. On the basis of this IS, it was determined that preparation of an EIR was necessary pursuant to the requirements of CEQA. On November 28, 2012, Merced County Community and Economic Development Department issued a Notice of Preparation (NOP) for the Vierra Dairy Expansion project EIR. The NOP, and subsequent comments on the NOP, identified the following issues to be evaluated in the environmental document:

- Air Quality and Odors
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions and Energy
- Hazards
- Hydrology, Water Quality, and Soil Erosion
- Land Use Compatibility

The Draft Vierra Dairy Expansion project EIR (DEIR) was made available for public and agency review and comment for a 46-day review period from November 4, 2013 to December 19, 2013. During this time, the DEIR was also circulated to state agencies through the State Clearinghouse. Public review copies of the DEIR were made available to the public at the Merced County Community and Economic Development Department. The Community and Economic Development Department received four written comments on the DEIR during the review period. An additional comment letter was received December 30, 2013, and was included in the record.

Subsequent to the receipt of comments on the DEIR, the Community and Economic Development Department prepared a Final EIR that responded to comments received on the DEIR. This FEIR, which incorporates all of the environmental analyses contained in the DEIR (as modified in response to comments) was circulated to commenting agencies and made available to the public in January 2014.

Together, the following documents compose the EIR for the Vierra Dairy Expansion project:

- DEIR (November 2013)
- FEIR (January 2014)

Section 15132 of the CEQA Guidelines governs the contents of a FEIR. As required by Section 15132, a FEIR shall consist of the DEIR or a revision to the draft; comments and recommendations received on the DEIR; a list of those commenting on the DEIR; and the responses of the lead agency to significant environmental points raised in the comments. For the Vierra Dairy Expansion project EIR, these requirements may be found in the following documents:

<b>Guidelines Section 15132 Content Requirement</b>	<b>DEIR (11/2013)</b>	<b>FEIR (01/2014)</b>
DEIR	X	
Revisions to DEIR		X
Comments Received on DEIR		X
List of Commentors		X
Responses to Comments		X

## VI. RECORD OF PROCEEDINGS

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For purposes of CEQA and these Findings, the Record of Proceedings for the Project consists of the following documents, at a minimum:

- The Initial Study prepared for the Vierra Dairy Expansion project;
- The Notice of Preparation (November 28, 2012) and all other public notices issued by the County in conjunction with the Project, including the Notices of Completion and of Availability issued on or about November 4, 2013, providing notice that the DEIR had been completed and was available for public review and comment;
- Comments received on the Notice of Preparation issued by the County;
- The EIR for the Vierra Dairy Expansion project, including both the DEIR and the FEIR, and including all documents referred to or relied upon therein, and documents relied upon or referenced in these findings, which include, but are not limited to the following:
  - All timely comments received on the DEIR and responses to those comments;
  - Technical appendices;
- All comments submitted by agencies or members of the public during the 45-day public comment period on the DEIR;
- All comments and correspondence submitted to the County with respect to the Project, in addition to timely comments on the DEIR;
- The Mitigation Monitoring and Reporting Program for the Project;
- All applications for approvals and development entitlements related to the Project and submitted to the County;
- All findings and resolutions adopted by County decision makers in connection with the Project, and all documents cited or referred to therein;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the County, consultants to the County, and responsible or trustee agencies with respect to the County's compliance with the requirements of CEQA and with respect to the County's actions on the Project;
- All documents submitted to the County by other public agencies or members of the public in connection with the Project, up through the close of the public hearing on \_\_\_\_\_;
- Notice of Public Hearing issued in connection with Planning Commission hearing on the Project, which was issued in January 2014;
- Minutes and/or verbatim transcripts of all public meetings and public hearings held by the County in connection with the Project;
- Any documentary or other evidence submitted to the County at such public meetings and public hearings;
- The Merced County Animal Confinement Ordinance; the EIR prepared for the Revisions to the Animal Confinement Ordinance, including both the Draft EIR and Final EIR, certified October 22, 2002; and the Findings adopted by the Merced County Board of Supervisors on October 22, 2002 regarding the Animal Confinement Ordinance and its EIR;

- The Modifications to the Merced County Animal Confinement Ordinance; the Addendum to the EIR prepared for the Modifications to the Animal Confinement Ordinance, adopted by the Merced County Board of Supervisors on February 18, 2005, to the extent that the modifications and Addendum have not been set aside in part or in whole by a Court of competent jurisdiction;
- The relevant files of the County for the Project;
- Matters of common knowledge to the County, including, but not limited to federal, state, and local laws and regulations;
- Any documents expressly cited in these findings, in addition to those cited above; and,
- Any other materials required to be in the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The custodian of the documents comprising the record of proceedings is David Gilbert, Planner III, of the Merced County, Community and Economic Development Department, whose office is located at 2222 M Street, Merced, California, 95340.

The Planning Commission has relied on all of the documents listed above in reaching its decision on the Vierra Dairy Expansion project, even if not every document was formally presented to the Commission or County Staff as part of the County files generated in connection with the Project. Without exception, any documents set forth above not found in the Project files fall into one of two categories. Many of them reflect prior planning or legislative decisions with which the Planning Commission was aware in approving the Vierra Dairy Expansion project (see City of Santa Cruz v. Local Agency Formation Commission (1978) 76 Cal.App.3d 381, 391-392; Dominey v. Department of Personnel Administration (1988) 205 Cal.App.3d 729, 738, fn. 6). Other documents influenced the expert advice provided to County Staff or consultants, who then provided advice to the Commission. For that reason, such documents form part of the underlying factual basis for the Planning Commission’s decisions relating to the approval of the Vierra Dairy Expansion project (see Public Resources Code Section 21167.6, subd. (e)(10); Browning-Ferris Industries v. City Council of City of San Jose (1986) 181 Cal.App.3d 852, 866; Stanislaus Audubon Society, Inc. v. City of Stanislaus (1995) 33 Cal.App.4th 144, 153, 155).

## **VII. FINDINGS REQUIRED UNDER CEQA**

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### **A. FINDINGS ACCORDING TO CEQA GUIDELINES SECTION 15091**

Public Resources Code Section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects” (emphasis added). The procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of projects and the feasible alternatives or feasible mitigation measures which will *avoid* or *substantially lessen* such significant effects” (emphasis added). Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.”

The mandate and principles announced in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required (see Public Resources Code Section 21081, subd. (a); CEQA Guidelines Section 15091, subd. (a)). For each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first such finding is that “[c]hanges or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR” (CEQA Guidelines Section 15091, subd. (a)(1)). The second permissible finding is that “[s]uch changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency” (CEQA Guidelines Section 15091, subd. (a)(2)). The third potential conclusion is that “[s]pecific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR” (CEQA Guidelines Section 15091, subd. (a)(3)). Public Resources Code Section 21061.1 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.” CEQA Guidelines Section 15364 adds another factor: “legal” considerations (see also Citizens of Goleta Valley v. Board of Supervisors (“Goleta II”) (1990) 52 Cal.3d 553, 565).

The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (City of Del Mar v. City of San Diego (1982) 133 Cal.App.3d 410, 417). “[F]easibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors” (Ibid.; see also Sequoyah Hills Homeowners Assn. v. City of Oakland (1993) 23 Cal.App.4th 704, 715). Further, alternatives are to be selected based on the “rule of reason”, and there is not an established directive that dictates the scope or nature of the alternative (Citizens for Open Government v. City of Lodi (2012) 205 Cal.App.4th 296).

The CEQA Guidelines do not define the difference between “avoiding” a significant environmental effect and merely “substantially lessening” such an effect. The County must therefore glean the meaning of these terms from the other contexts in which the terms are used. Public Resources Code Section 21081, on which CEQA Guidelines Section 15091 is based, uses the term “mitigate” rather than “substantially lessen.” The CEQA Guidelines therefore equate “mitigating” with “substantially lessening.” Such an understanding of the statutory term is consistent with the policies underlying CEQA, which include the policy that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects” (Public Resources Code Section 21002, emphasis added).

For purposes of these findings, the term “avoid” refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less-than-significant level. In contrast, the term “substantially lessen” refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce that effect to a less-than-significant level. These interpretations appear to be mandated by the holding in Laurel Hills Homeowners Association v. City Council (1978) 83 Cal.App.3d 515, 519-527, in which the Court of Appeal held that an agency had satisfied its obligation to substantially lessen or avoid significant

effects by adopting numerous mitigation measures, not all of which rendered the significant impacts in question less than significant.

Although CEQA Guidelines Section 15091 requires only that approving agencies specify that a particular significant effect is “avoid[ed] *or* substantially lessen[ed],” these findings, for purposes of clarity, in each case will specify whether the effect in question has been reduced to a less-than-significant level, or has simply been substantially lessened but remains significant.

Moreover, although Section 15091 of the CEQA Guidelines, read literally, does not require findings to address environmental effects that an EIR identifies as merely “potentially significant,” these findings will nevertheless fully account for all such effects identified in the EIR.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency (CEQA Guidelines Section 15091, subd. (a), (b)).

With respect to a project for which significant impacts are not avoided or substantially lessened either through the adoption of feasible mitigation measures or feasible environmentally superior alternative, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project’s “benefits” rendered “acceptable” its “unavoidable adverse environmental effects” (CEQA Guidelines Section Section 15093, 15043, subd. (b); see also Public Resources Code Section 21081, subd. (b)). The California Supreme Court has stated that, “[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced” (*Goleta II*, 52 Cal.3d 553, 576).

The findings set forth herein reflect the independent judgment of the Planning Commission and constitute its best efforts to set forth the rationales and support for its decision under the requirements of CEQA.

## **B. FINDINGS ON ESTABLISHING THE PROPER “BASELINE” FOR THE PROPOSED DAIRY EXPANSION**

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. As established by CEQA Guidelines Section 15125(a), the existing environmental setting, usually established at the time a notice of preparation is issued, should normally constitute the baseline. Therefore, “the impacts of a proposed project are ordinarily to be compared to the actual environmental conditions existing at the time of CEQA analysis, rather than to allowable conditions defined by a plan or regulatory framework.” (*Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 158 Cal.App.4th 1336). Essentially, prior operating permits or permit levels do not in themselves establish a baseline for CEQA review of a new project.

As most recently set forth in *Communities for a Better Environment v. South Coast Air Quality Management District* (*ibid*), a long line of Court of Appeals decisions has upheld this line of

reasoning, including cases where a plan or regulation allowed for greater development or more intense activity than had so far actually occurred, as well as cases where actual development or activity had, by the time CEQA analysis was begun, already exceeded that allowed under the existing regulations.

In the case of the Vierra Dairy Expansion project, the current permitted limit for the dairy is 1,573 milk and dry cows combined, as established in the 2005 ROWD for the submitted for the existing dairy to the CVRWQCB. In accordance with CEQA, the baseline herd to be used in this environmental analysis is the herd count at the time of NOP preparation, comprising a total of 3,375 animals, including 1,550 milk cows.

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## **VIII. LEGAL EFFECTS OF FINDINGS**

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To the extent that these findings conclude that various proposed mitigation measures outlined in the FEIR are feasible and have not been modified, superseded or withdrawn, the County hereby commits itself to require their implementation by including these measures as conditions of approval. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the Planning Commission approves the Project.

The mitigation measures are referred to in the Mitigation Monitoring and Reporting Program (MMRP) adopted concurrently with these findings, and will be effectuated through the process of constructing and implementing the Project. All of the feasible mitigation measures that will avoid or substantially lessen the significant effects of the Vierra Dairy Expansion project are binding upon the project applicant at the time of approval of the Vierra Dairy Expansion project.

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## **IX. MITIGATION MONITORING AND REPORTING PROGRAM**

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A MMRP has been prepared for the Project and has been adopted concurrently with these Findings (see Public Resources Code Section 21081.6, subd. (a)(1)). The County will use the MMRP to track compliance with Project mitigation measures.

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## **X. LESS THAN SIGNIFICANT ENVIRONMENTAL IMPACTS**

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The Initial Study for the proposed project identified numerous environmental impacts that were found to be less than significant, and therefore do not require mitigation. These impacts were not analyzed in the EIR. The reasons for the determination of “less than significant” for these impacts are contained in the Initial Study for the Vierra Dairy Expansion project, and summarized in the DEIR on pages 14-9 and 14-10.

The issues identified below were analyzed in the EIR. Based on the FEIR and the information contained in the record, the Planning Commission finds that the following impacts associated with the Project would be less than significant and therefore do not require mitigation. The Planning

Commission has been presented with no evidence to contradict its conclusions regarding the significance of these impacts.

1. *Less-than-Significant Impact AQ-1: Construction-related emissions (ROG, NO<sub>x</sub>, CO, SO<sub>2</sub>, and Fugitive Dust).* Construction activities associated with the Vierra Dairy Farm Expansion project would result in short-term air emissions including ROG, CO, SO<sub>2</sub>, NO<sub>x</sub>, and fugitive dust. Because emissions of construction-related ozone precursors and fugitive dust would not exceed the threshold values used by the SJVAPCD for stationary sources, this would be a less-than-significant impact (DEIR, pps. 5-16 to 5-18).
2. *Less-than-Significant Impact AQ-2: Carbon monoxide (CO) emissions from operational equipment and increased traffic.* Operation of equipment used at the Vierra Dairy Farm Expansion for processing and farming would result in the emissions of carbon monoxide. Because the magnitude of emissions from the Vierra Dairy Farm Expansion would not exceed SJVAPCD significance criteria, this would be a less-than-significant impact (DEIR, pps. 5-18 to 5-19).
3. *Less-than-Significant Impact AQ-4: PM<sub>10</sub> and PM<sub>2.5</sub> emissions from fugitive dust during project operations.* Operations from the Vierra Dairy Farm Expansion would result in fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions from wind erosion, farming operations, animal movement in unpaved corrals, vehicle use along unpaved driveways and access roads, and equipment operation. Because pollutant concentrations would not exceed SJVAPCD emissions thresholds, this would be a less-than-significant impact (DEIR, pps. 5-23 to 5-25).
4. *Less-than-Significant Impact AQ-6: Expose nearby residents to substantial pollutant concentrations from emissions of criteria air pollutants.* Operations from the Vierra Dairy Farm Expansion would result in emissions of criteria air pollutants that could impact ambient air quality through a violation of air quality standards. Because air emissions would not exceed ambient air quality standards for areas adjacent to the dairy, this would be a less-than-significant impact (DEIR, pps. 5-28 to 5-31).
5. *Less-than-Significant Impact AQ-8: Conflict with or obstruct implementation of the applicable air quality plan.* Implementation of the dairy expansion project would not conflict with or obstruct implementation of the SJVAPCD air quality attainment plans. For this reason, the impact would be less than significant (DEIR, p. 5-35).
6. *Less-than-Significant Impact Impact BIO-4: Impacts to additional special status-wildlife species, including VELB, giant garter snake, and tricolored blackbird.* Implementation of the proposed Vierra Dairy Expansion project could result in the loss of potential habitat for special-status species, including Valley Elderberry Longhorn Beetle, giant garter snake, and tricolored blackbird. However, because construction of the proposed project would not occur in or near the habitat for these species, this would be a less-than-significant impact (DEIR, pps. 6-27 to 6-28).
7. *Less-than-Significant Impact BIO-5: Potential selenium and heavy metals effects to on-site biological resources.* The use of supplemented feeds at the proposed Vierra Dairy Expansion could result in the introduction of heavy metals into the environment by the application of dairy waste to on-site agricultural fields and retention in ponds. If concentrations of metals in terrestrial or aquatic media are significantly higher than naturally occurring

background levels, adverse effects to terrestrial or aquatic biota within the project area could occur. However, project compliance with ACO and CVRWQCB regulations for waste, soil, and groundwater monitoring and remediation would provide protection from heavy metal contamination within the project area and would reduce this impact to less than significant (DEIR, pps. 6-28 to 6-29).

8. *Less-than-Significant Impact BIO-8: Loss and/or modification to wetlands or degradation of riparian and vernal pool habitat.* Implementation of the proposed Vierra Dairy Expansion project would not result in the modification of wetlands or result in the loss of riparian or vernal pool habitat, since no such resources are located within the area that would be disturbed by construction of the proposed dairy expansion. This would be a less-than-significant impact (DEIR, p. 6-33).
9. *Less-than-Significant Impact BIO-9: Loss and/or degradation of special-status plant species or sensitive natural communities.* Implementation of the proposed Vierra Dairy Expansion project would not result in the loss of special-status plant species or sensitive natural communities, since there are none on site. This would be a less-than-significant impact (DEIR, p. 6-34).
10. *Less-than-Significant Impact BIO-10: Interference with a wildlife movement corridor or nursery site.* Implementation of the proposed Vierra Dairy Expansion project would not interfere with a wildlife movement corridor, migratory patterns, or wildlife within a nursery site, because there are no wildlife movement corridors on site and none in the surrounding area. This would be a less-than-significant impact (DEIR, p. 6-34).
11. *Less-than-Significant Impact BIO-11: Conflict with local policies or ordinances protecting biological resources.* Implementation of the proposed Vierra Dairy Expansion project would not conflict with local policies or ordinances that protect biological resources because it would be consistent with the Merced County Year 2000 General Plan, the Open Space Action Plan, and the Animal Confinement Ordinance. This would be a less-than-significant impact (DEIR, p. 6-35).
12. *Less-than-Significant Impact CUL-1: Cause a substantial adverse change in the significance of a historical or archaeological resource.* Implementation of the proposed Vierra Dairy Farm Expansion project would lead to development and the construction of dairy facilities that could lead to substantial adverse changes in the significance of historical or archaeological resources within the project area. Even though the literature review indicated there were prehistoric resources adjacent to the Merced River in the general project vicinity, because the field investigation revealed no prehistoric or historic archaeological resources within the project area, this impact would be less than significant (DEIR, pps. 7-8 to 7-9).
13. *Less-than-Significant Impact GHG-1: Greenhouse gas emissions from project construction and operation.* Construction and operation of the Vierra Dairy Expansion project would result in greenhouse gas emissions from direct and indirect sources. Because the proposed project would not exceed established significance thresholds for GHG emissions, this would be a less-than-significant impact (DEIR, pps. 8-16 to 8-19).

14. *Less-than-Significant Impact HAZ-2: Create significant nuisance conditions due to increased mosquito production.* Implementation of the proposed Vierra Dairy Expansion project would not provide additional mosquito-breeding habitat since the proposed dairy expansion would not modify existing active dairy facilities that currently provide potential mosquito habitat. This would be a less-than-significant impact (DEIR, pps. 9-14 to 9-15).
15. *Less-than-Significant Impact HYD-2: Degradation of surface water quality from operation of the Vierra Dairy Expansion.* The project would not result in the degradation of surface water quality during project operations. Crop fields associated with the existing and proposed expansion of the dairy are developed with an existing tailwater return system. Wastewater is applied, and would continue to be applied, in accordance with ACO and CVRWQCB requirements. Additionally, there have been no water quality violations recorded to date associated with the existing tile drain system; as proposed by the applicant, the proposed expansion would not increase application of nutrients to cropland areas with tile drains. For these reasons, this would be a less-than-significant impact
16. *Less-than-Significant Impact HYD-4: Depletion of groundwater resources.* Implementation of the proposed dairy expansion would not result in significant depletion of groundwater resources since the increase in groundwater use is likely balanced by recharge from irrigation return. This would be a less-than-significant impact (DEIR, pps. 10-34 to 10-35).
17. *Less-than-Significant Impact HYD-5: Modification of surface water drainage patterns and an increase in runoff.* Implementation of the proposed dairy expansion project would not modify surface water drainage patterns, and would not cause localized off-site migration of runoff, erosion, and/or flooding since the expansion would require minimal grading over a previously disturbed area. Because all storm water generated by the project would be collected and maintained within the project proponent's larger property, this would be a less-than-significant impact (DEIR, pps. 10-35 to 10-36).
18. *Less-than-Significant Impact HYD-6: Exposure to flood risks.* The project site could be subject to a flood event, during which dairy facilities could be damaged, or floodwaters could inundate dairy facilities and fields where wet or dry manure had been applied recently, causing impacts to surface water quality. Compliance with Merced County regulations regarding floodplain management would provide protection of active dairy facilities from flood inundation. This would be a less-than-significant impact (DEIR, pps. 10-36 to 10-37).
19. *Less-than-Significant Impact LU-1: Consistency with Merced County Land Use Plans and policies adopted to protect the environment, including setback standards.* As proposed, the Vierra Dairy Expansion project would be consistent with Merced County land use policies, including setback standards for animal confinement facilities. Because the proposed project would comply with land use regulation exercised by Merced County under the ACO and Zoning Code provisions, this would be considered a less-than-significant impact (DEIR, pps. 11-14 to 11-15).

20. *Less-than-Significant Impact: Irreversible Commitment of Resources.* The demand for renewable and non-renewable resources is expected to increase regardless of whether or not the project is developed. As discussed in the ACO EIR, the number of dairy facilities in the San Joaquin Valley is expected to increase under the cumulative herd forecast. Therefore, if not consumed by this project, these resources would likely be committed to other projects in the region intended to meet this anticipated growth. The investment of additional resources in the project would be typical of the level of investment normally required for dairies of this scale. Mitigation measures have been included in the EIR to reduce and minimize the impact to renewable and non-renewable resources (DEIR, pps. 14-11 to 14-12). Because implementation of the project would not use resources in a wasteful manner, and because the use of such resources has been minimized, this would be a less-than-significant impact.
21. *Less-than-Significant Impact: Potential Environmental Damage from Accidents.* Because the project proposes no uniquely hazardous uses, and its operation would not be expected to cause environmental accidents that would affect other areas, implementation of the project would result in a less-than-significant impact (DEIR, p. 14-12).

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## **XI. SIGNIFICANT EFFECTS AND MITIGATION MEASURES**

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The DEIR identified several significant environmental effects (or “impacts”) that approval and implementation of the Vierra Dairy Expansion project could cause. Many significant effects were avoided altogether because the proposed Project contains requirements or is situated in such a way that prevents the occurrence of significant effects in the first place. For other effects, additional mitigation is identified in the DEIR. Some significant impacts of implementation of the Project, however, cannot be avoided by the adoption of feasible mitigation measures or feasible alternatives; these effects are outweighed by overriding considerations set forth in Section XIII below. This Section XI presents in greater detail the Planning Commission’s findings with respect to the environmental effects of the Project.

### **A. AIR QUALITY AND ODORS**

Air Quality and Odors setting information for the Vierra Dairy Expansion project is set forth in pages 5-1 through 5-13 of the DEIR, DEIR Appendices D, F, G, and H. The impact evaluation criteria used in assessing impacts on air quality as a result of implementing the Project are set forth in the DEIR on pages 5-13 through 5-15. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

*Impact AQ-3: Ozone precursor emissions (Volatile Organic Compounds (VOC)/Reactive Organic Gases (ROG) and Nitrogen Oxides) from dairy operations, farm equipment, and increased traffic (DEIR, pps. 5-19 to 5-23)*

*Finding: This would be a significant and unavoidable impact*

*Explanation:*

New dairies that exceed the threshold of five tons/year of VOCs or modifications to existing sources that are subject to the SJVAPCD permit requirements must obtain an ATC and PTO from the SJVAPCD, as well as undergo New Source Review (Rule 2201) requirements to determine if new emission sources trigger BACT. Farming equipment exhaust, increased vehicle exhaust, and manure management and feed are sources of ozone precursor emissions. Aggregated VOC emissions for all activities associated with the Vierra Dairy Expansion are presented in DEIR Table 5-5. VOC emissions associated with the proposed expansion would be 64.79 tons/year, with an increment of increase of approximately 24.27 tons/year over existing operations. The estimated total NO<sub>x</sub> emissions from expanded project operations for mobile source and farm equipment would be 2.87 tons/year, or a net increase of 0.19 tons/year of NO<sub>x</sub> emissions from existing conditions (DEIR, pps. 5-19 to 5-22).

The proposed dairy expansion would trigger New Source Review and application of BACT, and an ATC/PTO would be required prior to the initiation of construction. As part of the PTO, the dairy operator would be required to submit an ATC/PTO application detailing an emission mitigation plan listing all chosen BACT/BARCT mitigation measures. The SJVAPCD would then consider implementation of the selected mitigation measures as conditions of the ATC permit required by District Rule 2201.

Because the increase of 24.23 tons/year of VOCs would exceed the SJVAPCD significance thresholds, the project-level impact would be significant (DEIR, p. 5-22).

*Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact from ozone precursor emissions during project operations is expected to be significant because the project would exceed SJVAPCD emissions criteria with establishment of the expanded herd. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure AQ-3a:**

The proposed dairy expansion would exceed SJVAPCD permit thresholds for ROG emissions; therefore, in order to reduce emissions, prior to the initiation of operations, the applicant shall implement all air quality provisions of the ACO, including Chapter 18.48.50 U; comply with all applicable SJVAPCD Rules including but not limited to: Rule 2010 – apply for an Authority to Construct/Permit to Operate; Rule 2201 New Source Review; Rule 4570, Confined Animal Facilities; implement BACT/BARCT mitigation measures appropriate for this dairy operation to be developed during permit review in cooperation with SJVAPCD staff, including but not limited to all applicable measures in Appendix D of the Draft EIR; and Rules 4701 and 4702, Internal Combustion Engines.

#### **Mitigation Measure AQ-3b:**

Because project emissions have been evaluated to exceed SJVAPCD significance thresholds, the project applicant shall consult with the SJVAPCD regarding the establishment of a Voluntary Emissions Reduction Agreement between the applicant and the SJVAPCD. Consultation shall occur prior to issuance of building permits, and documentation of consultation with the SJVAPCD shall be provided to the County.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring the implementation of measures to reduce ozone precursor emissions. Even after imposition of the identified mitigation measures, this would be a significant and unavoidable impact for the following reasons: the BACT/BARCT measures required by the above Mitigation Measure AQ-3a and the Voluntary Emissions Reduction Agreement encouraged in Mitigation Measure AQ-3b may not reduce project ROG emissions below the threshold of significance; the selection of mitigation options will not be determined until completion of the ATC/PTO permitting process; Merced County cannot assure implementation of the foregoing measures outside of its jurisdiction; and the San Joaquin Valley Air Basin is in nonattainment for both federal and state ozone standards. No additional feasible measures are available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Planning Commission finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

*Impact AQ-5: Expose nearby residents to substantial pollutant concentrations from the emissions of toxic air contaminants from project operations (DEIR, pps. 5-26 to 5-28)*

*Finding: This would be a less-than-significant impact after mitigation*

*Explanation:*

Proposed modifications to the dairy would result in emissions of hazardous air pollutants and would be located near existing residences; therefore, an assessment of the potential risk to the population attributable to emissions of hazardous air pollutants from the proposed dairy modification is required. The Hazard Risk Assessment (HRA) prepared for the Vierra Dairy Farm Expansion project assesses the potential risk to the adjacent residents and workers attributable to emissions of hazardous air pollutants from the proposed dairy (see DEIR Appendix H). The HRA addresses emissions from: ammonia; particulate matter and its toxic components (e.g., aluminum, lead, manganese, nickel, etc.); and xylenes, formaldehydes, carbon tetrachloride, and other components from VOCs. Emissions from the dairy expansion have been restricted to incremental emissions from animal movement, manure management, and land application of wastewater based on the proposed increase in the number of cattle and the additional on-site mobile sources required for the expansion (DEIR, p. 5-26).

A total of two hundred and five off-site receptors (residences) and four on-site receptors were assessed during the preparation of the HRA. However, one of the on-site residences is occupied by the employees of the dairy with no children and another is unoccupied. Therefore, in accordance with SJVAPCD policy, the employee-occupied and unoccupied residences are not included in the model results (see Figure 2-1 of DEIR Appendix H, *Health Risk Assessment*, for residences included as receptors in the model). Sensitive receptors<sup>1</sup> were determined to be greater than two miles<sup>2</sup> from the proposed facility. Based on this minimum distance, sensitive receptors were not included in the model.

The carcinogenic risk is below the significance level of ten in one million ( $10 \times 10^{-6}$ ) at all non-exempt modeled residences. The health hazard indices (HIs) for acute and chronic non-cancer risk are below the significance level of 1.0 at all non-exempt modeled residences, with the exception of one on-site residence, which is above the significance level for acute risk. Acute risks are primarily attributable to emissions of ammonia, which affects the respiratory system and eyes (DEIR, p. 5-27).

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<sup>1</sup> Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and designated residential areas are examples of sensitive receptors.

<sup>2</sup> The SJVAPCD draft modeling guidance requires sensitive receptors within two kilometers to be included in the model; the HRA conservatively looked for sensitive receptors within two miles of the project site.

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact from hazardous pollutant emissions is expected to be significant because preliminary modeling indicated the SJVAPCD's acute non-cancer risk threshold would be exceeded. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure AQ-5a:**

Prior to issuance of a building permit for the proposed expansion, the project applicant shall acquire an ATC/PTO from the SJVAPCD for proposed operations and submit these permits to Merced County. In order to obtain these permits, the project applicant shall modify operations to minimize toxic air contaminant emissions so that the proposed expansion would not exceed the SJVAPCD's acute non-cancer risk threshold for the on-site residence. Modifications to operations may include identifying additional emission control measures during the permitting process, vacating the significant on-site non-exempt residence, or converting the significant on-site non-exempt residence into a storage building.

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

To control for air toxics associated with particulate matter emissions, the dairy operator shall comply with San Joaquin Valley Air Pollution Control District Rule 4570 and implement control efficiencies for PM<sub>10</sub> emissions to be determined by the SJVAPCD.

#### **Mitigation Measure AQ-5c:**

Implement Mitigation Measures AQ-3a and AQ-3b to minimize ROG emissions.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring lower toxic air emissions and thereby reducing acute non-cancer risk for the on-site residents. Compliance with SJVAPCD rules would further minimize emissions and reduce the associated risk. Because the proposed expansion would meet cancer and non-cancer risk criteria with implementation of the above mitigation measures, the potential impact from hazardous pollutant emissions from project operations would be reduced to less than significant (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

*Impact AQ-7: Adverse odor from project operations (DEIR, pps. 5-31 to 5-35)*

*Finding: This would be a less-than-significant impact after mitigation*

*Explanation:*

Operations and manure management at the Antonio Brasil Dairy Expansion in Merced County may emit odors that may be bothersome to isolated rural residents, the only nearby sensitive receptors. There are several off-site residences located within the windshed of the dairy (defined as an area of 1,320 feet upwind to 2,640 downwind of the periphery of the animal facility) (see DEIR Figure 3-3 in DEIR Chapter 3, *Project Description*) (DEIR, p. 5-29).

Odors associated with dairy and other animal confinement operations are primarily generated from manure and silage. The odor characteristics that contribute to nuisance conditions include the intensity, concentration, or strength of the odor, the odor frequency, the duration that the odor remains detectable, and the perceived offensiveness and character or quality of the odor. The four basic approaches to control odor and odorants are diet manipulation, manure treatment, capture and treatment of emitted gases, and enhanced dispersion.

Unlike the other air pollutants evaluated in this section, odor does not have generally accepted methods of measurement or allowable concentration, and its offensiveness differs among individuals. For these reasons, Merced County has sought to prevent nuisances by the use of setbacks between potential sources of offensive odors and adjoining sensitive land uses, rather than regulating the concentration of odor-producing compounds. Under existing regulations, Merced County enforces a setback of 0.5-mile from animal confinement facilities to specified urban uses, and a minimum of 1,000 feet between animal confinement facilities (ponds, corrals, barns) and rural residences. This existing scheme to prevent odor nuisances has worked relatively well in the County.

The County has maintained and reinforced land use policies to protect agricultural production in designated agricultural areas. Since the late 1960s, the County Zoning Code has regulated land uses in the County to maintain areas zoned for Agricultural uses in agricultural production. The County's 1978 General Plan introduced the Specific Urban Development Plan designation whereby the County directed urban growth to occur in urban areas, with rural areas reserved for agricultural production. The 1984 Agricultural Element of the General Plan further refined the County's Urban Centered Concept for managing urban and rural uses. This land use concept, which has been the land use policy in Merced County for the past 35 years, directs anticipated urban growth to cities, unincorporated communities, or established population centers. Such centers are designated as Specific Urban Development Plan, Rural Residential Center, Highway Interchange Center or Agricultural Services Center. A primary goal of the Urban Centered Concept is that agricultural operations, including animal confinement facilities, are not eliminated by population growth and residential development within rural areas (DEIR, p. 5-32).

As discussed in DEIR Chapter 11, *Land Use Compatibility*, there are several off-site residences located within 1,000 feet: two off-site residences are located approximately 85 feet and 285 feet to the north of the existing commodity barn and feed/silage area, and one off-site residence is located approximately 900 feet south of the manure drying area (see DEIR Figure 11-1). According to Merced County Code Chapter 18.48.040 B(2), modification or expansion of the facility may not decrease the existing separation distance unless the off-site property owner provides written

permission; however, the proposed dairy expansion would not reduce the distance to these residences. No odor complaints have been reported at the Vierra Dairy and submitted to DEH (Merced County Public File Review, June 2013) (DEIR, p. 5-32).

Chapters 18.48.050 H, 18.48.055 C.8.a, and 18.48.040 B.1 of the ACO (see Appendix C) address potential odor impacts, and require preparation of an odor management plan. Additionally, the nuisance requirements and protocols set forth in the Merced County Code regarding odor nuisances would apply. Summarily, if an odor nuisance condition were reported, as required by the ACO, DEH would implement the following procedures:

- A. If nuisance conditions are reported to the DEH, the Division shall take the following actions:

Within 72 hours of receiving a complaint, the DEH shall determine whether an odor exists during an inspection of the location of the complaint, and identify potential sources of odor in the vicinity. If a confined animal facility is identified as a potential source of the odor nuisance, the County will evaluate the affected facility and identify sources of the odor. In the event of odor causing a nuisance, the County will impose additional control measures on a site-specific basis. Measures that may be required by DEH include the operational measures set forth above.

- B. If odor nuisance conditions are confirmed, and are attributable to operations at a confined animal facility, the DEH shall require the owner/operator to remedy the nuisance condition within a specified period of time. The Division shall notify the parties reporting the nuisance of its findings, and shall provide follow-up inspections to ensure that the nuisance condition is cured. Should the condition persist, the Division shall initiate an enforcement action against the offending operator. (DEIR, p. 5-33)

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact from nuisance conditions from odors is expected to be significant because the nearest residences are located less than 1,000 feet from active dairy facilities, and an expansion of the proposed facilities and an increase in herd size would increase the potential for nuisance conditions. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure AQ-7a:**

To minimize potential for odor nuisance conditions, prior to initiating operations at the new facilities, the applicant shall prepare an Odor Control Plan for submission and approval by the Merced DEH. Following approval, the applicant shall implement the approved Plan. The following odor control measures shall be required in the Plan:

- Liquid manure utilized for irrigation purposes shall be managed so that it does not stand in the application field for more than 24 hours.
- Implement odor control measures as contained in the Plan, which may include, but not be limited to the following:

1. Ration/diet manipulation

This approach involves the alteration of feed in order to reduce the volume of substrate available for anaerobic activity. The approach includes reducing the nitrogen content of food, phase feeding, repartitioning agents, improved animal genetics, and various feed additives.

2. Manure management

Utilize best management practices for manure management, including minimizing the time between excretion and application, and aeration of retention basins.

Additionally, implement the following additional best management practices:

*Manure Collection Areas*

- Clean out manure generated at the freestall barns daily and corrals at least twice a year, or more frequently as necessary to minimize odors;
- Keep cattle as dry and clean as possible at all times;
- Scrape manure from the corrals and bedding from the freestall barns and corrals at a frequency that would reduce or minimize odors.

*Manure Treatment and Application*

- Minimize moisture content of stockpiled manure/retained solids to a level that would reduce the potential for release of odorous compounds during storage;
- Minimally agitate stockpiled manure during loading for off-site transport;
- Mix process water with irrigation water prior to irrigation (dilution rate shall be adequate to minimize odor levels and maintain appropriate nutrient content in effluent);
- Clean up manure spills upon occurrence;
- Maintain and operate settling ponds and retention ponds to minimize odor levels.

*General*

- Implement dust suppression measures to prevent the release of odorous compound-carrying fugitive dust;
- During project operations, the dairy operator/owner shall respond to neighbors who are adversely affected by odors generated at the project site and take prompt corrective action.

If necessary and feasible, the animal confinement operation must implement the following additional measures:

1. Manure treatment

Manure treatment methods include maintaining aerobic conditions during storage, aerobic treatment using aerated lagoons or composting, anaerobic digestion, and biochemical treatment.

2. Capture and treatment of emitted gases

This approach includes the use of covered storage pits or lagoons, soil incorporation of applied liquid or solid manure, and dry scrubbers for building exhaust gases including soil absorption beds, bio-filter fields, or packed beds.

3. Enhanced air dispersion  
Odor and other air contaminants are diluted to below threshold levels by atmospheric turbulence that increases with wind velocity, solar radiation, and roughness elements such as buildings, trees, or barriers. Sound site selection with adequate separation distance and elevated sources or mechanical turbulence can aid in dispersing odorous compounds and avoiding nuisance conditions.
4. Enhanced land spreading procedures  
Procedures may be modified to minimize impacts by avoiding spreading when the wind is blowing towards populated areas, employing technologies to incorporate manure into soil during or directly after application (i.e. injection, plowing, disking), or spreading manure in thin layers during warm weather.

**Mitigation Measure AQ-7b:**

Implement the nuisance control measures set forth in Mitigation Measures HAZ-1a and HAZ-1b.

***Findings on Proposed Mitigation***

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring housekeeping and management measures. Because the proposed expansion would not reduce the setback distance, and no odor complaints have been recorded for the existing dairy facility, with implementation of the above mitigation measures, the potential impact from odors would be reduced to less than significant (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

**B. BIOLOGICAL RESOURCES**

Biological Resources setting information for the Vierra Dairy Expansion project is set forth in pages 6-1 through 6-19 of the DEIR and DEIR Appendix K. The impact evaluation criteria used in assessing biological resource impacts as a result of implementing the Project are set forth in the DEIR on page 6-20. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

***Impact BIO-1: Loss of foraging habitat for Swainson's hawk (DEIR, pps. 6-20 to 6-24)***

***Finding: This would be a less-than-significant impact after mitigation***

***Explanation:***

Swainson's hawk is listed as threatened in the State of California and is known to forage in the project vicinity. The species was not observed during field survey. Further, no potential nest trees for tree-nesting raptors are present on the project site, and no trees are proposed for removal with construction of the proposed dairy expansion. Therefore, direct impacts to Swainson's hawk and nesting raptors are highly unlikely. However, multiple historical (greater than 20 years) nesting

occurrences (Occ. # 46, 93, 94, and 550) have been recorded three miles from the proposed area of construction, and Swainson's hawks generally forage within 10 miles of their nest tree. There are no recent Swainson's hawk nesting occurrences within 10 miles of the proposed area of construction (DEIR, p. 6-20).

According to the California Department of Fish and Wildlife (CDFW) Staff Report regarding Mitigation for Impacts to Swainson's Hawks (CDFG 1994), the following vegetation types are considered small mammal and insect foraging habitat for Swainson's hawks: alfalfa; fallow fields; beet, tomato, and other low-growing row or field crops; dry-land and irrigated pasture; rice land (when not flooded); and cereal grain crops (including corn after harvest). On-site cropland, including current cropping (corn and oats) and cultivation practices, provides foraging habitat for small ground-dwelling mammals that are prey species for raptors. There would be increased agricultural production under the proposed dairy operations, as 374 acres of cropland previously double cropped with corn and oats would be triple cropped with corn, oats, and sudangrass. The increased planting and clearing of land in crop rotation is many times a benefit to raptors, as it opens up the fields for better visibility to prey on insects and rodents. However, approximately three acres of on-site cropland that has been previously cultivated in low growing row crops would be converted to active dairy facilities (DEIR, p. 6-21).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to loss of foraging habitat for Swainson's hawk is expected to be significant because Swainson's hawk is a State-listed species, the species may be foraging on the project site, and three acres of appropriate foraging habitat would be removed with project implementation. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure BIO-1a:**

Prior to issuance of a building permit, the project applicant shall consult with CDFW to determine if mitigation is necessary for the loss of three acres of potential Swainson's hawk foraging habitat. The project applicant shall submit documentation of CDFW consultation to Merced County. Should CDFW consider there to be impacts to Swainson's hawk requiring mitigation under CDFW guidelines, CDFW pre-approved CEQA mitigation measures shall be required as outlined in Mitigation Measure BIO-1b.

#### **Mitigation Measure BIO-1b:**

Following consultation with CDFW, should it be determined necessary, CDFW-pre approved CEQA mitigation measures shall be required for this project and are hereby incorporated by reference:

1. Protocol Nesting Surveys of the Project Site and Surrounding Area. The project applicant must conduct a protocol-level survey of the project site and within the surrounding area in conformance with the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley," Swainson's Hawk Technical Advisory Committee (May 31, 2000). This protocol prescribes minimum standards for survey equipment, mode of survey, angle and distance to tree, speed, visual and audible clues, distractions, notes and observations,

and timing of surveys. To meet the CDFW recommendations for mitigation and protection of Swainson's hawks, surveys should be conducted for a one-half-mile radius around all project activities, and if active nesting is identified within the one-half-mile radius, consultation is required.

- a. Nesting surveys can only be performed between January 1 and July 30 and will vary depending on seasonal conditions and the actual nesting period. If the protocol survey process is started outside of this survey window but during the time when there could be nestlings or fledglings (July 30-September 15), the project applicant and qualified raptor biologist shall consult with CDFW to determine appropriate action, including modification of survey requirements based on the proposed construction period. If construction is to take place between September 15 and February 1 (non-breeding season), surveys will not be required.
- b. Surveys must be performed by a qualified raptor biologist.
- c. A written report with the pre-construction survey results must be provided to the Planning Department and CDFW within 30 days prior to commencement of construction-related activities. The report shall include: the date of the report, authors and affiliations, contact information, introduction, methods, study location, including map, results, discussion, and literature cited.
- d. The project applicant must submit CNDDDB forms for Swainson's hawk occurrences and for any other listed, fully protected, or species of special concern encountered and positively identified during the surveys. [www.dfg.ca.gov/biogeodata/cnddb](http://www.dfg.ca.gov/biogeodata/cnddb).

If the required nesting surveys show there are no active nests within the appropriate radius as defined by the technical advisory referenced above, then no additional mitigation for active nests will be required as outlined in BIO-1b(2) below.

2. Nest Avoidance. If active nests are documented on the CNDDDB database, or other environmental study, or are discovered during the protocol survey within one-half-mile radius of project activities, the project applicant must obtain **CESA 2081 Management Authorization** prior to the start of construction-related activities and issuance of the first building permit. CDFW pre-approved mitigation measures to avoid nest impacts during construction must include:
  - a. **No intensive new disturbances** (for example, heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities), habitat conversions, or other project-related activities that may cause nest abandonment or forced fledging, should be initiated within one-half-mile (in rural areas) or one-quarter-mile (in urbanized areas) of an active nest between March 1 and September 15, or August 15 if written CESA 2081 Management Authorization obtained from CDFW prior to such disturbance.
  - b. **Nest trees shall not be removed** unless there is no feasible way of avoiding it. If a nest tree must be removed, written CESA 2081 Management Authorization must be obtained from CDFW prior to tree removal. Such written authorization must specify:
    - i. The tree removal period, which can typically be expected to be between October 1 and February 1.
    - ii. The conditions required to offset the loss of the nest tree.
  - c. **If disturbances, habitat conversions, or other project-related activities**, that may cause nest abandonment or forced fledging, are necessary, within the nest protection

buffer zone, monitoring of the nest site by a qualified raptor biologist, funded by the project applicant, shall be required, to determine if the nest is abandoned. If the nest is abandoned, but the nestlings are still alive, the project proponent is required to fund the recovery and hacking, that is the controlled release of captive reared young of the nestling.

- d. **Routine disturbances** such as agricultural activities, commuter traffic, and routine maintenance activities within one-quarter-mile of an active nest are not prohibited.

3. **Loss of Foraging Habitat.** Following consultation with CDFW as required under Mitigation Measure BIO-1a, if it is determined that the project will result in foraging habitat impacts requiring mitigation pursuant to CDFW guidelines, to mitigate for the loss of foraging habitat, the project applicant must obtain **CESA 2081 Management Authorization** from CDFW prior to the start of construction-related activities or issuance of the first building permit. The extent of any necessary mitigation shall be determined by CDFW. Generally, CDFW requires mitigation for foraging habitat based on the presence of active nests within 10 miles of the project. If an active nest site is identified within a certain distance of the project boundary, the project proponent ordinarily will be required by CDFW to provide off-site foraging habitat management lands at a specified Mitigation Ratio, as follows:

Distance from Project Boundary	Mitigation Acreage Ratio*
Within 1 mile	1.00:1**
Between 1 and 5 miles	0.75:1
Between 5 and 10 miles	0.50:1

\*Ratio means [acres of mitigation land] to [acres of foraging habitat impacted].  
 \*\*This ratio shall be 0.5:1 if the acquired lands can be actively managed for prey production.

CDFW provides options for off-site habitat management by fee title acquisition or conservation easement acquisition with CDFW-approved management plan, and by the acquisition of comparable habitat. Mitigation credits may be pursued through a CDFW-approved mitigation bank for Swainson’s hawk impacts in Merced County. Go to:

[www.dfg.ca.gov/habcon/conplan/mitbank/catalogue](http://www.dfg.ca.gov/habcon/conplan/mitbank/catalogue).

The CDFW pre-approved CEQA mitigation measures are found at “DFG Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks in the Central Valley of California,” CDFW (November 8, 1994). This report contains recommended assessment and management measures to reduce impacts to Swainson’s hawk nesting and foraging habitat.

Therefore, to mitigate impacts to a level below significance, prior to obtaining the first building permit, the project applicant shall conduct protocol-level surveys for Swainson’s hawk. The applicant shall obtain written CESA 2081 Management Authorization from the CDFW for nesting impacts (if active nests are documented within one-half-mile radius of project activities) and for foraging habitat impacts (if determined necessary) prior to the start of construction-related activities or issuance of the first building permit. In addition, if construction-related activity would result in the removal of an active nest during the Swainson’s hawk breeding season, between March 1 and September 15, the applicant shall obtain prior written authorization from the U.S. Fish and Wildlife Service to ensure compliance with the Migratory Bird Treaty Act (16 U.S.C. 703-711) to avoid impacts to actively nesting Swainson’s hawks.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by relying on the CDFW permit process and mitigation requirements to avoid “take” of special status species. Although the mitigation measure is within the jurisdiction of an agency other than Merced County, the required measures must be completed prior to commencement of any activities that would result in these impacts, and compliance with the CDFW permit requirements would fully mitigate impacts to Swainson’s hawk foraging habitat. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

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*Impact BIO-2: Impacts to foraging and nesting habitat for burrowing owl (DEIR, pps. 6-24 to 6-25)*

*Finding: This would be a less-than-significant impact after mitigation*

*Explanation:*

Implementation of the proposed Vierra Dairy Expansion project could adversely affect burrowing owl during construction, a bird species of special concern. The reconnaissance survey included specific searching for burrowing owl and their sign, especially in areas within the footprint of proposed construction. No burrowing owls were observed on the project site, but potentially suitable habitat occurs in the pastures west of the dairy facility. No construction is proposed in that area. While no burrowing owls were observed during the survey, they could potentially establish burrows near dairy facilities. Further, ground-disturbing construction activities within 250 feet of an occupied burrowing owl burrow could cause adult burrowing owls to abandon the nest, cause eggs or young to be directly impacted (crushed), and/or result in reproductive failure (DEIR, p. 6-24).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to loss of foraging and nesting habitat for sensitive bird species is expected to be significant because burrowing owls could potentially establish burrows near the proposed dairy facilities, and construction could adversely impact this species. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure BIO-2a:**

Implement Mitigation Measure BIO-1b, if necessary, which includes measures to minimize potential impacts to Swainson’s hawk, and which could benefit burrowing owl as well.

**Mitigation Measure BIO-2b:**

Within 14 days prior to construction, a qualified biologist or ornithologist shall complete a preconstruction survey for nesting birds over all areas of ground disturbance proposed for dairy construction in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012a). If nesting birds are identified in the preconstruction survey, BIO-2c shall be implemented as appropriate.

**Mitigation Measure BIO-2c:**

If burrowing owls are identified in or near the area to be disturbed, buffer areas around the occupied burrows shall be established, inside of which no disturbance shall occur. The size of the buffer area required would vary depending on whether construction occurs during non-breeding or breeding season. If avoidance requirements cannot be met, passive relocation of owls using one-way doors may be implemented, but only during the non-breeding season. For each vacated burrow that would be excavated by project construction, one alternative unoccupied natural or artificial burrow shall be provided outside of the construction area. Consultation with CDFW is required for mitigation recommendations if a recently occupied burrow is destroyed. Additional avoidance measures shall be implemented prior to and during construction if burrowing owls occur within the site:

- Avoid disturbing occupied burrows during the nesting period, from February 1 through August 31.
- Avoid impacting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls.
- Avoid direct destruction of burrows during construction.
- Prior to construction, conduct a Worker Awareness Program (environmental education) to inform project workers of their responsibilities regarding sensitive biological resources and increase the on-site workers' commitment to burrowing owl protection.
- Place visible markers near burrows to ensure that farm equipment and other machinery does not collapse burrows.
- Do not fumigate, use treated bait, or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur (e.g., sites observed with nesting owls, designated use areas).
- Restrict the use of treated grain to poison mammals to the months of January and February.

***Findings on Proposed Mitigation***

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring dedication of mitigation lands for sensitive bird species foraging habitat (if required), preconstruction surveys and avoidance measures, and environmental education for construction workers. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

**Impact BIO-3:** *Loss of foraging and nesting habitat for sensitive bird species and migratory birds (DEIR, pps. 6-26 to 6-27)*

**Finding:** *This would be a less-than-significant impact after mitigation*

**Explanation:**

Implementation of the proposed Vierra Dairy Expansion project would result in the loss of potential foraging habitat for special-status species and/or migratory bird species. There is the potential for migratory birds, especially ground nesters, to breed on the site. Suitable habitat for ground nesting birds such as mountain plover, northern harrier, killdeer, short-eared owl, and horned lark, is limited and only expected along irrigation canals and ditches. The dairy expansion would be constructed on land that has been previously cultivated in low growing row crops, including mainly corn, that provide potential foraging habitat for a variety for special-status and migratory bird species. Therefore, the loss of foraging habitat may occur for special status and migratory bird species. Special-status species that may be affected include Swainson's hawk, ferruginous hawk, loggerhead shrike, and mountain plover. Except for loggerhead shrike, none of these special-status species were observed at the project site during the biological surveys (DEIR, p. 6-26).

There would be increased agricultural production under the proposed dairy operations, as 374 acres of cropland previously double cropped with corn and oats would be triple cropped with corn, oats, and sudangrass. However, increased agricultural activities would not result in additional impacts to species of concern on the project site, as agricultural practices in these areas have been going on for a long time. Also, the nesting season generally coincides within the window that corn is planted (late spring), and plantings in early fall (sudangrass) and late fall (oats) would not result in additional impacts to breeding birds (DEIR, p. 6-26).

**Finding on Significance of Impact**

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to loss of foraging and nesting habitat for sensitive bird species and migratory birds is expected to be significant because farmland provides potential foraging habitat for these birds and would be converted to active dairy facilities with the proposed project. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

**Proposed Mitigation**

**Mitigation Measure BIO-3a:**

Implement Mitigation Measure BIO-1b, if necessary, which includes measures to minimize potential impacts to Swainson's hawk, and which would benefit other species as well.

**Mitigation Measure BIO-3b:**

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, the following measures shall be implemented prior to and during construction activities:

- Implement avoidance measures for burrowing owls included in Mitigation Measure BIO-2c, if required.

- A preconstruction survey shall be conducted to determine the presence of nesting birds if ground clearing or construction activities will be initiated during the breeding season (February 1 through September 15). The project site and potential nesting areas within 500 feet of the site shall be surveyed 14 to 30 days prior to the initiation of construction. Surveys shall be performed by a qualified biologist or ornithologist to verify the presence or absence of nesting birds.
- Construction shall not occur within a 500-foot buffer surrounding nests of raptors (including burrowing owls) or a 250-foot buffer surrounding nests of migratory birds (including killdeer, mountain plover, black-necked stilt, etc).
- If construction within these buffer areas is required, or if nests must be removed to allow continuation of construction, then approval must be obtained from the California Department of Fish and Wildlife.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring dedication of mitigation lands for sensitive bird species foraging habitat (if required), and preconstruction surveys and avoidance measures. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

***Impact BIO-6: Loss of habitat for the San Joaquin kit fox and/or American badger (DEIR, pps. 6-30 to 6-32)***

***Finding: This would be a less-than-significant impact after mitigation***

#### ***Explanation:***

Potential habitat for the San Joaquin Kit fox and American badger that may occur on the project site includes den sites used for shelter that can be located in flat terrain or gently sloping hills, in washes, drainages, or berm areas. While the San Joaquin Kit fox is known to occur within 3 to 6 miles of the project site, and the American badger is known to occur within 10 miles south of the project site, no sign of either the San Joaquin Kit fox or American badger were observed on the project site, nor was there potential den habitat within the area of the proposed expansion. However, the project site supports some small mammals that could provide prey for San Joaquin Kit fox and American badger, and agricultural access roads, open or fallow fields, and irrigation ditches and canals provide an important corridor for the movements of these mammals. American badger and San Joaquin kit fox may occur on site as transient foragers. Therefore, the conversion of three acres of cropland to active dairy facilities would not directly impact den habitat, but construction vehicles and lighting could adversely impact potential transient foragers (DEIR, p. 6-30).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to loss of foraging habitat for San Joaquin kit fox and/or American badger is expected to be significant because even though no den sites were observed within the project site, San Joaquin kit foxes and American badgers may occur on site as transient foragers, and impacts to these species may occur during construction. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure BIO-6:**

To minimize potential impacts to both the San Joaquin Kit Fox and American badger, prior to any construction activities within the three acres proposed for dairy operations, the project applicant shall follow the *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011). The measures that are listed below have been excerpted from those guidelines and would protect both San Joaquin Kit fox and American badgers.

1. Prior to the commencement of construction, a preconstruction survey shall be conducted by a qualified biologist over all areas of ground disturbance for construction of the dairy to determine presence/ absence of this species in accordance with USFWS recommendations.
2. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and state and federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.
3. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than two-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the Service and the California Department of Fish and Wildlife (CDFW) shall be contacted as noted under Measure 11 referenced below.
4. Kit foxes are attracted to den-like structures such as pipes, and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
5. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.
6. No firearms shall be allowed on the project site.

7. If any San Joaquin kit fox or American badger, or their sign, are detected on site during the preconstruction survey, dogs and cats shall be kept off the project site to prevent harassment, mortality of kit foxes or American badgers, and/or destruction of their dens.
8. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
9. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured, or entrapped kit fox. The representative will be identified during the employee education program, and their name and telephone number shall be provided to the Service.
10. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for guidance.
11. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured, or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530) 934-9309. The Service should be contacted at the numbers below.
12. The Sacramento Fish and Wildlife Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The Service contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFW contact is Mr. Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
13. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.
14. Any project-related information required by the Service or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at: Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California, 95825-1846, (916) 414-6620 or (916) 414-6600.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring 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. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The

Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

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***Impact BIO-7: Interference with night-active wildlife (DEIR, pps. 6-32 to 6-33)***

***Finding: This would be a less-than-significant impact after mitigation***

***Explanation:***

The operation of expanded dairy facility would include the installation of additional security lighting that could disrupt the foraging activities of night-active wildlife species. While there are sensitive residential receptors for nighttime light and glare located in the vicinity of proposed active dairy operations, County standards require that all new lighting be directed away from or be properly shaded to eliminate light trespass or glare within a project or onto surrounding properties. However, there may be light trespass beyond the area of active dairy facilities into cropped areas where night-active wildlife may forage. Further, the proximity of sensitive habitats along the Merced River would increase the potential for night-active wildlife in the project vicinity (DEIR, p. 6-32).

***Finding on Significance of Impact***

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact to night-active wildlife is expected to be significant because night-active wildlife may be impacted by the proposed dairy expansion. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

***Proposed Mitigation***

***Mitigation Measure BIO-7:***

Project-related lighting shall be minimized and directed away or shielded to maintain lighting within developed areas of the dairy and away from sensitive areas. No light trespass shall occur onto adjacent fields or off site. Minimizing and/or directing/shielding lighting away from sensitive areas will ensure that disruption of night-active species will not occur. This will help reduce or minimize any accelerated night-time predation rates on the dairy and adjacent agricultural fields. Around residences and other areas where it may be appropriate, landscaping shall be used to shield the agricultural fields from additional lighting.

***Findings on Proposed Mitigation***

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring that new lighting to be shielded from sensitive areas. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

## C. CULTURAL RESOURCES

Setting information regarding Cultural Resources for the Vierra Dairy Expansion project is set forth in pages 7-1 through 7-6 of the DEIR and DEIR Appendix L. The impact evaluation criteria used in assessing impacts to cultural resources as a result of implementing the Project are set forth in the DEIR on pages 7-6 to 7-7. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

*Impact CUL-2: Cause a substantial adverse change in the significance of paleontological resources, unique geological features, or disturbances to human remains (DEIR, pps. 7-9 to 7-11)*

*Finding: This would be a less-than-significant impact after mitigation*

### *Explanation:*

The entire project area has been highly modified by agriculture, reducing the probability of finding prehistoric habitation sites. The project area also lacks any unique geologic features, since the project area consists of flat and graded agricultural fields. While pre-field research indicated the project area may be located in a moderately sensitive area for the possible discovery of previously unrecorded prehistoric and historic cultural resources, during the field investigation, no evidence of paleontological resources, unique geological features, or human remains was observed during surface inspection. Still, many areas that have been plowed for years may nevertheless contain intact archaeological remains beneath the plow zone, a situation demonstrated at several Central Valley localities. Other locations predicted to be highly or moderately sensitive for prehistoric and/or historic cultural resources in the project region include areas adjacent to seasonal and perennial watercourses, springs, drainageway confluences, irrigation and drainage ditches, elevated mounds, and other locations. The project site is located approximately one mile north of the Merced River and over three miles east of the San Joaquin River. Therefore, even though no resources have been discovered during previous disturbance of the project site, previously unknown cultural or historic resources could be disrupted or destroyed by construction, including clearing of vegetation, excavation or blading of construction pads, access roads and utility trenches, and conducting other operations that involve the removal of vegetation and the excavation or disturbance of subsurface strata (DEIR, p. 7-9).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential for disturbance to previously unknown paleontological resources, unique geologic features, or to human remains are expected to be significant because the project area is considered highly sensitive for the possible discovery of a prehistoric or historic resource. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

## *Proposed Mitigation*

### **Mitigation Measure CUL-2a:**

The project applicant and construction contractor shall implement a plan to address discovery of unanticipated buried cultural or paleontological resources. If buried cultural resources such as chipped or ground stone, midden deposits, historic debris, building foundations, human bone, or paleontological resources are inadvertently discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archaeologist or paleontologist can assess the significance of the find and, if necessary, develop responsible treatment measures in consultation with Merced County and other appropriate agencies.

### **Mitigation Measure CUL-2b:**

The project applicant and construction contractor shall implement a plan to address discovery of human remains. If remains of Native American origin are discovered during proposed project construction, it shall be necessary to comply with state laws concerning the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (NAHC). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- The County coroner has been informed and has determined that no investigation of the cause of death is required; and
- If the remains are of Native American origin:
  - ✓ The most likely descendants of the deceased Native Americans has made a recommendation to the landowner or person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98; or
  - ✓ The NAHC has been unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified.

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

## *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring the project applicant and construction contractor to implement a plan that addresses the discovery of unanticipated buried cultural or paleontological resources and to comply with state laws concerning the disposition of Native American burials. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

## D. GREENHOUSE GASES AND ENERGY

Setting information regarding Greenhouse Gases and Energy for the Vierra Dairy Expansion project is set forth in pages 8-1 through 8-15 of the DEIR and DEIR Appendix F. The impact evaluation criteria used in assessing impacts from greenhouse gas emissions and energy use as a result of implementing the Project are set forth in the DEIR on page 8-15. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

*Impact GHG-2: Wasteful or inefficient use of energy (DEIR, pps. 8-19 to 8-20)*

*Finding: This would be a less-than-significant impact after mitigation*

### *Explanation:*

Proposed dairy and additional agricultural operations at the Vierra Dairy Expansion project site require the use of electricity, natural gas, and other fossil fuels associated with agricultural production. Development of the proposed dairy expansion project would entail energy consumption that includes both direct and indirect expenditures of energy. Indirect energy would be consumed by the use of construction materials for the project (e.g., energy resource exploration, power generation, mining and refining of raw materials into construction materials used, including placement). Direct energy impacts would result from the total fuel consumed in vehicle propulsion (e.g., construction vehicles, heavy equipment, and other vehicles using the facility). No unusual materials, or those in short supply, are required in the construction of the project.

To reduce electricity use and increase efficiency, conducting energy audits on a dairy and acting on those recommendations have generated significant cost savings and reduced GHG emissions from energy use. The energy efficiency savings identified in a farm energy audit vary greatly, and are not correlated with farm size. However, it is estimated that, as a rough average, farms across the U.S. may be able to achieve 10 percent to 15 percent energy savings through a farm energy audit (DEIR, p. 8-19).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential energy impacts, and thus greenhouse gas emissions, are expected to be significant because there may be energy inefficiencies in project facilities and operations. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure GHG-2:**

The project applicant shall obtain from the appropriate utility company a full facility audit under the company's energy management program. The project applicant shall implement all no cost items identified in the energy audit, and additionally shall implement their choice of low cost and/or investment grade opportunities to reach a total reduction of 10 percent in the energy consumption

at the facility. The implementation shall be verified by submission of the utility “Installation Completion Form” or equivalent to Merced County Division of Environmental Health.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring an energy audit and implementation of investment grade and/or low cost measures to reduce energy consumption and increase energy efficiency. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

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*Impact GHG-3: Increase in GHG emissions that would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (DEIR, pps. 8-20 to 8-21)*

*Finding: This would be a significant and unavoidable impact*

### *Explanation:*

The California Air Resources Board (CARB) Climate Change Scoping Plan (2008) represents the primary plan to reduce GHG emissions throughout California. This Plan is designed to reduce California’s statewide 2020 GHG emissions by 29 percent as compared to the 2020 Business As Usual scenario. The Scoping Plan includes several strategies to reduce GHG emissions in the agricultural sector, including more efficient agricultural equipment, fuel use, and water use through transportation and energy measures; reductions from manure digesters at dairies; and addressing impacts on productivity of crops and livestock.

The proposed dairy expansion would utilize one of these three cited Scoping Plan agricultural strategies. Consistent with the Scoping Plan strategy of addressing impacts on productivity of crops and livestock, the SJVAPCD requires implementation of manure management measures and feed efficiency requirements through their rules and regulations to improve criteria air emissions that would also improve the productivity of the herd and thereby reduce potential GHG emissions. However, as discussed in Impact GHG-2, there may be energy inefficiencies in proposed project facilities and operations (DEIR, p. 8-20).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the Vierra Dairy Expansion project may be inconsistent with CARB’s Climate Change Scoping Plan agricultural efficiency requirements because there may be energy inefficiencies in project facilities and operations and there is no anaerobic manure digester proposed for the dairy in the known future. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure GHG-3:**

Implement Mitigation Measure GHG-2, which requires an energy audit and implementation of energy reduction measures.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measure is appropriate and feasible, and would substantially lessen, but not avoid the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring an energy audit and implementation of investment grade and/or low cost measures to reduce energy consumption and increase energy efficiency, thus helping to meet Scoping Plan strategies and result in reduction of project-related GHG emissions; however, the proposed project would not address all strategies addressed in the Scoping Plan. No additional feasible measures are available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Planning Commission finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

## **E. HAZARDS, HEALTH RISKS, AND VECTORS**

Setting information for Hazards, Health Risks, and Vectors for the Vierra Dairy Expansion project is set forth in pages 9-1 through 9-10 of the DEIR and Appendix E of the DEIR. The impact evaluation criteria used in assessing impacts from hazards as a result of implementing the Project are set forth in the DEIR on pages 9-10 and 9-11. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

### *Impact HAZ-1: Increased fly production and related nuisance effects (DEIR, pps. 9-11 to 9-14)*

**Finding:** *This would be a less-than-significant impact after mitigation*

#### **Explanation:**

The dairy facility and proposed expansion area are surrounded on all sides by field crops including low-growing forage crops and corn. The majority of the project site (approximately 442 acres) consists of intensively managed, cultivated, and flood-irrigated corn fields, and other lands used for the production of forage crops and the application of manure process water. Some ruderal (weedy) plants and sparse vegetation grow along the edges of the cropped fields and near the agricultural drains. No trees are present within the site surrounding the dairy facility; however, there are some trees along the eastern boundary of the project croplands and along the southern boundary of the project croplands near the Merced River. The presence of low-growing forage row crops and other uses with few heterogeneous vertical structures, such as larger trees, in the close vicinity of the dairy, is likely to result in greater dispersal of house and stable flies from the dairy operation. The operators of the Vierra Dairy Expansion currently apply pest spray control and other bait as

necessary to reduce the incidence of insect pests, and these practices would continue with implementation of the proposed expansion project (DEIR, pps. 9-11 to 9-12).

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. As discussed in DEIR Chapter 11, *Land Use Compatibility*, there are several off-site residences located within 1,000 feet: two off-site residences are located approximately 85 feet and 285 feet to the north of the existing commodity barn and feed/silage area, and one off-site residence is located approximately 900 feet south of the manure drying area (see DEIR Figure 11-1). According to Merced County Code Chapter 18.48.040 B(2), modification or expansion of the facility may not decrease the existing separation distance unless the off-site property owner provides written permission; however, the proposed dairy expansion would not reduce the distance to these residences.

The DEH has responsibility for the maintenance of public health in the county. As required by the DEH, the methods for insect control must be described in a Vector Control Plan as outlined in Chapter 18.48.055 C.8.c of the ACO (see Appendix C). No Vector Control Plan has been prepared for the existing Vierra Dairy operations or the proposed expansion as of the date of these Findings (DEIR, p. 9-12).

Since adoption of the ACO, the Regional Water Quality Control Board has become the regulatory body for nutrient management planning, thereby replacing the ACO requirement for submission of a Comprehensive Nutrient Management Plan (CNMP) to the DEH with a state process. As a result, no CNMP (that would have included a Vector Control Plan) has been submitted to DEH for review and approval.

DEH enforces the operational measures of each Vector Control Plan through periodic random inspections, and by requiring the annual submittal of compliance reports. The DEH also responds to complaints from neighbors of such facilities as described above. No fly complaints have been reported at the Vierra Dairy and submitted to DEH (Merced County Public File Review, May 2013).

As required by the ACO, DEH must implement the procedures outlined on DEIR pages 9-12 and 9-13 if nuisance insect conditions are reported at, or adjacent to, the animal confinement facility. Management measures previously adopted by the County in the EIR for the ACO would apply to the proposed project as included in Mitigation Measures HAZ-1a and HAZ-1b (DEIR, p. 9-13).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to increased fly production and related nuisance effects is expected to be significant because the nearest residence is located less than 1,000 feet from proposed active dairy facilities, and the the proposed expansion could result in an increase in flies, creating an increased potential for nuisance conditions. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

## *Proposed Mitigation*

### **Mitigation Measure HAZ-1a:**

Prior to obtaining a building permit, the project sponsor shall prepare a Vector Control Plan to meet the requirements of the Animal Confinement Ordinance Chapter 18.48.055 C.8.c. The Vector Control Plan shall be submitted to the Merced County Division of Environmental Health for review and approval. The applicant shall implement all measures within the approved Vector Control Plan throughout the active life of the dairy.

### **Mitigation Measure HAZ-1b:**

The following operational measures identified in the EIR for the ACO shall be implemented.

1. All confined animal facilities shall implement the following Best Management Practices to address potential fly problems:
  - a. Daily inspection of manure flushing systems to ensure that manure is being effectively removed from flushed areas, with particular attention paid to corners and isolated areas;
  - b. Daily inspections of water supply and circulation systems to ensure that any leaks are promptly repaired. These inspections shall include all watering troughs to ensure that mechanisms for controlling water level are operating effectively and are protected from damage;
  - c. Regular blading of feeding lanes in freestall barns and corrals to ensure that spilled feed is promptly removed and disposed;
  - d. Daily removal of manure and spilled feed from stalls in freestall barns;
  - e. Scraping of corrals at least twice a year to minimize the potential for development of fly populations on manure;
  - f. Weekly inspection of silage storage areas to ensure proper covering, drainage, and removal of any spoiled silage;
  - g. Weekly inspection of fence lines of corrals and other “edge” areas, and removal of any accumulated manure;
  - h. Periodic monitoring of stable flies by direct observation and counting of the number of stable flies on the legs of a representative number, minimum of two percent, of the support stock herd;
  - i. All exterior doors and windows in milk rooms shall have screens that are inspected monthly to determine if they are working properly, and to identify rips in the screening. Ripped or otherwise damaged screens shall be repaired or replaced immediately;
  - j. If necessary, flytraps shall be set throughout barns at strategic locations. The traps are inspected monthly, or more frequently if necessary, and replaced when saturated with captured flies.
2. In addition to fly management practices in the cattle housing and milking areas of dairy facilities, the following sanitation practices shall be implemented at animal confinement facilities to control fly populations:
  - a. Dead animals shall be stored in a secured area at the dairy facility, and off-site rendering plant operators shall immediately be notified for pickup of carcasses. Carcasses must be removed within three business days pursuant to ACO Section 18.48.005(A);
  - b. Residual feed shall be removed from infrequently used feeding areas;

- c. All garbage shall be disposed of in closed dumpsters that are regularly emptied by a contracted waste management service for off-site disposal;
- d. Grass and other landscape clippings shall be removed from the site for off-site disposal or reuse (as feed or soil amendment).

### *Findings on Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Antonio Brasil Dairy Expansion project. The Planning Commission finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Antonio Brasil Dairy Expansion project by requiring housekeeping and management measures. Because the setback distance to the off-site residences to the north would not be reduced with project implementation compliant with ACO requirements, and no nuisance complaints have been recorded for the existing dairy facility, with implementation of the above mitigation measures, the impact from nuisance flies would be reduced to less than significant. (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

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*Impact HAZ-3: Contamination from manure pathogens at off-site locations as a result of project operations (DEIR, pps. 9-15 to 9-17)*

*Finding: This would be a significant and unavoidable impact*

#### *Explanation:*

The proposed dairy expansion would increase the dairy herd size from 3,375 animals, with 1,550 milk cows, to 5600 animals, with 2,650 milk cows; the addition of 2,225 animals would result in an increased volume of manure and associated pathogens produced at the project site. The manure could also contain residual amounts of contaminants such as hormones, antibiotics, or pesticides. Therefore, manure process water applied to fields may contain these pathogens and contaminants. Potential impacts from selenium and heavy metal effects to on-site biological resources (Impact BIO-3) at the project site are evaluated in Chapter 6, *Biological Resources*. Potential impacts from pathogen transport and contamination of groundwater (Impact HYD-3) and water supply wells (Impact HYD-7) at the project site are evaluated in Chapter 10, *Hydrology and Water Quality*. For the potential of flooding resulting in mobilization of manure pathogens at the project site, see Impact HYD-6.

While implementation of the ACO and the Merced County Well Ordinance would minimize potential impacts from pathogen contamination on site, the proposed dairy expansion includes the increased export of manure generated from the facility. Exported dry manure would be sold as fertilizer to an off-site agricultural operation that may not be regulated to the same extent as dairy operations in Merced County and the San Joaquin Valley. The Irrigated Lands Program Waste Discharge Requirements General Order (Order R5-2012-0116) adopted by the RWQCB (see Regulatory Setting of Chapter 10, *Hydrology and Water Quality*) provides general waste discharge requirements to protect ground and/or surface waters for owners and operators of irrigated lands within the Eastern San Joaquin River Watershed. For purposes of this General Order, the regulatory

boundaries of Eastern San Joaquin watershed are the Stanislaus River Watershed on the north, the Sierra crest on the east, the San Joaquin River Basin boundary on the south, and the San Joaquin River on the west. Farming operations outside of this boundary are not currently regulated under the requirements of the General Order, although General Orders for several adjacent areas are currently being prepared by the RWQCB.

As defined by the adopted Eastern San Joaquin River Watershed General Order, surface and groundwater water monitoring conducted by water quality coalitions may reduce but not avoid this potential impact. Because the General Order is limited in geographical coverage and solid manure may be transported to areas not regulated by the General Order, there is the potential for over-application of manure or surface water runoff from the receiving off-site agricultural fields in areas not covered by the General Order. Potential impacts to surface water quality at these off-site fields would be reduced since a significant amount of adsorption<sup>3</sup> of nutrients to soil particles and inactivation of pathogenic organisms would be expected to occur in the fields (DEIR, p. 9-16).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to adverse health impacts from the increased export of dry manure is expected to be significant because no site-specific groundwater monitoring is required at non-dairy facilities and other off-site locations to determine if groundwater contamination is occurring. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure HAZ-3:**

Over the course of dairy operations, the project sponsor shall obtain written agreement from the recipients of manure exported off site for the following:

- 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.

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<sup>3</sup> Not to be confused with absorption, adsorption is the adhesion of atoms, ions, or molecules from a gas, liquid, or dissolved solid to a surface. Absorption is the process in which a fluid permeates or is dissolved by a liquid or solid.

- 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 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.

***Findings on Proposed Mitigation***

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measure is appropriate and feasible, and would substantially lessen, but not avoid the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring written agreements from the recipients of manure exported off site to implement measures to protect surface and groundwater quality. This would be a significant and unavoidable impact because there is no feasible mechanism for the County to track the implementation of the measure and ensure compliance. No additional feasible measures are available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Planning Commission finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

**F. HYDROLOGY AND WATER QUALITY**

Hydrology and Water Quality setting information for the Vierra Dairy Expansion project is set forth in pages 10-1 through 10-23 of the DEIR and DEIR Appendices I and J. The impact evaluation criteria used in assessing impacts on hydrology and water quality as a result of implementing the Project are set forth in the DEIR on page 10-24. A summary of proposed project operations is included on DEIR pages 10-24 through 10-27 and FEIR pages 4-1 through 4-4. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

***Impact HYD-1: Degradation of water quality due to storm water runoff during project construction (DEIR, pps. 10-27 to 10-28)***

***Finding: This would be a less-than-significant impact after mitigation***

***Explanation:***

Although some of the proposed facilities would be constructed within the existing facility footprint, the proposed project would entail the construction of active dairy facilities over approximately three

acres of existing cropland. Storm water runoff during the construction period could result in the siltation and sedimentation of waterways draining the site, or in the transport of pollutants used during construction.

Construction activities disturbing one or more acres are required by the State Water Resources Control Board (SWRCB) to obtain a Construction General Permit. Effective July 1, 2010 all dischargers are required to obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009. This Construction General Permit is a risk-based approach to managing stormwater discharge. The Construction General Permit has three risk level categories based on sedimentation risk and receiving water risk. Each risk category has specific Best Management Practices that must be implemented with specific monitoring, sampling, and reporting requirements. The Construction General Permit also sets specific numeric action levels (NAL) for pH and turbidity. A judgment by the California Superior Court on December 27, 2011 struck down the numeric effluent limitations (NEL) requirements and associated receiving water monitoring for Risk Level 3 sites. Other parts of the Construction General Permit remain in effect. In March 2012, the State Water Resources Control Board developed draft amendments to the Construction General Permit to modify NEL requirements, and issued revised proposed amendments in June 2012 (DEIR, p. 10-27).

The Construction General Permit requires a Storm Water Pollution Prevention Plan (SWPPP) and a Rain Event Action Plan (REAP) (another dynamic, site-specific plan) to be developed by the discharger, who must implement these plans – and also comply with specific requirement of the Construction General Permit. The SWPPP must list BMPs the discharger will use to protect storm water runoff, and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan (DEIR, p. 10-28).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential for degradation of water quality due to storm water runoff during project construction is expected to be significant since construction of the proposed project could result in the erosion of on-site soils or loss of topsoil, which could cause the degradation of water quality in waterways draining the site by reducing the quality of storm water runoff during project construction. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure HYD-1:**

The project applicant shall submit Permit Registration Documents (PRD) for the Construction General Permit Order 2009-0009-DWQ to the SWRCB, and comply with, and implement, all requirements of the permit. A Legally Responsible Person (LRP) shall electronically submit PRDs prior to commencement of construction activities in the Storm Water Multi-Application Report Tracking System. PRDs consist of the Notice of Intent, Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification statement by the LRP, and the first annual fee. Following submittal of a Notice of Intent package and development of a SWPPP in accordance with the Construction General Permit, the applicant will receive a Waste Discharge

Identification Number from the SWRCB. All requirements of the site-specific SWPPP with revisions shall be included in construction documents and must be available on site for the duration of the project.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring project compliance with State Water Resources Control Board regulations to avoid siltation effects. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

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### *Impact HYD-3: Groundwater contamination from operation of the Vierra Dairy Expansion (DEIR, pps. 10-30 to 10-34; FEIR, pps. 4-4 to 4-8)*

*Finding: This would be a significant and unavoidable impact*

#### *Explanation:*

The proposed dairy expansion has the potential to impact the underlying groundwater quality with nutrients, salts, and other compounds. Based on the existing water quality data collected at six domestic wells, one instance of elevated nitrates and five instances of elevated salts (E.C.) have been observed. These values exceeded the primary MCL for nitrate and the secondary MCL for EC as established by State and Federal Regulations (see DEIR Table 10-1). Water quality is available for six domestic wells and one irrigation well (see DEIR Table 10-1). Concentration of nitrate as nitrogen ranged from 1.13 to 21.2 mg/L and one detection was reported above the California Title 22 Primary Maximum Contaminant Limit (MCL) of 10 mg/L. Ammonium nitrate was non-detect for the analyzed wells. Electrical Conductance ranged from 0.32 to 2.12 mS/cm, with nine detections above the Title 22 Secondary MCL of 0.9 mS/cm (DEIR, p. 10-30).

Despite attempts to apply pond wastewater at agronomic rates, groundwater quality beneath crop fields may be impacted further above the primary MCL levels already observed for nitrate (MCL is 10 mg/L as N and 45 mg/l as NO<sub>3</sub>) and beyond secondary MCL for EC (MCL is 0.9 mmhos/cm for EC). The NMP allows application of nitrogen at greater rates than the plant crops actually need with a maximum of 1.65 whole farm nutrient balance ratio, and coupled with potential inefficiencies in application and variations in weather, over-application of nitrogen and other nutrients could occur. Also, applying manure with high organic nitrogen content may not meet a crop's nitrogen need during the most rapid growth stage, while exceeding the crop nitrogen uptake during the remainder of the crop's growing season when the nitrogen may be subject to leaching. The existing on-site monitoring system, with additional groundwater monitoring wells if required, would be used to assess future changes in water quality and to determine if further degradation occurs (DEIR, pps. 10-30 to 10-32).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that because of the existing groundwater conditions of contamination, the proposed dairy expansion may result in additional groundwater impacts despite operational improvements and best management practices required by the NMP and WMP. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

To minimize degradation of groundwater, the CVRWQCB shall incorporate the following mitigation measures into the individual WDR permit requirements for the Vierra Dairy Expansion. The following mitigation protocol mirrors CVRWQCB requirements to quantify and evaluate water quality and determine necessary measures to remediate water quality conditions. It includes monitoring of the effectiveness of implemented measures, and modification or addition of measures if water quality problems persist.

#### **Mitigation Measure HYD-3a:**

Prior to issuance of a building permit, the Division of Environmental Health shall complete a regulatory compliance audit of the dairy facility to confirm the existing dairy meets local and state requirements. The project applicant shall correct any non-compliance issues prior to issuance of a building permit. The applicant shall comply with requirements of the NMP/WMP, and implement CVRWQCB requirements included in the individual WDR for the proposed expansion, and with all Merced County ACO requirements not superseded by the conditions of the individual WDR.

#### **Mitigation Measure HYD-3b:**

As set forth in the NMP, proposed application rates of liquid and/or solid manure shall not exceed agronomic rates. Nutrient samples shall be collected prior to and during applications periods to confirm agronomic rates within all portions of cropped areas receiving manure, and to protect water supplies. Soil testing frequency for nitrogen, potassium, phosphorus, and salts are described in the NMP. Modifications to the NMP may be required as outlined in the individual WDR for the proposed expansion to be issued by the CVRWQCB.

#### **Mitigation Measure HYD-3c:**

The CVRWQCB may require an industry-wide or site-specific salinity report to be submitted to the CVRWQCB for review and approval prior to operation or final inspection. The salinity report shall identify sources of salt in waste generated at the dairy; evaluate measures that can be taken to minimize salt in the dairy waste; and include an affirmative commitment by the applicant to implement measures identified to minimize salt in the dairy waste to meet Basin Plan requirements. Any necessary measures shall be incorporated into the WDR issued for the facility or become a required deliverable of the WDR.

#### **Mitigation Measure HYD-3d:**

A site-specific Monitoring Well Installation and Sampling Plan (MWISP) has not been developed for the Vierra Dairy. As a condition of the individual WDR issued for the facility, the CVRWQCB may require the installation of shallow groundwater monitoring wells on site or require the facility to contribute to a regional representative groundwater monitoring system to confirm water table

gradients and water quality variations. Monitoring well requirements and a monitoring schedule shall be included in the WDR issued for the facility. The resulting groundwater monitoring objectives for either the regional program or individual site shall be used to assess and mitigate groundwater impacts.

**Mitigation Measure HYD-3e:**

Groundwater monitoring of the on-site domestic and irrigation wells as required under the General Order and individual WDR shall be completed by the dairy operator. Potential future groundwater monitoring wells may be sampled as required by the WDR. If appropriate, surrounding properties with domestic water supply wells within 500 feet of the land application property could be considered for sampling for nitrate and E.C. at a minimum. A well monitoring schedule shall be incorporated into the WDR issued for the facility.

**Mitigation Measure HYD-3f:**

After project implementation and subsequent groundwater monitoring, if the dairy shows increased concentration in groundwater of constituents of concern, additional manure exportation, a reduction in herd size, or additional crop acres may be necessary to accommodate the proposed herd size. A new Report of Waste Discharge (ROWD) may be required by the CVRWQCB. The ROWD shall clearly demonstrate that the herd size will not constitute a threat to groundwater quality. If necessary, the CVRWQCB shall revise the WDR issued to the facility.

**Mitigation Measure HYD-3g:**

The Department of Planning and Community Development and Division of Environmental Health shall make a final inspection of the facility prior to the commencement of expanded operations to confirm the dairy meets local and state requirements.

***Findings on Proposed Mitigation***

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen, but not avoid, the potential adverse environmental effects associated with the Vierra Dairy Expansion project because the mitigation measures and any corrective actions deemed essential by the CVRWQCB will allow ongoing monitoring of any operational changes that may impact the nutrient balance on the Vierra Dairy facility. However, because the proposed operations would increase solid and liquid manure generated and handled at the facility, and exported for off site application, and there are existing water quality exceedances in close proximity to the site, potential impacts to groundwater quality would be significant and unavoidable. No additional feasible measures are available to reduce this impact below a level of significance (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard. To the extent that this adverse impact will not be substantially lessened or eliminated, the Planning Commission finds that specific economic, social, and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project.

*Impact HYD-7: Water supply pathways for pollutant migration (DEIR, pps. 10-38 to 10-39)*

*Finding: This would be a less-than-significant impact after mitigation*

*Explanation:*

Existing irrigation and domestic water wells (either active or abandoned) in proximity of the site that do not meet current wells standards of construction may act as conduits for pollutant migration to the subsurface. If any of the wells were not constructed with effective sanitary seals upon construction, or have been damaged since installation, surface water may seep into the wells and the underlying aquifer, causing water quality degradation.

The Merced County ACO, together with the Merced County Well Ordinance, recognizes the importance of protecting water quality from the release of animal pathogens. One ACO requirement addresses the specific issue of potential pollutant migration into wells. Chapter 18.48.050 establishes a minimum setback of 100 feet between any manured areas and water wells. However, application of manure (liquid or dry) may be closer than 100 feet to a surface water body or irrigation well if adequate protection to the surface water body or irrigation well is provided. The ACO requires that all wastewater be maintained on-site and discharged into the manure management system, and that it does not create a nuisance or pollution condition (Chapter 18.48.050 E, K, LL). In the event of groundwater pollution, the project applicant must submit a plan to abate the groundwater impacts to the Merced County Division of Environmental Health (Chapter 18.48.050 T). In addition, the CVRWQCB requires that all process water that comes into contact with wastewater be collected and stored in the ponds with low permeability liners, reducing the potential release of pathogens to water supplies (DEIR, p. 10-38).

*Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to water supply pathways for pollutant migration is expected to be significant despite regulations set forth above because existing wells at the project site may not meet current Merced County standards for well protection, and thereby may be a potential conduit for groundwater contamination. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

*Proposed Mitigation*

**Mitigation Measure HYD-7:**

Prior to issuance of any building permit, all existing water supply wells at the facility site and property shall be inspected by the Merced County Division of Environmental Health to ensure that each well is properly sealed at the surface to prevent infiltration of waterborne contaminants into the well casing or surrounding gravel pack. If any of the wells are found not to comply with the Merced County Well Ordinance standards, the project applicant shall retain a qualified professional as described in the respective Ordinance to install the required seal or functional equivalent including setback distances of 100 feet from manured areas as required by the CVRWQCB General Order.

Documentation of the inspections and seal installations, if any, shall be provided to the County Division of Environmental Health prior to commencement of dairy expansion operations.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring inspection of on site water supply wells to ensure that each well is properly sealed, and installation of a well seal if required. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

## **G. LAND USE COMPATIBILITY**

Setting information for Land Use Compatibility for the Vierra Dairy Expansion project is set forth in pages 11-1 through 11-14 of the DEIR. The impact evaluation criteria used in assessing impacts to land use compatibility as a result of implementing the Project are set forth in the DEIR on page 11-14. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

**Impact LU-2:** *Land use compatibility with existing off-site residential uses adjacent to the project area (DEIR, pps. 11-15 to 11-16)*

**Finding:** *This would be a less-than-significant impact after mitigation*

### **Explanation:**

The major land uses adjacent to the dairy project are agricultural and open space land uses. For the proposed Vierra Dairy, the nearest off-site residences are located approximately 85 feet and 285 feet north of active animal facilities along Washington Road near the northeast corner of the project area. No nuisance complaints have been reported at the Vierra Dairy and submitted to DEH (Merced County Public File Review, June 2013). While the existing agricultural character of the vicinity would tend to minimize incompatibility to existing uses in the project vicinity, implementation of the dairy expansion project could introduce an additional source of odors, flies, and other insects in the area of these residences. (These potential adverse odor and nuisance insect effects are evaluated in DEIR Chapter 5, *Air Quality and Odors* and DEIR Chapter 9, *Hazards, Health Risks, and Vectors* of this EIR.) The combination of these nuisance effects contributes on a cumulative level to determine land use compatibility with existing residents in the area (DEIR, p. 11-15).

Merced County regulates land use through the General Plan and Zoning Code. The EIR prepared for the Merced County ACO assesses potential land use conflicts with rural residences for new and expanding animal confinement facilities in Merced County. In efforts to minimize these conflicts and protect agricultural uses, the ACO requires a minimum setback between new or expanded animal confinement facilities and individual off-site rural residents to 1,000 feet, and generally

prohibits the construction of new off-site dwellings within 1,000 feet of an existing animal confinement facility, with some exceptions. According to Merced County Code Chapter 18.48.040 (B)(2), the modification or expansion of an existing facility must not decrease the existing separation distance from the nearest residence within 1,000 feet. For the proposed Vierra Dairy Expansion, while there are off-site residences located within 1,000 feet of existing dairy facilities, the proposed dairy expansion would not reduce the distance to these residences (DEIR, p. 11-16).

Within unincorporated areas of the county, the regulatory definition of nuisances is the exclusive responsibility of Merced County. In certifying the EIR for the ACO and adopting modifications to the ACO, the Board of Supervisors found that the most appropriate land uses in agriculturally designated and zoned areas of the county were agricultural activities, including animal confinement facilities. The Board also found, given the prominent role of agriculture in the economy of the county, that agricultural uses should be protected from incompatible uses, thus reinforcing a County policy established in 1978. In seeking to protect agricultural uses, the County has determined that a setback of 1,000 feet from isolated off-site rural residences to active areas of an animal confinement facility (corrals, wastewater lagoons, and separation ponds) is sufficient to reduce potential nuisances to such uses to a level deemed acceptable by the County while protecting predominant agricultural uses.

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that while no nuisance complaints have been reported at the Vierra Dairy, because the active dairy facilities are located less than 1,000 feet from several off-site residences, there would be an increased potential for nuisance conditions at these residences with implementation of the proposed dairy expansion. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure LU-2a:**

Implement the odor control measures set forth in Mitigation Measure AQ-7a.

#### **Mitigation Measure LU-2b:**

Implement the nuisance control measures set forth in Mitigation Measures HAZ-1a and HAZ-1b.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measures are appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring housekeeping and management measures to minimize nuisance insect and odor conditions. Further, the setback distance to the off-site residences would not be reduced with project implementation, and as documented in DEIR Chapter 8, *Hazards, Health Risks, and Vectors*, no nuisance complaints have been recorded for the existing dairy facility. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA

Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

## H. TRAFFIC AND CIRCULATION

The Traffic and Circulation setting information for the Vierra Dairy Expansion project is set forth in pages 12-1 through 12-2 of the DEIR. The impact evaluation criteria used in assessing impacts on traffic and circulation as a result of implementing the Project are set forth in the DEIR on page 12-2. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the DEIR, the findings of the Planning Commission are as follows.

*Impact TRF-1: Traffic and County roadway effects (DEIR, pps. 12-3 to 12-5)*

*Finding: This would be a less-than-significant impact after mitigation*

*Explanation:*

The proposed dairy herd expansion would result in the addition of approximately 25 trips per day, including an additional 4.2 heavy truck trips per day (see Table 3-4 in DEIR Chapter 3, *Project Description*). Because of the existing low levels of traffic in the vicinity, and because minimal new trips would be generated by the proposed project expansion, there would be no reduction of the existing Level of Service on Williams Avenue (DEIR, p. 12-3).

The Department of Public Works, Road Division review of the proposed project determined that some of the existing accesses to the dairy are unpaved. To reduce the potential for pavement raveling at the edge of Williams Avenue and Washington Road when trucks access and leave the site, each driveway approach used by heavy trucks would need to be improved. These driveways would also need to be illuminated by streetlights to enhance traffic safety during dark or foggy weather. To maintain adequate traffic circulation at the project site, the following conditions of approval would be required for the project:

1. The Applicant shall improve all driveways utilized by heavy truck operations associated with the dairy with either paved or concrete approaches on to adjacent County roadways, in accordance with Chapter 7 of the Merced County Department of Public Works Improvement Standards and Specifications. The Applicant shall be required to obtain an Encroachment Permit from the County to perform said driveway improvements.
2. The Applicant shall install a 150-watt, pole-mounted street light at each driveway approach along a County roadway to enhance traffic safety.

As described above, the proposed dairy expansion operations would result in the generation of additional heavy truck traffic from milk tankers, commodity deliveries, and other dairy and farm operations. Truck traffic associated with dairy operations carry heavy loads and are daily in nature, and thus are potentially very destructive to the roads serving dairies. Because of the weight of milk tankers and feed trucks, the pavement surface of surrounding roadways can rapidly deteriorate, causing unsafe driving conditions. This increases the need for more maintenance and additional costs to the County. The Merced County Public Works Department has instituted roadway improvement conditions through the ACO for new or expanding dairy projects that would impact

the county's road system. Merced County Code Chapter 18.48.050 W requires that the sponsors of new or expanded animal confinement facilities be subject to a road impact evaluation. As implemented, this requirement results in new road construction appropriate to individual confined animal facilities, or payments to a fund used for general road improvements (DEIR, p. 12-4).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential for traffic and County roadway effects is expected to be significant since the additional heavy truck traffic as a result of the dairy expansion could result in a deterioration of County roadways. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

#### **Mitigation Measure TRF-1:**

Roadway Impact Evaluation or Roadway Impact Agreement:

- a. The applicant shall provide a roadway impact evaluation, prepared by a registered Geotechnical Engineer or Civil Engineer, to assess the potential impact that the project may have on Merced County roadways. This evaluation shall include both an analysis of the traffic characteristics of the roadways most impacted by the project, and a geotechnical analysis of the existing structural section of those roadways. The traffic analysis will require classification counts to determine the existing and projected Traffic Indices of said roadways. The geotechnical analysis will require corings of said roadways to determine their structural integrity. Based upon said evaluation, the applicant shall pay to the Merced County Road Fund an amount equivalent to improving said roadways sufficient to sustain the truck load impacts for the future 20-years; or,
- b. In lieu of performing a roadway impact evaluation, the Applicant may opt to enter into a Roadway Impact Agreement with Merced County Department of Public Works - Road Division. The Roadway Impact Agreement will stipulate that the Applicant shall pay a Road Impact Fee to the Merced County Road Fund to compensate the County for the increased cost of maintaining the County roadways impacted by the Applicant's project. The Road Impact Fee shall be paid annually, and shall be an amount equal to \$2.50 for every heavy truck (i.e., milk tankers, commodity deliveries, etc.) trip entering or leaving the project site during the previous 12 months, associated with the expansion. The Applicant shall also pay a fee of \$200.00 for processing said Roadway Impact Agreement.

### *Findings on Proposed Mitigation*

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the Vierra Dairy Expansion project. The Planning Commission further finds that the above measure is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the Vierra Dairy Expansion project by requiring project compliance with Merced County ACO regulations to avoid roadway impacts. The above-stated measure would reduce the magnitude of this impact to a less-than-significant level (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

## **G. CUMULATIVE IMPACTS**

The assessment of cumulative effects for the Vierra Dairy Expansion project is tiered from the EIR for the Merced County Animal Confinement Ordinance Revision (ACO) project certified by the Merced County Board of Supervisors on October 22, 2002 (SCH #2000072024). The environmental conclusions of the 2002 EIR were subsequently reconfirmed in an Addendum to the EIR prepared and certified by the County on February 8, 2005. The forecast of cumulative conditions, geography of cumulative effects, and assessment of cumulative effects set forth within pages 5-266 through 5-282 of the ACO DEIR and revised in pages 4-107 through 4-122 of the ACO FEIR are incorporated into this finding as though fully set forth herein.

### **FINDING ON TIERING FROM THE EIR FOR THE MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE REVISION AND USE OF AN ADOPTED FORECAST FOR SUBSEQUENT CUMULATIVE IMPACT ANALYSIS**

“Tiering” refers to the relationship between a program-level EIR (where long-range programmatic cumulative impacts are the focus of the environmental analysis) and subsequent environmental analyses such as the Vierra Dairy Expansion project EIR, which focus primarily on issues unique to a smaller project within the larger program or plan. Through tiering, a subsequent environmental analysis can incorporate, by reference, discussion that summarizes general environmental data found in the program EIR that establishes cumulative impacts and mitigation measures, the planning context, and/or the regulatory background. These broad-based issues need not be reevaluated subsequently, having been previously identified and evaluated at the program stage (DEIR, p. 1-5).

The ACO EIR comprehensively evaluated the potential environmental effects (including cumulative effects) of implementing the revisions to the ACO and from approval of new or expanding animal confinement facilities (ACO FEIR p. 4-118). The ACO EIR identified a number of mitigation measures that would reduce the magnitude of these potential effects. Those measures were subsequently adopted by the County as conditions of approval for the revisions to the ACO, and a mitigation monitoring program was adopted. Because the Vierra Dairy Expansion project is subject to the requirements of the ACO for new and expanding confined animal facilities, those previously adopted mitigation measures and conditions apply to the Vierra Dairy Expansion project, and would continue to apply after approval of the currently requested actions. Therefore, the ACO EIR is related to the Vierra Dairy Expansion project and, pursuant to CEQA Guidelines Section 15152(a), the Merced County Planning Commission finds that tiering of environmental documents is appropriate (DEIR, p. 1-5).

The DEIR for the Vierra Dairy Expansion project stated that the County is using the tiering concept, incorporated the ACO EIR by reference, summarized the environmental effects contained in the ACO EIR, and set forth a location for public review of the ACO EIR consistent with CEQA Guidelines Section 15152 (DEIR, pps. 1-5 to 1-7). The Planning Commission finds that the proper procedures for tiering were employed in the Vierra Dairy Expansion project EIR, consistent with the requirements of CEQA Guidelines Section 15152.

## EVALUATION OF CUMULATIVE EFFECTS

Considering the above information, and the potential cumulative impacts identified in the ACO FEIR, the findings of the Planning Commission are as follows:

*Impact CUM-1: Air Quality Effects (Vierra Dairy Expansion project EIR, pps. 14-2 to 14-3; ACO FEIR, pps. 4-123 to 4-129)*

*Finding: This would be a significant and unavoidable impact*

### *Explanation:*

The facts concerning air quality conditions relied upon by the Board of Supervisors in their consideration of cumulative air quality effects were set forth in the findings for the Animal Confinement Ordinance Revisions EIR dated October 22, 2002. Summarily, as set forth in the FEIR for the Animal Confinement Ordinance Revisions (pps. 4-123 to 4-129), these facts as identified by the Board of Supervisors in 2002 are:

- Air quality effects associated with animal confinement facility development adversely affect the ambient air quality within the San Joaquin Valley Air Basin.
- Air emissions inventories and site-specific monitoring data on relevant parameters (e.g., ROG, hydrogen sulfide, PM<sub>10</sub> and methane) for other animal confinement facilities within the San Joaquin Valley air basin are not available.
- The primary threshold of significance for cumulative air quality impacts is defined by Ambient Air Quality Standards, which define the attainment status of the air basin.
- Air emissions in the San Joaquin Valley air basin are forecast to increase between the present and the year 2020, especially emissions of Total Organic Gases, Total Particulate Matter, and Particulate Matter less than 10 microns in diameter. Cumulative development and operation of confined animal facilities in the San Joaquin Valley Air Basin is expected to result in increased air emissions.
- Confined animal facility development is forecast to increase in the valley, leading to increased emissions of air pollutants from this source.

As a result of the foregoing assessment, the following cumulative significant effects were identified for air quality:

- Fugitive Dust Emissions from Construction Activities
- Ozone Precursor Emissions (Reactive Organic Gases and Nitrogen Oxides) from Dairy Operations, Farm Equipment and Increased Traffic
- PM<sub>10</sub> Emissions from Fugitive Dust During Project Operations
- Ammonia and Hydrogen Sulfide Emissions from Confined Animal Facility Operations
- Greenhouse Gas Emissions from Confined Animal Facility Operations

The facts relied upon by the Board of Supervisors regarding this cumulative impact are hereby incorporated by reference as though fully set forth herein.

Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and applied the measures to the Vierra Dairy Farm Expansion project. Because emissions of construction-related ozone precursors and fugitive dust would not exceed the threshold values used by the SJVAPCD for stationary sources, and the project would be required to implement construction dust control measures, impacts due to fugitive dust emissions from construction activities were determined to be less than significant. Similarly, impacts due to hazardous pollutant emissions of ammonia were determined to be less than significant with mitigation. While the project-level impact from fugitive dust would be less than significant since emissions do not exceed SJVAPCD significance thresholds, because the Air Basin is in nonattainment for State AAQS for PM<sub>10</sub>, these emissions would be considered cumulatively significant. The project level-impact from ozone precursors (VOCs and NO<sub>x</sub>) would exceed the SJVAPCD significance thresholds, and because the Air Basin is in nonattainment for both federal and state ozone standards, these emissions would be considered cumulatively significant. Thus, the cumulative impact of the Vierra Dairy Farm Expansion on air quality would be significant and unavoidable.

The proposed project would not address all applicable Scoping Plan strategies, and a significant unavoidable impact was identified since the project would conflict with an adopted plan to recude GHG emissions. However, the proposed project would not exceed established significance thresholds for GHG emissions, and project impacts due to GHG emissions were determined to be less than significant. Therefore, the proposed project would not make a cumulatively considerable contribution to a cumulatively significant effect (see analysis in Impact GHG-1 in DEIR Chapter 8, *Greenhouse Gases and Energy*) (DEIR, p. 14-3).

#### *Finding on Significance of Cumulative Impact*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Merced County Board of Supervisors found that cumulative effects to air quality from confined animal facility development within the San Joaquin Valley Air Basin would be a cumulatively significant impact. While the San Joaquin Valley Air Pollution Control District enforces measures that would minimize air quality emissions, cumulative air quality impacts would be significant and unavoidable since confined animal facility development would contribute to the nonattainment status of the San Joaquin Valley Air Basin, and due to the lack of federally approved Attainment Plans. The findings of the Board of Supervisors regarding these cumulative impacts are hereby incorporated by reference as though fully set forth herein.

#### *Findings on Contribution of Project to Cumulative Impact*

Based on the analysis contained within the Vierra Dairy Expansion project DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the Vierra Dairy Expansion project to cumulative air impacts is expected to be cumulatively considerable. The Planning Commission finds emissions to be considered to be cumulatively considerable for the following reasons:

- The San Joaquin Valley Air Basin has been designated as nonattainment for ozone, PM<sub>10</sub> (for only state standards), and PM<sub>2.5</sub> as well. Any additional emissions from any source would make attainment more difficult.

- Livestock wastes and other agriculture-related activities account for a large portion of existing ozone precursor, PM<sub>2.5</sub> precursor, and PM<sub>10</sub> emissions. Their percentage of the total emissions in future years is expected to increase as the relative contributions from regulated sources decrease.
- Current levels of air emissions in the San Joaquin Valley result in high levels of chronic lung disease, and increased morbidity and mortality. Increased pollutant concentrations in the future due to increased emissions could be expected to increase existing levels of chronic lung disease, and to increase morbidity and mortality.
- Current levels of air emissions in the San Joaquin Valley result in decreased crop yields and damaged forest vegetation in the Sierra Nevada. Increased pollutant concentrations in the future due to increased emissions could be expected to decrease crop yields further and result in additional damage to forest vegetation.

Because of these factors, operation of the dairy would make a cumulatively considerable contribution to these significant and unavoidable cumulative effects. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Adopted Mitigation*

The following measures were adopted by the Board of Supervisors to reduce the magnitude of these potential air quality effects. Since implementation of several of the measures is outside the jurisdictional authority of Merced County, and the County cannot fully implement the measures unilaterally, these cumulative impacts would remain significant and unavoidable.

#### **Mitigation Measure CUM-1a:**

Implement San Joaquin Valley Air Pollution Control District (SJVAPCD) Rules 8020 and 8021, and the following requirements of the Merced County Animal Confinement Ordinance - Chapter 18.48.050 U, HH, and II.

#### **Mitigation Measure CUM-1b:**

The U.S. Environmental Protection Agency, California Air Resources Board, and/or SJVAPCD should sponsor and complete detailed emissions studies of air emissions from all areas of animal confinement facilities, including emissions rates from various sources, activities, and facilities. Concurrently, these agencies should evaluate and document the effectiveness of various emissions control options for managing or lessening air pollutant emissions from animal confinement facilities.

#### **Mitigation Measure CUM-1c:**

Upon completion of the emissions studies set forth above, should it be determined that controls on emissions from animal confinement facilities are necessary to reach attainment status, the SJVAPCD should incorporate the resulting emissions inventory into its attainment planning for criteria pollutants for which the Air Basin is in nonattainment.

### *Findings on Adopted Mitigation*

Mitigation measures within Merced County have been adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. For areas outside of Merced County, the Board of Supervisors found that the above-stated mitigation measures are within the responsibility and jurisdiction of

another public agency and not the County of Merced. The Board of Supervisors' findings on these mitigation measures are hereby incorporated by reference as though fully set forth herein.

Because emissions of the Vierra Dairy Expansion project would be cumulatively considerable, the requirements of these measures are made requirements of the Vierra Dairy Expansion project where applicable. For findings on the effectiveness of the air quality mitigation measures applicable to the Vierra Dairy Expansion project, see Section XI.A and Section XI.D of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Planning Commission finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

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*Impact CUM-2: Biological Resources Effects (Vierra Dairy Expansion Project EIR, pps. 14-3 to 14-4; ACO FEIR, pps. 4-129 to 4-130)*

*Finding: This would be a less-than-significant impact*

*Explanation:*

The facts concerning biological resource conditions relied upon by the Board of Supervisors in their consideration of cumulative biological resource effects were set forth in the findings for the Animal Confinement Ordinance Revisions EIR dated October 22, 2002. Summarily, as set forth in the FEIR for the Animal Confinement Ordinance Revisions (pps. 4-129 to 130), these facts are:

- Other agencies in the region may lack mitigation standards to compensate for the loss and/or degradation of riparian habitat.

As a result of the foregoing assessment, the following cumulatively significant impact was identified for biological resources:

- Loss and/or degradation of riparian habitat outside of Merced County.

The facts relied upon by the Board of Supervisors regarding this cumulative effect are hereby incorporated by reference as though fully set forth herein.

An animal confinement facility development in Merced County, with the implementation of mitigation identified in the ACO EIR, is expected to have a less-than-significant effect on all biological resources impacts (except for riparian habitats). Mitigation measures adopted by Merced County reduce the potential effect to riparian habitats within the county to less than significant. The potential impacts to riparian habitat throughout the San Joaquin Valley is expected to be cumulatively considerable, since mitigation measures adopted by Merced County have no effect in areas outside the county. Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and applied the measures to the Vierra Dairy Expansion project where applicable. Because most of the natural vegetation in the project vicinity has been converted to alfalfa, corn, small grains, row crops and agricultural facilities, with implementation of mitigation measures required in this EIR, impacts to biological resources were determined less than significant, there would be no cumulatively considerable contribution to this significant and unavoidable effect.

### *Finding on Significance of Cumulative Impact*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors found that the potential impact to riparian habitat throughout the San Joaquin Valley is expected to be cumulatively considerable, since mitigation measures adopted by Merced County have no effect in areas outside the County. Confined animal facility development in Merced County is not expected to be cumulatively considerable because of the requirements of the Animal Confinement Ordinance and mitigation measures adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. The findings of the Board of Supervisors regarding this impact are hereby incorporated by reference as though fully set forth herein.

### *Findings on Contribution of Project to Cumulative Impact*

Based on the analysis contained within the Vierra Dairy Expansion project DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the cumulative contribution from the Vierra Dairy Expansion project to biological resources would be reduced below a level of significance by the operation of mitigation measures as identified in Section XI.B of these Findings. Notwithstanding the existence of significant and unavoidable adverse cumulative effects throughout the San Joaquin Valley as identified above, the Vierra Dairy Expansion project would not result in a cumulatively considerable contribution to this significant and unavoidable effect. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

The Planning Commission further finds that because the contribution of the Vierra Dairy Expansion project to cumulative impacts on biological resources is expected to be less than cumulatively considerable, no additional mitigation measures beyond those previously adopted by Merced County for confined animal facilities would be required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Section 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

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### *Impact CUM-5: Hazards (Vierra Dairy Expansion Project DEIR, p. 14-4; ACO FEIR, p. 4-131)*

*Finding: This would be a less-than-significant impact*

#### *Explanation:*

For hazards, no cumulatively significant effect was identified in the ACO FEIR. Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and employed the measures on the Vierra Dairy Expansion project where applicable. The cumulative impacts from hazards in Merced County would be considered less than significant as identified in the ACO and as modified to reflect current environmental conditions in the county. With implementation of ACO management measures to reduce impacts due to mosquitoes and nuisance

flies, the nuisance effects of the Vierra Dairy Farm Expansion project would be less than significant. In addition, because hazard effects as evaluated in the ACO EIR are considered a localized issue, the construction and operation of the dairy would not make a cumulatively considerable contribution to this less-than-significant cumulative effect (ACO FEIR, p. 4-131 and Vierra Dairy Expansion Project DEIR, p. 14-4).

### *Finding on Significance of Cumulative Impact*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors found that the potential cumulative impacts are expected to be less than significant. Confined animal facility development in Merced County, including the Vierra Dairy Expansion project, is not expected to be cumulatively considerable because of the requirements of the Animal Confinement Ordinance and mitigation measures adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. The findings of the Board of Supervisors regarding this impact are hereby incorporated by reference as though fully set forth herein.

### *Findings on Contribution of Project to Cumulative Impact*

Based on the analysis contained within the Vierra Dairy Expansion project DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the cumulative contribution from the Vierra Dairy Expansion project due to hazards are a localized effect that would be reduced below a level of significance by the operation of regulatory requirements as identified in Section XI.E of these Findings, so that implementation of the Project would not make a cumulatively considerable contribution to the less-than-significant cumulative effect. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

None required.

### *Findings on Proposed Mitigation*

The Merced County Planning Commission further finds that because the contribution of the Vierra Dairy Expansion project to cumulative impacts due to hazards is expected to be less than cumulatively considerable, no additional mitigation measures beyond those previously adopted by Merced County for confined animal facilities would be required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Section Section 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

*Impact CUM-6: Hydrology and Water Quality Effects (Vierra Dairy Expansion Project DEIR, pps. 14-5 to 14-6; ACO FEIR, p. 4-131 through 4-137)*

*Finding: This would be a significant and unavoidable impact*

*Explanation:*

The facts concerning water quality conditions relied upon by the Board of Supervisors in their consideration of cumulative water quality effects were set forth in the findings for the Animal Confinement Ordinance Revisions EIR dated October 22, 2002. As a result of the foregoing assessment, the following cumulatively significant impact was identified for surface water and groundwater quality:

- Contamination of groundwater or surface waters outside of Merced County.

The facts relied upon by the Board of Supervisors regarding this cumulative effect are hereby incorporated by reference as though fully set forth herein.

Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and employed the measures on the Vierra Dairy Expansion project where applicable. The cumulative impacts to hydrology in the San Joaquin River Watershed would be considered significant and unavoidable as identified in the ACO and as modified to reflect current environmental conditions in the county. Even with implementation of water quality mitigation measures, because the groundwater effects of the Vierra Dairy Farm Expansion would be significant and unavoidable, construction and operation of the Vierra Dairy Farm Expansion would make a cumulatively considerable contribution to these water quality significant and unavoidable effects. Further, disposal of manure from the Vierra Dairy Farm Expansion to off-site locations was found to be significant and unavoidable, even with implementation of mitigation, and would make a cumulatively considerable contribution to this significant and unavoidable water quality impact due to pathogens and other contaminants.

*Finding on Significance of Cumulative Impact*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors found that the potential cumulative impact on surface water and groundwater quality is expected to be significant in areas outside of Merced County. Confined animal facility development in Merced County was not expected to be cumulatively considerable because of the requirements of the Animal Confinement Ordinance and mitigation measures adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

*Findings on Contribution of Project to Cumulative Impact*

Based on the analysis contained within the Vierra Dairy Expansion project DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the Vierra Dairy Expansion project to the cumulative impairment of surface water and groundwater quality is expected to be cumulatively considerable.

Because disposal of manure from the Vierra Dairy Expansion to off-site locations, including those outside of Merced County, and impacts to groundwater quality was found to be significant and unavoidable despite mitigation measures as identified in Section XI.F of these Findings, the construction and operation of the Vierra Dairy Expansion would make a cumulatively considerable contribution to this significant cumulative effect. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Adopted Mitigation*

The following measures were adopted by the Board of Supervisors to reduce the magnitude of the potential cumulative effect. Since implementation of one of the measures is outside the jurisdictional authority of Merced County, and the County cannot fully implement the measure unilaterally, this cumulative impact would remain significant and unavoidable.

#### **Mitigation Measure CUM-6a:**

Implement Section 18.48.050 A, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, V, Z, AA, BB, DD, EE, JJ, KK, LL and NN; Section 18.48.055 A, B, C.4.d, C.4.m, D, E, and F; and Section 18.48.060 A, D, E, G, H, I, K, L, M, Q, S, and T of the Animal Confinement Ordinance.

#### **Mitigation Measure CUM-6b:**

The following Best Management Practices shall be implemented by all dairies and confined animal facilities as applicable:

1. Positive drainage shall be included in project design and construction to ensure that excessive ponding does not occur. The design shall comply with Title 3, Division 2, Chapter 1, Article 22, Section 646.1 of the Food and Agriculture Code for construction and maintenance of dairy or facility surroundings, corrals, and ramps, as described below.
2. Dirt or unpaved corrals, or unpaved lanes, shall not be located closer than 25 feet from the milking barn or closer than 50 feet from the milk house. Corral drainage must be provided.
3. A paved (concrete or equivalent) ramp or corral shall be provided to allow the animals to enter and leave the milking barn. This paved area shall be curbed (minimum of 6 inches high and 6 inches wide) and sloped to a drain. Cow washing areas shall be paved (concrete or equivalent) and sloped to a drain. The perimeter of the area shall be constructed in a manner that will retain the wash water to a paved drained area. Paved access shall be provided to permanent feed racks, mangers, and water troughs. Water troughs shall be provided with: (1) a drain to carry the water from the corrals; and (2) pavement (concrete or equivalent) which is at least 10 feet wide at the drinking area.
4. The cow standing platform at permanent feed racks shall be paved with concrete or equivalent for at least 10 feet back of the stanchion line.
5. As unpaved areas are cleaned, depressions tend to form, allowing ponding and increased infiltration. Regular maintenance shall include filling of depressions. Personnel shall be taught the correct use of manure collection machines (wheel loaders or elevating scrapers).

**Mitigation Measure CUM-6c:**

For all new or expanding confined animal facilities, the Division of Environmental Health shall make a final inspection of the facility prior to the commencement of operations to confirm the dairy meets all local and state requirements.

**Mitigation Measure CUM-6d:**

All existing water supply wells at a proposed new or modified animal confinement facility site (including those located away from the confined animal facilities in the cropland areas) shall be inspected by the Merced County Division of Environmental Health to ensure that each well is properly sealed at the surface to prevent infiltration of waterborne contaminants into the well casing or surrounding gravel pack. If any of the wells are found not to comply with the Merced County Well Ordinance standards described in Impact HYD-7, the applicant or confined animal facility operator shall retain a qualified professional as described in the County Well Ordinance to install the required seal or functional equivalent. Documentation of the inspections and seal installations, if any, shall be provided to the County Division of Environmental Health prior to commencement of dairy operations.

**Mitigation Measure CUM-6e:**

The Regional Water Quality Control Board should evaluate the potential emissions to groundwater of salts, nutrients, and other substances from all areas of confined animal facilities, including corrals, treatment ponds, and cropped application fields.

**Mitigation Measure CUM-6f:**

Based on the results of this study, the Regional Water Quality Control Board should adopt uniform standards that apply to all confined animal facilities within the Central Valley for permitted seepage rates from all areas, including corrals, treatment ponds, and application fields; maximum permeability rates for areas that require lining to prevent groundwater degradation; and implementation of an antidegradation policy for groundwater.

***Findings on Adopted Mitigation***

Mitigation measures within Merced County have been adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. For areas outside of Merced County, the Board of Supervisors found that the above-stated mitigation measures are within the responsibility and jurisdiction of another public agency and not the County of Merced. The Board of Supervisors' findings on these mitigation measures are hereby incorporated by reference as though fully set forth herein.

Because hydrology and water quality impacts of constructing and operating the Vierra Dairy Expansion project would be cumulatively considerable, the requirements of these measures are made requirements of the Vierra Dairy Expansion project where applicable. For findings on the effectiveness of the water quality mitigation measures applicable to the Vierra Dairy Expansion project, see Section XI.F of these Findings. To the extent that this adverse impact will not be substantially lessened or eliminated, the Planning Commission finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations support the approval of the proposed Project. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

*Impact CUM-7: Land Use (Vierra Dairy Expansion Project DEIR, p. 14-6; ACO FEIR, p. 4-137)*

*Finding: This would be a less-than-significant-impact*

*Explanation:*

Adverse effects to existing rural residences adjacent to existing animal confinement facilities were identified as significant and unavoidable as identified in the ACO EIR and as modified to reflect current environmental conditions in the county. Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and applied the measures to the Vierra Dairy Farm Expansion project where applicable. Adverse effects to existing rural residences adjacent to the Vierra Dairy Farm Expansion project were identified as less than significant following mitigation. Because the land use effects of the Vierra Dairy Farm Expansion project would be less than significant, construction and operation of the dairy would not make a cumulatively considerable contribution to this significant cumulative effect.

*Finding on Significance of Cumulative Impact*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors determined that cumulative land use and nuisance effects to isolated rural residences from existing confined animal facilities closer than 1,000 feet to such residences would be significant because such residences would be located within the 1,000 foot setback between active dairy areas and residences established by the Board of Supervisors to control nuisance land use effects. The findings of the Board of Supervisors regarding these cumulative impacts are hereby incorporated by reference as though fully set forth herein.

*Finding on Contribution of Project to Cumulative Impact*

Based on the analysis contained within the Vierra Dairy Expansion project DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the Vierra Dairy Expansion project to cumulative land use impacts is expected to be less than cumulatively considerable. Because adverse effects to existing rural residences adjacent to existing and proposed animal confinement facilities at the Vierra Dairy were identified as less than significant, this impact would be less than significant. Therefore, the Vierra Dairy Expansion project would not make a cumulatively considerable contribution to this significant cumulative effect. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

*Proposed Mitigation*

None required.

*Findings on Proposed Mitigation*

Mitigation measures within Merced County have been adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. The Board of Supervisors adopted proposed revisions to Zoning

Code Section 18.48.040 in the ACO EIR to reduce the magnitude of these potential land use compatibility effect effects, and applied the measures to the Vierra Dairy Expansion project where applicable. The Merced County Planning Commission further finds that because the contribution of the Vierra Dairy Expansion project to cumulative land use impacts is expected to be less than cumulatively considerable, no additional mitigation measures beyond those previously adopted by Merced County for confined animal facilities would be required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Section Section 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

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***Impact CUM-10: Transportation and Circulation Effects (Vierra Dairy Expansion Project DEIR, p. 14-7; ACO FEIR, pps. 4-138 through 4-139)***

***Finding:***            *This would be a less-than-significant impact*

***Explanation:***

The facts concerning roadway integrity and traffic conditions relied upon by the Board of Supervisors in their consideration of cumulative transportation and circulation effects were set forth in the findings for the Animal Confinement Ordinance Revisions EIR dated October 22, 2002. Summarily, as set forth in the FEIR for the Animal Confinement Ordinance Revisions (pps. 4-138 to 139, and DEIR, p. 5-261), these facts are:

- Cumulative impacts related to transportation and circulation are limited to roadway integrity effects from the passage of heavy vehicles. Confined animal facilities are often located in more remote areas served only by farm-to-market roads that are not constructed to modern engineering standards. Truck traffic associated with current dairy and other confined animal operations carries heavier loads, is daily in nature, and thus is much more destructive to the roads. Because of the weight of milk tankers and feed trucks, the pavement surface of these roadways can rapidly deteriorate, causing unsafe driving conditions. Such effects can cross County boundaries because routes from dairies to supporting facilities can cross County lines.
- No cumulative effects to roadway capacity are expected because of the cumulative roadway capacity of the roadway network in the San Joaquin Valley, the generally high levels of service of farm to market roads serving confined animal facilities, and the dispersion of truck traffic serving regional confined animal facilities. An additional factor is the generally low volume of traffic serving confined animal facilities.

Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and applied the measures to the Vierra Dairy Farm Expansion project where applicable. Local access to the Vierra Dairy Farm Expansion project site is currently provided off of Williams Avenue. Since Williams Avenue is within Merced County, it would be subject to County conditions. With implementation of County conditions of approval and mitigation measures to maintain roadway integrity, the roadway integrity effects of the Vierra Dairy Farm Expansion project would be less than significant, and construction and operation of the dairy expansion would not make a cumulatively considerable contribution to this significant and unavoidable effect.

### *Finding on Significance of Cumulative Impact*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors found that the potential cumulative impact to roadway integrity is expected to be significant in areas outside of Merced County. Confined animal facility development in Merced County is not expected to be cumulatively considerable because of the requirements of the Animal Confinement Ordinance and mitigation measures adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. The findings of the Board of Supervisors regarding this impact are hereby incorporated by reference as though fully set forth herein.

### *Findings on Contribution of Project to Cumulative Impact*

Based on the analysis contained within the Vierra Dairy Expansion project DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the Vierra Dairy Expansion project to cumulative impacts to roadway integrity is not expected to be cumulatively considerable. As determined by the County Road Division, the roadway integrity effects of the Vierra Dairy Expansion project would be less than significant with implementation of conditions of approval and mitigation measures. Notwithstanding the existence of adverse cumulative effects throughout the San Joaquin Valley as identified above, the contribution from Vierra Dairy Expansion project is expected to be less than cumulatively considerable, and construction and operation of the dairy expansion would not make a cumulatively considerable contribution to this significant and unavoidable effect. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

None required.

### *Findings on Proposed Mitigation*

The Planning Commission further finds that because the contribution of the Vierra Dairy Expansion project to cumulative impacts on transportation and circulation is expected to be less than cumulatively considerable, no additional mitigation measures beyond those previously adopted by Merced County for confined animal facilities would be required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Section Section 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

*Other Effects: Cumulative Impacts to Cultural Resources, Geological Resources, Mineral Resources, Noise, Utilities and Service Systems (Vierra Dairy Expansion Project DEIR, pps. 14-4 to 14-7; ACO FEIR, pps. 4-123 through 4-139)*

*Finding: These would be less-than-significant impacts*

***Explanation:***

Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and employed the measures on the Vierra Dairy Expansion project where applicable. Impacts to cultural resources are isolated incidents that are project-specific, and generally do not contribute to a cumulative condition. Therefore, the cumulative impacts to cultural resources in Merced County would be considered less than significant as identified in the ACO and as modified to reflect current environmental conditions in the county. With implementation of mitigation relating to undiscovered cultural resources, the cultural resource effects of the Vierra Dairy Farm Expansion project would be less than significant, and construction and operation of the dairy expansion would not make a cumulatively considerable contribution to this less-than-significant cumulative effect. Thus, the cumulative impact of the Vierra Dairy Farm Expansion project on cultural resources would be less than significant (ACO FEIR, p. 4-131 and Vierra Dairy Expansion Project DEIR, p. 14-4).

For geological resources, no cumulatively significant effect after the imposition of mitigation was identified in the ACO FEIR. Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and employed the measures on the Vierra Dairy Expansion project where applicable. The cumulative impacts to geological resources in Merced County would be considered less than significant as identified in the ACO and as modified to reflect current environmental conditions in the county. The Planning Commission specifically finds that because of the operation of this measure, and because the geological resource effects of the Vierra Dairy Expansion project would be less than significant, construction and operation of the dairy expansion would not make a cumulatively considerable contribution to this less-than-significant cumulative effect. Thus, the cumulative impact of the Vierra Dairy Expansion project on geological resources would be less than significant (ACO FEIR, p. 4-131 and Vierra Dairy Expansion Project DEIR, p. 14-4).

For mineral resources, no cumulatively significant effect after the imposition of mitigation was identified in the ACO FEIR. Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and applied the measures to the Vierra Dairy Expansion project where applicable. The cumulative impacts to mineral resources in Merced County would be considered less than significant as identified in the ACO and as modified to reflect current environmental conditions in the county. Because the mineral resource effects of the Vierra Dairy Farm Expansion project would be less than significant, construction and operation of the dairy would not make a cumulatively considerable contribution to this less-than-significant cumulative effect. Thus, the cumulative impact of the Vierra Dairy Farm Expansion project on mineral resources would be less than significant (ACO FEIR, p. 4-137 and Vierra Dairy Expansion Project DEIR, p. 14-7).

For noise, no cumulatively significant effect after the imposition of mitigation was identified in the ACO FEIR. Merced County has adopted the mitigation measure identified for this cumulative

impact in the ACO EIR, and applied the measure on the Vierra Dairy Expansion project where applicable. The cumulative impacts to the noise environment in Merced County would be considered less than significant as identified in the ACO and as modified to reflect current environmental conditions in the county. The Planning Commission specifically finds that because the noise effects of the Vierra Dairy Expansion project would be less than significant, construction and operation of the dairy would not make a cumulatively considerable contribution to this less-than-significant cumulative effect. Thus, the cumulative impact of the Vierra Dairy Expansion project on noise would be less than significant (ACO FEIR, p. 4-137 and Vierra Dairy Expansion Project DEIR, p. 13-7).

For utilities and service systems, no cumulatively significant effect after the imposition of mitigation was identified in the ACO FEIR. Merced County has adopted the mitigation measure identified for this cumulative impact in the ACO EIR, and applied the measure to the Vierra Dairy Expansion project where applicable. The cumulative impacts to utilities and services in Merced County would be considered less than significant as identified in the ACO and as modified to reflect current environmental conditions in the county. The Planning Commission specifically finds that because the utilities and services effects of the Vierra Dairy Expansion project would be less than significant with implementation of ACO mitigation requirements regarding conflicts with public irrigation facilities, construction and operation of the dairy would not make a cumulatively considerable contribution to this significant cumulative effect. Thus, the cumulative impact of the Vierra Dairy Expansion project on utilities and services would be less than significant (ACO FEIR, p. 4-137 and Vierra Dairy Expansion Project DEIR, p. 13-8).

#### *Finding on Significance of Cumulative Impacts*

Based on the analysis contained within the Animal Confinement Ordinance Revisions DEIR and FEIR, other considerations in the record, and the impact evaluation criteria, the Board of Supervisors found that the potential cumulative impacts are expected to be less than significant with implementation of mitigation identified by the Board of Supervisors (cultural resources, geological resources, mineral resources, noise, and utilities and service systems). For those environmental topics listed above that could be reduced by implementation of mitigation adopted by the Board of Supervisors, or for which no significant effect was identified, the contribution of confined animal facility development in Merced County, including the Vierra Dairy Expansion project, is not expected to be cumulatively considerable because of the requirements of the Animal Confinement Ordinance and mitigation measures adopted by the Board of Supervisors in its certification of the Animal Confinement Ordinance Revisions EIR and approval of the revised Animal Confinement Ordinance. The findings of the Board of Supervisors regarding this impact are hereby incorporated by reference as though fully set forth herein.

#### *Finding on Contribution of Project to Cumulative Impacts*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Merced County Planning Commission finds that the contribution to the above-cited effects from operations at the Vierra Dairy Expansion project is expected to not be cumulatively considerable because the Vierra Dairy Expansion project has no identified impacts in these areas. This conclusion is consistent with CEQA Guidelines Section 15130(a)(3). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

None required.

### *Findings on Proposed Mitigation*

The Merced County Planning Commission further finds that because the contribution of the Vierra Dairy Expansion project to cumulative impacts of Cultural Resources, Geological Resources, Mineral Resources, Noise, Utilities and Service Systems is expected to be less than cumulatively considerable, no additional mitigation measures beyond those previously adopted by Merced County for confined animal facilities would be required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

## **H. GROWTH INDUCEMENT**

The definition of growth inducement and setting information for the Vierra Dairy Expansion project is set forth in pages 14-8 through 14-9 of the DEIR. The impact evaluation criteria used in assessing impacts of growth inducement as a result of implementing the Project are set forth in the DEIR on page 14-8. This information is incorporated into these findings as though fully set forth herein. Considering the above information, and the potential impacts identified in the Final EIR, the findings of the Planning Commission are as follows.

*Impact:*                *Growth Inducement (DEIR, pps. 14-8 to 14-9)*

*Finding:*              *This would be a less-than-significant impact*

### *Explanation:*

Implementation of the Vierra Dairy Farm Expansion project would not result in any direct growth inducement. There are twelve employee residences – four residences are within the windshed of the dairy (one of these residences is currently unoccupied), and eight additional employee residences are situated on the dairy agricultural fields. The facility currently employs a staff of 25 workers. With implementation of the proposed project, the number of employees would increase to approximately 30 to 32 workers. No new residences would be constructed on site. The existing workforce within Merced County (111,200 workers, of whom 15.5 percent, or 17,200 people, were unemployed in April 2013) could accommodate additional labor needs for construction or operation of the project without requiring the importation of large numbers of workers (EDD 2013). Similarly, any additional housing demands caused by project employees could be accommodated by existing and planned housing resources within Merced County (DEIR, p. 14-8).

The proposed Vierra Dairy Farm Expansion project is located in an active agricultural district. Because animal confinement facilities do not require additional public facilities beyond those typically provided in agricultural areas, the animal confinement operations themselves would not be expected to increase the demand for public facilities beyond the levels provided and planned for by public utilities. The project is not growth inducing from the perspective of adding new infrastructure because no new infrastructure that could induce growth is proposed or required by the proposed project. The Vierra Dairy Farm Expansion is currently served by some services and infrastructure,

and would not result in the need for any major new systems or substantial alterations to these utility systems (see DEIR Appendix A, *Notice of Preparation and Initial Study*). Thus, implementation of the Vierra Dairy Farm Expansion project would not serve to reduce an infrastructure barrier to growth (DEIR, p. 14-9).

The proposed dairy project is consistent with Merced County land use plans, and does not include any changes in zoning or land use designations that would directly increase the potential for growth. Therefore, the Vierra Dairy Farm Expansion project would not induce growth beyond that which has been anticipated in Merced County planning documents (DEIR, p. 14-9).

### *Finding on Significance of Impact*

Based on the analysis contained within the DEIR and the FEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact of growth inducement caused by the Vierra Dairy Expansion project is expected to be less than significant because the project would not result in any direct growth inducement by the creation of housing units or an increased demand for housing, and any added employees could be accommodated by the local labor pool; would not result in the lowering of any infrastructure barriers to growth; and would not result in any land use policy changes that could result in additional development within the County. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

### *Proposed Mitigation*

The Merced County Planning Commission further finds that because the potential impact of the growth inducement from the Vierra Dairy Expansion project is expected to be less than significant, no mitigation measures are required. Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code Section 21002; CEQA Guidelines Sections 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

## **XII. PROJECT ALTERNATIVES**

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Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any project alternatives that are both environmentally superior and feasible within the meaning of CEQA. As noted earlier, in Sections II and VII of these Findings, an alternative may be “infeasible” if it fails to promote the project applicant’s goals and objectives with respect to the project. Thus, “‘feasibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors” of a project (*City of Del Mar*, *supra*, 133 Cal.App.3d at 417; see also *Sequoyah Hills*, *supra*, 23 Cal.App.4th at 715).

The detailed discussion in Section XI demonstrates that many significant environmental effects of the Project have been either substantially lessened or avoided through the imposition of existing

policies or regulations of the Merced County Animal Confinement Ordinance and Zoning Code, or by the adoption of additional, formal mitigation measures identified in the EIR.

However, even with mitigation in the form of the application of existing policies and, where feasible, the addition of formal mitigation measures, the following significant effects remain significant and unavoidable, though they have been substantially lessened:

- Ozone precursor emissions from dairy operations, farm equipment, and increased traffic (Impact AQ-3)
- Increase in GHG emissions that would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (Impact GHG-3)
- Contamination from manure pathogens at off-site locations as a result of project operations (Impact HAZ-3)
- Groundwater contamination from operation of the Vierra Dairy Expansion (Impact HYD-3)
- Cumulative air quality impacts (Impact CUM-1)
- Cumulative hydrology and water quality impacts (Impact CUM-6)

The County can fully satisfy its CEQA obligations by determining whether any alternatives identified in the EIR are both feasible and environmentally superior with respect to these impacts (Laurel Hills, *supra*, 83 Cal.App.3d at pp. 520-521 and pp. 526-527); Kings County Farm Bureau v. City of Hanford, *supra*, 221 Cal.App.3d at pp. 730-731; and Laurel Heights I, *supra*, 47 Cal.3d at pp. 400-403; see also Public Resources Code Section 21002). As the succeeding discussion will show, no identified alternative is both feasible and environmentally superior with respect to the unmitigated impacts.

To fully account for these unavoidable significant effects, and the extent to which particular alternatives might or might not be environmentally superior with respect to them, these Findings will not focus solely on these impacts, but instead will address the environmental merits of the alternatives with respect to all impacts. The Findings will also assess whether each alternative is feasible in light of the project applicant's objectives for the Project.

The County's review of project alternatives is guided primarily by the need to reduce potential impacts associated with the Project, while still achieving the basic objectives of the Project. As set forth by the project applicant, the specific Project objectives are:

- To maintain a modern, efficient, and competitive dairy operation that operates in full compliance with applicable county, state, and federal laws and regulations.
- To fully use land and facilities currently owned and operated by the project applicant without the need to purchase additional land.
- To use all available land (which is not otherwise used for the dairy) for the production of feed for the herd. This allows for the application, at appropriate agronomic rates, of dairy process water from dairy operations, which in turn reduces the need for imported fertilizers.
- To generate dry manure that can be land applied and/or sold as a commodity for use as fertilizer in the region.

- To construct improvements that could be permitted within a reasonable time frame and would represent commensurate benefit with cost.
- To 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 (DEIR, pps. 3-8 through 3-9).

The EIR identified and evaluated two development alternatives and also evaluated the environmental impacts of the No Project alternative. In accordance with CEQA Guidelines Section 15126.6(f), several alternatives were considered for the Vierra Dairy Expansion project, but rejected as infeasible. The potentially feasible alternatives were analyzed in relation to the objectives of the Project and in relation to their ability to avoid or substantially lessen environmental impacts. The alternatives rejected as infeasible included:

- Additional Acreage for Solid Manure Disposal Alternative - Based on the potentially large amount of acreage required to apply all dry manure on-site; the lack of available agricultural real estate in the project vicinity; and the cost of land in the Hilmar area, the project applicant cannot reasonably acquire additional land. Because the project applicant does not own, or cannot reasonably acquire, additional acreage for the disposal of solid manure, this alternative was considered infeasible and rejected from further analysis (DEIR, pps. 13-1 through 13-2).
- Alternative Sites Outside the San Joaquin Valley - The relocation of dairy facilities to alternative sites outside the San Joaquin Valley was also eliminated, despite the fact that siting outside of the San Joaquin Valley Air Basin might speculatively lessen the incremental effect of air emissions and potential air quality cumulative effects. However, because these properties would be outside the jurisdiction of the County; the project applicant does not own, or cannot reasonably acquire an additional dairy site outside of the San Joaquin Valley; and relocation of existing facilities would be cost prohibitive, this alternative was considered infeasible and rejected from further analysis (DEIR, p. 13-2).
- Organic Dairy Farm Management Alternative - Based on the potentially large amount of acreage required for pasture; the lack of available agricultural real estate in the project vicinity; and the cost of land in the Hilmar area, the project applicant cannot reasonably acquire additional land. In addition, current federal farm policies could make organic farming difficult to implement. For each and every reason identified, this alternative was considered infeasible and rejected from further analysis (DEIR, pps. 13-2 through 13-3).

## **A. ALTERNATIVE 1 – NO PROJECT ALTERNATIVE**

### *Definition of Alternative 1*

The CEQA Guidelines have clarified that, under a “No Project” alternative, an EIR must examine both the existing conditions, as well as a “buildout” scenario (i.e., what would occur if the site were developed as allowed under applicable County plans). The amended CEQA Guidelines Section 15126.6(e)(2) states:

The No Project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental review is commenced as well as what would be reasonably expected

to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Therefore, the analysis of the No Project alternative in the EIR describes existing facility development at the Vierra Dairy, as well as expected agricultural development at the site under the current zoning requirements (DEIR, p. 13-3).

Under the No Project Alternative, construction of the Vierra Dairy Farm Expansion would not occur. The existing dairy facility and agricultural operations currently developed on the project site would continue under the No Project Alternative. The existing herd size of 3,375 animals (plus 6 bulls), including approximately 1,550 milk cows, would be maintained on the project site in addition to continued use of the existing wastewater management system. Uses permitted under the General Agriculture zoning designation without discretionary approval by Merced County are limited to crop production, including orchards and vineyards. Thus, the agricultural activities permitted by Merced County zoning designations and the facilities currently developed on the project site would continue under the No Project Alternative (DEIR, p. 13-3).

### *Evaluation of Alternative 1*

There are six significant and unavoidable impacts that have been identified for the proposed project—two for air quality, one for conflicts with a greenhouse gas reduction plan, two for water quality, and one for contamination from manure transport off site. The No Project Alternative would reduce the magnitude of anticipated environmental impacts associated with the proposed project. The No Project Alternative would avoid the increment of increase for air quality impacts, groundwater contamination, and off-site transport of manure pathogens due to the proposed project. The No Project Alternative would not create any construction impacts or provide a source of additional flies, mosquitoes, or odors. Based on the foregoing, the No Project Alternative would result in fewer environmental effects than the proposed Vierra Dairy Farm Expansion project. DEIR Table 13-1 includes an evaluation of the relative impacts of implementing Alternative 1 - No Project Alternative (DEIR, p. 13-2 to 13-5).

Implementation of the No Project Alternative may not fully meet the following goals of the project applicant in proposing the Vierra Dairy Expansion project since the project applicant would not develop the existing dairy to its full production potential and the economic return on investment could be diminished.

- *To maintain a modern, efficient, and competitive dairy operation that operates in full compliance with applicable county, state, and federal laws and regulations.* Under this alternative, no dairy expansion would be developed. Smaller dairy farms in the US are observed to have higher costs per unit of milk produced than larger farms, largely to farm inefficiencies and economies of size (Tauer and Mishra 2005)<sup>4</sup>. Larger farms realize lower production costs for a number of reasons, including fixed capital costs spread over more units of output, access to better technologies, specialization at larger farms, and volume

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<sup>4</sup> Tauer, Loren W. and Ashok K. Mishra 2005. "Can the small dairy farm remain competitive in US agriculture?" Elsevier, Food Policy 31 (2006) 458-468.

discounts for input items such as feed. The cost advantages of a larger size allow large dairy farms to be more profitable than smaller operations (USDA 2007).<sup>5</sup>

- *To fully use land and facilities currently owned and operated by the project sponsor without the need to purchase additional land.* This alternative would not fully maximize production from the existing land base. The proposed project would increase the crops produced by triple-cropping over 374 of the 579 cropped acres, thereby maximizing commodity production.
- *To generate dry manure that can be land applied and/or sold as a commodity for use as fertilizer in the region.* Since the dairy expansion would not occur, reduced amounts of dairy process water and manure would be generated. Under this alternative, manure generated by the herd would be approximately 4,950 cubic feet per day, while the proposed project would generate approximately 8,270 cubic feet per day,
- *To 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.* The dairy under existing operations currently employs a staff of approximately 25 workers; with implementation of the proposed expansion, the number of employees would increase to approximately 32 workers. Since the dairy expansion would not occur under this alternative, no additional employees beyond those existing would be required (DEIR, p. 13-7).

### ***Finding of Feasibility on Alternative 1***

The Merced County Planning Commission rejects Alternative 1, No Project Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Planning Commission finds the alternative to be infeasible.

- The No Project Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the project applicant for pursuing the Vierra Dairy Expansion project.

The basis for the foregoing determination can be found in Section IV of these Findings and Section 3.2 of the DEIR dated October 2013 regarding the applicant's Project objectives, pages 13-3 through 13-7 of the DEIR dated October 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the No Project Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

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<sup>5</sup> USDA 2007. Profits, costs, and the changing structure of dairy farming. Economic Research Report No. 47, United States Department of Agriculture. Economic Research Service. James M. MacDonald, Erik J. O'Donoghue, William D. McBride, Richard F. Nehring, Carmen L. Sandretto, and Roberto Mosheim. September 2007.

## **B. ALTERNATIVE 2 – ANAEROBIC DIGESTER LOW AIR EMISSIONS ALTERNATIVE**

### *Definition of Alternative 2*

Under the Anaerobic Digester Low Air Emissions Alternative, the existing wastewater lagoon would be covered and re-constructed as an anaerobic digester. To minimize air emissions from the digester, the digester system would upgrade the biogas to natural gas standards and inject it into a natural gas pipeline. No electricity from the biogas would be generated on site. All other improvements and the herd size increase associated with the proposed dairy expansion project would occur under the Anaerobic Digester Low Air Emissions Alternative. This alternative was selected to comply with CARB's Climate Change Scoping Plan agricultural strategies to reduce greenhouse gas emissions (DEIR, p. 13-7).

In addition to generating renewable energy, anaerobic digestion leads to reduced odor pollution, fewer pathogens, and reduced greenhouse gas emissions. There is little change in the nutrient value of the manure and organic matter that passes through the process, which can then be used as fertilizer. Methane produced from the collected manure can be captured with an estimated effectiveness of 95 percent. With the captured methane used for energy recovery that displaces current or required fossil fuel use, an overall reduction of 63.5 percent of fugitive CH<sub>4</sub> emissions could be achieved by the use of properly designed and controlled anaerobic treatment. Of the 11 operating anaerobic digesters at California dairies as reported by the U.S. EPA AgSTAR program in 2013, the average methane emission reduction was approximately 7,000 metric tons CO<sub>2</sub> equivalents per year, or an approximate 3.7 metric tons CO<sub>2</sub> equivalents per year reduction per cow (DEIR, p. 13-7).

Despite the benefits of anaerobic digestion systems in relation to greenhouse gases and odors, these systems could result in increased soil and groundwater contamination.<sup>6</sup> The anaerobic treatment process creates intermediates such as ammonia, hydrogen sulfide, orthophosphates, and various salts, all of which must be properly controlled or captured. In addition, atmospheric releases at locations off-site where biogas is shipped may negate or decrease the benefit of emissions controls on-site. Thus, while proper treatment system operation can control intermediates, improper design or operation may lead to violations of federal, state, and local air quality regulations as well as the release of toxic air contaminants. With regard to water quality, it is critical that project developers and managers ensure digester integrity and fully consider and address post-digestion management of the effluent in order to avoid contamination of local waterways and groundwater resources (de Boer 2008). Catastrophic digester failures; leakage from pipework and tanks; and lack of containment in waste storage areas are all examples of potential problems. Further, application of improperly treated digestate and/or improper application timing or rates of digestate to agricultural land may lead to increased nitrogen oxide emissions, soil contamination, and/or nutrient leaching, thus negating or reducing benefits of the project overall (DEIR, pps. 13-7 through 13-8).

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<sup>6</sup> This Anaerobic Digester Low Air Emissions Alternative does not propose the combustion of biogas on site for electricity generation. The combustion of biogas could result in increased nitrogen oxide emissions. While devices such as Selective Catalyst Reduction (SCR) units can reduce NO<sub>x</sub> emissions, uncontrolled emissions from combustion of biogas may contain between 200 to 300 ppm of NO<sub>x</sub>.

## *Evaluation of Alternative 2*

There are six significant and unavoidable impacts that have been identified for the proposed project—two for air quality, one for conflicts with a greenhouse gas reduction plan, two for water quality, and one for contamination from manure transport off site. The Anaerobic Digester Low Air Emissions Alternative would reduce the magnitude of anticipated environmental impacts associated with the proposed project. The Anaerobic Digester Low Air Emissions Alternative would reduce, but not avoid, odor and nuisance fly impacts. Greenhouse gas emissions would also be reduced. While the anaerobic digester would reduce pathogens in the liquid manure stored in the lagoon and applied to cropland off site, because the dry manure exported off site is separated from the waste stream and would not be processed in the manure digester, it would not minimize potential impacts from manure pathogen transport off site. Based on the foregoing, the Anaerobic Digester Low Air Emissions Alternative would result in fewer environmental effects than the proposed Vierra Dairy Farm Expansion project. Table 13-2 includes an evaluation of the relative impacts of implementing Alternative 2 - Anaerobic Digester Low Air Emissions Alternative (DEIR, p. 13-8).

Implementation of the Anaerobic Digester Low Air Emissions Alternative may not fully meet the following goals of the project applicant in proposing the Vierra Dairy Expansion project since permitting difficulties for the digester could extend the time line for approval and the alternative would result in potentially greater water and air quality violations.

- *To maintain a modern, efficient, and competitive dairy operation that operates in full compliance with applicable county, state, and federal laws and regulations.* This alternative is ineffective in reducing impacts of the project compared to the other action alternative (see DEIR Table 13-6 for a relative comparison of alternatives)).
- *To construct improvements that can be permitted within a reasonable time frame and would represent commensurate benefit with cost.* This alternative may take additional time to permit with both the SJVAPCD and the RWQCB. (DEIR, p. 13-11)

## *Finding of Feasibility on Alternative 2*

The Merced County Planning Commission rejects Alternative 2, Anaerobic Digester Low Air Emissions Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Planning Commission finds the alternative to be infeasible.

- The Anaerobic Digester Low Air Emissions Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the project applicant for pursuing the Vierra Dairy Expansion project.

The basis for the foregoing determination can be found in Section IV of these Findings and Section 3.2 of the DEIR dated October 2013 regarding the applicant's Project objectives, pages 13-7 through 13-11 of the DEIR dated October 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the Anaerobic Digester Low Air Emissions Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

## C. ALTERNATIVE 3 – AIR EMISSIONS LIMITED HERD SIZE

### *Definition of Alternative 3*

In general, the amount of air emissions and volume of manure and process water generated at animal confinement facilities are proportional to the number of animals managed at the facilities. A limitation in the number of dairy cows and support stock at the Vierra Dairy Farm Expansion project would result in a corresponding limitation in manure and associated air emissions. The alternative would restrict total herd size to 4,265 animals, including milking cows and dry cows. This restriction would reduce volatile organic compounds (VOC) emissions, an ozone precursor, for the proposed project to less-than-significant levels. This alternative would reduce the size of the Vierra Dairy Farm Expansion herd increase to approximately 76 percent of the proposed increase as shown in DEIR Table 13-3 and Table 13-4 (DEIR, pps. 13-11 to 13-12).

### *Evaluation of Alternative 3*

There are six significant and unavoidable impacts that have been identified for the proposed project—two for air quality, one for conflicts with a greenhouse gas reduction plan, two for water quality, and one for contamination from manure transport off site. Limiting the size of the Vierra Dairy Farm Expansion would reduce individual project effects for ozone precursor emissions to a less-than-significant level. The magnitude of water quality effects would also be reduced, in addition to contamination from manure transport off site, although the level of significance would remain unchanged. Potential effects related to construction, including PM<sub>10</sub> construction effects, would be reduced under the limited herd alternative since construction of the dairy facilities would result in a smaller facility than the proposed project.

Assumptions regarding the operational characteristics of the dairy project under the Limited Herd Size alternative would remain the same as for the proposed project. Flushing of the freestall barns and scraping of corrals would generate manure and process water. The process water generated by the dairy would be reused as irrigation for the growing of silage and other crops adjacent to animal confinement facilities and applied to nearby agricultural fields off site. Dry manure generated by the dairy would also be separated from liquids, accumulated on site, and processed for bedding material, or sold and hauled off site for use as fertilizer and soil amendments. The amount of process water and manure generated at the dairy under this alternative would be expected to be proportional to the herd size. DEIR Table 13-5 includes an evaluation of implementing the Air Emissions Limited Herd Size Alternative (DEIR, pps. 13-12 to 13-15).

Implementation of the Air Emissions Limited Herd Size Alternative may not fully meet the following goals of the project applicant in proposing the Vierra Dairy Expansion project since it would not allow development of the existing dairy to its full production potential and the economic return on investment could be diminished.

- *To maintain a modern, efficient, and competitive dairy operation that operates in full compliance with applicable county, state, and federal laws and regulations.* As discussed under the No Project Alternative, the cost advantages of a larger size allow large dairy farms to be more profitable than smaller operations. While the dairy facilities would be expanded under this alternative, a reduced herd size would make it difficult for this dairy to realize its full economic potential and to maintain competitive operations.

- *To 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.* With a reduced herd size, fewer employees may be required under this alternative. While this alternative would increase the number of employees from the 25 existing, not all of the 32 employees proposed would be required for a smaller herd. (DEIR, p. 13-15)

***Finding of Feasibility on Alternative 3***

The Merced County Planning Commission rejects Alternative 3, Air Emissions Limited Herd Size Alternative, as infeasible for each and every reason listed, each reason being a separate and independent basis upon which the Planning Commission finds the alternative to be infeasible.

- The Air Emissions Limited Herd Size Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the project applicant for pursuing the Vierra Dairy Expansion project.

The basis for the foregoing determination can be found in Section IV of these Findings and Section 3.2 of the DEIR dated October 2013 regarding the applicant’s Project objectives, pages 13-11 through 13-15 of the DEIR dated October 2013 regarding the environmental effects of the Alternative, and the information presented in Section XIII, Statement of Overriding Considerations, of these Findings, regarding County policy and factual determinations.

To the extent that any environmental impacts might be less significant under the Air Emissions Limited Herd Size Alternative, the rejection of this alternative is appropriate for the reason stated above and in the statement of overriding considerations. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

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**XIII. STATEMENT OF OVERRIDING CONSIDERATIONS**

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As set forth in the preceding sections, the County’s approval of the Project will result in significant adverse impacts that cannot be substantially lessened or avoided even with the adoption of all feasible mitigation measures or Project alternatives. Despite these impacts, however, the County chooses to approve the Project because, in its view, the economic, social, and other benefits that the Project will produce will render the significant effects acceptable. To do so, the County must first adopt this Statement of Overriding Considerations (Pub. Resources Code Section 21081; CEQA Guidelines Section 15093).

The following statement identifies the reasons why, in the County’s judgment, the benefits of the Project outweigh its unavoidable significant effects. Any one of the reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a Court were to conclude that not every reason is supported by substantial evidence, the County will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this Section (XIII), and in the documents found in the Record of Proceedings, as defined in Section VI.

The County finds that the Project will have the following specific economic, legal, social, technological, or other benefits:

## **A. PRESERVATION AND PROMOTION OF SUSTAINABLE AGRICULTURE IN THE COUNTY**

The Planning Commission finds that dairy industry is extremely important to agriculture in Merced County. Dairy facilities employ people seven days a week, twenty-four hours per day, all year long. Dairy facility employment yields good pay, good benefits, and in many cases, housing. Dairy facilities are also stable businesses. The proposed project presents a balance between retaining jobs in the dairy industry and protecting the environment and the public.

For the reasons set forth above, the Planning Commission finds that the ability of the Project to preserve and promote sustainable agriculture outweighs its other environmental impacts.

## **B. PRESERVATION OF OPEN SPACE AREAS**

Approval and implementation of the Vierra Dairy Expansion project will help ensure preservation of the project site, an area of open space, as agricultural land that could otherwise be lost to non-agricultural development. Without substantial, long-term investment in state-of-the-art dairy facilities on existing agricultural land, the owners of agricultural land could eventually succumb to financial pressures to develop the land for housing or other non-agricultural uses. Approval of the Project will encourage investment in dairy facilities, which will result in preservation of agricultural uses.

For the reasons set forth above, the Planning Commission finds that the ability of the Project to preserve open space outweighs its other environmental impacts.

## **C. PROVIDE NEEDED ECONOMIC DEVELOPMENT FOR THE COUNTY**

Approval of the Project will assist in the much-needed economic development in Merced County. According to the most recent figures from the California Employment Development Department, Merced County currently suffers from a 13.6 percent unemployment rate, compared to a rate of 8.5 percent for the state as a whole (<http://www.labormarketinfo.edd.ca.gov/> [November 2013]). Growth of the dairy industry, including at the Vierra Dairy Expansion project, will create much-needed new jobs at dairy facilities and related businesses. Unlike other agricultural endeavors, dairy facilities employ workers year round.

The jobs maintained and created by the dairies and other confined animal facilities, including the Vierra Dairy Expansion, will reduce unemployment rates and bring economic benefits to the area through increases in purchasing power of dairy and related-industry employees and increased sales and property tax revenues.

For the reasons set forth above, the Planning Commission finds that the economic benefits of the Project outweigh its environmental impacts.

## **D. CONSISTENCY WITH THE COUNTY'S GENERAL PLAN POLICIES AND RIGHT-TO-FARM ORDINANCE**

Approval of the Vierra Dairy Expansion project promotes the goals, objectives, and policies included in the 2030 Merced County General Plan. The Economic Development Element acknowledges that Merced County is largely dependent on agriculture, and Goal ED-2 seeks to *“Support the existing agricultural economy while expanding infrastructure and existing/ new industries in order to increase employment opportunities and attract new investment.”*

The Land Use and Agricultural Elements seek to protect and preserve agricultural lands and uses. Goal 2 of the Land Use Element is “*Preserve, promote, and expand the agricultural industry in Merced County.*” Goals 1 through 3 of the Agricultural Element include:

*Goal AG-1: Maintain the financial viability of the agricultural sector by encouraging expansion of commercial agriculture, attracting new agricultural support and value added industries, and promoting locally-grown commodity sales.*

*Goal AG-2: Ensure the long-term preservation and conservation of land used for productive agriculture, potentially-productive agricultural land, and agricultural-support facilities.*

*Goal AG-3: Minimize conflicts between productive agricultural areas and urban land uses, and discourage the parcelization and conversion of large agricultural holdings into rural residential parcels or urban uses.*

This Project is consistent with these goals, thus encouraging continued agricultural use of land in the County. This Project is also consistent with the 2000 Merced County General Plan, which was in effect at the time of project application.

The development of the Project on land in agricultural use will also further promote the intent of the Merced County Right-to-Farm Ordinance (Merced County Code, Chapters 17.08.080 and 17.12.070) that encourages the County to “protect agricultural land, operations, and facilities from conflicting uses due to the encroachment of incompatible, non-agricultural uses of the land in agricultural areas of the county.”

For the reasons set forth above, the Planning Commission finds the ability of the Project to implement other elements of the General Plan and the County’s Right to Farm Ordinance outweighs its environmental impacts.