

CEQA FINDINGS OF FACT
and
STATEMENT OF OVERRIDING CONSIDERATIONS
OF THE
MERCED COUNTY PLANNING COMMISSION
FOR THE
JOHN B. PIRES DAIRY EXPANSION PROJECT
ENVIRONMENTAL IMPACT REPORT

NOVEMBER 2011

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I. INTRODUCTION

The Environmental Impact Report (“EIR”) prepared for the John B. Pires 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”) (Pub. Resources Code, § 21000 *et seq.*) and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 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 §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 John B. Pires Dairy Expansion project. If the Project can be defined as having significant impacts on the environment, then an EIR must be prepared.

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 Department of Planning and Community Development (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

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 §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

“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

“CMP” means Conservation Management Practices

“CNMP” means Comprehensive Nutrient Management Plan

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

“CDFG” means California Department of Fish and Game

“CO” means carbon monoxide

“CO₂” 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 John B. Pires Dairy Expansion project, dated August 2011

“District” means San Joaquin Valley Air Pollution Control District

“EIR” means Environmental Impact Report for the John B. Pires Dairy Expansion project, including the DEIR and the FEIR

“EPA” means U.S. Environmental Protection Agency

“FEIR” means Final Environmental Impact Report for the John B. Pires Dairy Expansion project, dated October 2011

“GHG” means Greenhouse Gas

“IS” means Initial Study

“MMP” means Mitigation Monitoring Program for the John B. Pires Dairy Expansion project, dated November 2011

“NOP” means Notice of Preparation

“NO_x” means nitrogen oxides

“NRCS” means California Natural Resource Conservation Service

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

“PM₁₀” means particulate matter with a diameter of 10 microns or less

“PM_{2.5}” means particulate matter with a diameter of 2.5 microns or less

“PRD” means Permit Registration Documents

“PTO” means Permit to Operate

“RFEIR” means Revised Final Environmental Impact Report for the John B. Pires Dairy Expansion project, dated November 2011

“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

“TDS” means Total Dissolved Solids

“USFWS” means United States Fish and Wildlife Service

“VOC” means Volatile Organic Compounds

“WDRs” means Waste Discharge Requirements

IV. PROJECT DESCRIPTION

A. PROJECT DESCRIPTION

The applicant has filed Conditional Use Permit CUP10-007 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 6,050 animals. This would represent an increase of 1,927 animals from existing numbers (4,123 existing animals). The proposed project would include construction of approximately 120,000 square feet of heifer pens and a cattle shade adjacent to the north edge of the operation. Construction of the proposed structures, in addition to ancillary dirt roadways and operation staging areas, would convert approximately 12 acres of existing cropland to active dairy facilities, increasing the area of operation from 53 to 65 acres. An existing shade structure and pen would also be converted to a freestall barn. Wastewater would continue to be mixed with irrigation water and applied to the land. With conversion of 12 acres of existing cropland for construction of new active dairy facilities, there would be 442 acres cropped in oat silage, corn silage, sudangrass silage available for disposal of dairy wastewater (DEIR, p. 3-9).

B. PROJECT LOCATION

The existing John B. Pires Dairy and the site of the proposed expansion are located on approximately 53 acres of 10 parcels totaling 526 acres in an unincorporated area of Merced County on the east side of Kniebes Road, 850 feet north of Highway 140, approximately 0.6 miles northeast of the City of Gustine city limits. The project's location is within the central California region (see DEIR Figure 3-1 and Figure 3-2). The project site is located on 10 parcels, identified as Merced County Assessor's Parcel Numbers (APN) 063-020-004 (79 acres) (site of active dairy facilities and proposed expansion), -013 (35 acres), -025 (113 acres), -026 (67.5 acres), -027 (29.3 acres), -028 (5 acres), -029 (21 acres), -031 (154.7 acres), 054-130-045 (7.4 acres), and 063-040-007 (14 acres). The project site is located in Section 4, Township 8 South, Range 9 East, Mount Diablo Base and Meridian; 37°15'58.15"N, 120°58'57.80"W (DEIR, p. 3-1).

C. EXISTING SITE CONDITIONS

The existing animal confinement facility is located on approximately 53 acres of the 526-acre project site. The existing facilities within the 53-acre area include the following: milk barn, hospital barn, freestall barns and associated corrals, 2 silage pads, hay barn, shop, commodity barn, 1 settling basin, 1 wastewater storage pond. Approximately 454 acres of the project site are currently used for the production of crops and application of manure process water. The remaining 19 acres of the 526-acre site consist of on-site roadways and ancillary uses to the dairy, in addition to on-site residences. As established at the time of preparation and circulation of the Initial Study/Notice of Preparation (April 2011), there are approximately 4,123 animals at the dairy (2,369 milk cows and 1,754 support stock) (DEIR, p. 3-2).

There are several off-site single-family residences associated with other agricultural operations located on parcels to the north, south, east, and west of the project site. Several of these off-site residences are 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 3-4). The closest residences are located approximately 1,000 feet to the north and 450 feet to the south of active dairy facilities. Other surrounding uses include: the Gustine Airport and wastewater treatment facility approximately 0.9 miles southeast of the project site; dairy facilities located approximately 0.5 miles to the north and to the west of the project site; the Kesterson Unit of the San Luis Wildlife Refuge located over one mile northeast of active dairy facilities (see DEIR Figure 3-5); and the City of Gustine city limits and the Specific Urban Development Plan (SUDP) boundary located 0.6 miles and 0.25 miles west, respectively (DEIR, p. 3-6).

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 also 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 can 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, p. 3-9).

E. DISCRETIONARY ACTIONS

In order to approve the John B. Pires Dairy Expansion project, the Planning Commission must:

- Certify the Environmental Impact Report; and,
- Approve Conditional Use Permit No. CUP10-007.

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

In order for the John B. Pires Dairy Expansion project to be constructed and operated, the State of California, Regional Water Quality Control Board must:

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

In order for the John B. Pires 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 John B. Pires Dairy Expansion project.

F. MINISTERIAL ACTIONS

In order for the John B. Pires Dairy Expansion project to be constructed, the State Water Resources Control Board must:

- Approve a General Construction Activity Storm Water Permit for the John B. Pires Dairy Expansion project.

In order for the John B. Pires Dairy Expansion project to be constructed and operated, the SJVAPCD must:

- Approve a modification to the existing Conservation Management Practices (CMP) Plan for the John B. Pires Dairy Expansion project.

In order for the John B. Pires Dairy Expansion project to be constructed and operated, the Merced County Department of Planning & Community Development must:

- Issue a building permit for the proposed dairy expansion.
- Issue a demolition permit to remove existing mobile home structures on site, or legalize existing structures following submittal of plans for the mobile home foundation systems by the project applicant.
- Issue an Additional Dwelling Occupancy Monitoring Permit (ADOMP) for residences in excess of one allowed by right per parcel.

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

- 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 John B. Pires Dairy Expansion project to be constructed and operated, the Merced County Division of Environmental Health will require:

- A domestic well schematic that shows all wells that provide potable water to family and employee residences, including the number of year-round residents in each dwelling and which well(s) provide water to each residence.
- 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

PROJECT HISTORY

The existing dairy operation was permitted by Merced County on August 12, 1992 under CUP3621 to re-establish a dairy of 944 animal units. The previous operations had been suspended for some time prior to CUP3621. The project applicant has applied to the Merced County Planning and Community Development Department to obtain a Conditional Use Permit. It is the application for the Conditional Use Permit that has triggered the need for compliance with CEQA, and preparation of the EIR. Following discussions with the Merced County Department of Public Works, Road Division, the County Road Division has determined that the proposed project would have a less-than-significant impact on the County roadway system, and a roadway impact assessment would not be required (RFEIR, Chapter 3 Letter C). Two conditions of approval for the proposed project would remain for driveway improvements and street lighting.

In April 2011, an Initial Study (IS) was completed to assess the potential environmental effects resulting from the John B. Pires 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 April 21, 2011, Merced County Department of Planning and Community Development issued a Notice of Preparation (NOP) for the John B. Pires 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
- Biological Resources
- Greenhouse Gas Emissions and Energy
- Hazards (Nuisance Insects)
- Hydrology and Water Quality
- Land Use Compatibility

The Draft John B. Pires Dairy Expansion project EIR (DEIR) was made available for public and agency review and comment for a 45-day review period from August 15, 2011 to September 29, 2011. 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 Planning and Community Development Department. The Planning and Community Development Department received four written comments on the DEIR during the review period.

Subsequent to the receipt of comments on the DEIR, the Planning and Community Development Department prepared a Final EIR that responded to comments received on the DEIR. A Revised FEIR (RFEIR) was later prepared to address one comment letter received on the DEIR that was not previously included in the FEIR. This RFEIR, which incorporates all of the environmental analyses contained in the DEIR (as modified in response to comments) was circulated for public and agency review in November 2011.

Together, the following documents compose the EIR for the John B. Pires Dairy Expansion project:

- DEIR (August 2011)
- RFEIR (November 2011)

Section 15132 of the CEQA Guidelines governs the contents of a FEIR. As required by §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 John B. Pires Dairy Expansion project EIR, these requirements may be found in the following documents:

Guidelines §15132 Content Requirement	DEIR (8/2011)	RFEIR (11/2011)
DEIR	X	
Revisions to DEIR		X
Comments Received on DEIR		X
List of Commentors		X
Responses to Comments		X

VI. RECORD OF PROCEEDINGS

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 John B. Pires Dairy Expansion project;
- The Notice of Preparation (April 21, 2011), 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 August 15, 2011, 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 John B. Pires Dairy Expansion project, including both the DEIR and the RFEIR, 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 November 2, 2011;
- Notice of Public Hearing issued in connection with Planning Commission hearing on the Project, which was issued in November 2011;
- 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, Senior Planner, of the Merced County, Department of Planning & Community Development, 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 John B. Pires 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 John B. Pires 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 John B. Pires Dairy Expansion project (see Pub. Resources Code, § 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

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 Pub. Resources Code, § 21081, subd. (a); CEQA Guidelines, § 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, § 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, § 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, § 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 § 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).

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” (Pub. Resources Code, § 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, § 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, §§ 15093, 15043, subd. (b); see also Pub. Resources Code, § 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 § 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 John B. Pires Dairy Expansion project, the current permitted limit for the dairy established by the County is 944 animal units, and 1,450 milk and dry cows combined as established in the 2005 Report of Waste Discharge (ROWD) submitted by the applicant to the Central Valley Regional Water Quality Control Board (CVRWQCB). However, while the existing herd exceeds these numbers, in accordance with CEQA, the baseline herd to be used in this environmental analysis is the herd count at the time of NOP preparation and circulation in April 2011, comprising a total of 4,123 animals, including 2,369 milk cows.

VIII. LEGAL EFFECTS OF FINDINGS

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 Program (MMP) 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 John B. Pires Dairy Expansion project are binding upon the project applicant at the time of approval of the John B. Pires Dairy Expansion project.

IX. MITIGATION MONITORING PROGRAM

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

X. LESS THAN SIGNIFICANT ENVIRONMENTAL IMPACTS

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 John B. Pires Dairy Expansion project, and summarized in the DEIR on pages 12-8 and 12-9.

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:

1. Less-than-Significant Impact AQ-1: Construction-related emissions (ROG, NO_x, CO, and Fugitive Dust). Construction activities associated with the John B. Pires Dairy Expansion project would result in short-term air emissions including ROG, CO, SO₂, NO_x, 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 5-17).
2. Less-than-Significant Impact AQ-2: Carbon monoxide (CO) emissions from operational equipment and increased traffic. Operation of equipment used at the John B. Pires Dairy Expansion for processing and farming would result in the emissions of carbon monoxide. Because the magnitude of emissions from the John B. Pires Dairy Expansion would not exceed SJVAPCD significance criteria, this would be a less-than-significant impact (DEIR, p. 5-18).
3. Less-than-Significant Impact AQ-4: PM₁₀ and PM_{2.5} emissions from fugitive dust during project operations. Operations from the John B. Pires Dairy Expansion would result in fugitive dust (PM₁₀ and PM_{2.5}) 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. 5-22 to 5-24).
4. Less-than-Significant Impact AQ-5: Hazardous pollutant emissions from project operations. The proposed dairy would be a potential source of hazardous air pollutants from animal movement, manure management, and on-site mobile sources. As proposed, this project would not exceed the thresholds for health risks, and the project would not generate a potentially significant hazardous air pollutant impact (DEIR, pps. 5-25 to 5-26).
5. Less-than-Significant Impact AQ-7: Ambient Air Quality. Operations from the John B. Pires Dairy 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. 5-31 to 5-33).
6. Less-than-Significant Impact BIO-3: Potential selenium and heavy metals effects to biological resources. The use of supplemented feeds at the proposed John B. Pires Dairy Expansion could result in introduction of heavy metals into the environment by the application of dairy waste to agricultural fields and retention in ponds. However, project compliance with Animal Confinement Ordinance (ACO) and CVRWQCB regulations for waste, soil, and groundwater monitoring and remediation would reduce this impact to less than significant (DEIR, pps. 6-23 to 6-24).
7. Less-than-Significant Impact BIO-6: Loss and/or modification to wetlands. Construction activities and land conversions for the John B. Pires Dairy Expansion would not result in substantial adverse effects to wetlands since there are none on site (DEIR, p. 6-28).
8. Less-than-Significant Impact BIO-7: Loss and/or degradation of riparian and vernal pool habitat. Implementation of the proposed John B. Pires Dairy Expansion project would not result in the loss of riparian or vernal pool habitat since there are none on site (DEIR, p. 6-29).

9. Less-than-Significant Impact GHG-1: Greenhouse gas emissions from project construction and operation. Construction and operation of the John B. Pires Dairy Expansion project would result in greenhouse gas emissions from direct and indirect sources. Because the proposed project would not exceed significance thresholds for greenhouse gas (GHG) emissions, there would be a less-than-significant impact (DEIR, pps. 7-16 to 7-19).
10. Less-than-Significant Impact HYD-2: Degradation of surface water quality from operation of the John B. Pires Dairy Expansion. The proposed project would not result in the degradation of surface water quality during project operations because no surface water discharge is proposed (DEIR, p. 9-19).
11. Less-than-Significant Impact HYD-4: Depletion of groundwater resources. Implementation of the proposed project would not result in depletion of groundwater resources since there would be an overall reduction of groundwater use with the proposed dairy expansion (DEIR, pps. 9-24 to 9-25).
12. Less-than-Significant Impact HYD-5: Modification of surface water drainage patterns and an increase in runoff. Because implementation of the proposed dairy expansion project would not modify surface water drainage patterns, it would not cause localized off-site migration of runoff, erosion, and/or flooding (DEIR, pps. 9-25 to 9-26).
13. Less-than-Significant Impact HYD-6: Exposure to flood risks. Because the project site would not 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 recently applied, project implementation would not cause impacts to surface water quality during flood events (DEIR, pps. 9-26 to 9-27).
14. Less-than-Significant Impact HYD-8: Violation of regulations related to the handling of waste. Because the project would be consistent with all applicable regulations, implementation of the proposed John B. Pires Dairy Expansion project would not result in the violation of adopted regulations related to waste discharge (DEIR, pps. 9-28 to 9-29).
15. Less-than-Significant Impact LU-1: Consistency with Merced County setback standards. As proposed, the John B. Pires Dairy Expansion project would be consistent with Merced County 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 by obtaining a setback waiver, this would be considered a less-than-significant impact (DEIR, pps. 10-18 to 10-19).
16. Less-than-Significant Impact LU-3: Land use compatibility with existing wildlife uses adjacent to the project area. Implementation of the proposed John B. Pires Dairy Expansion project could be incompatible with adjacent wildlife activities. However, because the proposed dairy expansion is consistent with the setback requirements of the Merced County ACO, and the adjacent land uses consist of similar agricultural activities to those present on site, this would be a less-than-significant impact (DEIR, pps. 10-21 to 10-22).

17. Less-than-Significant Impact LU-4: Land use compatibility with land uses within SUDP boundary. Implementation of the proposed John B. Pires Dairy Expansion project could be incompatible with existing land uses adjacent to the proposed project located within the City of Gustine SUDP boundary. However, since the proposed expansion is consistent with the setback requirements of the Merced County ACO, and the existing land uses consist of similar agricultural activities to those present on site, this would be a less-than-significant impact (DEIR, pps. 10-22 to 10-23).
18. 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 this EIR to reduce and minimize the impact to renewable and non-renewable resources (DEIR, p. 12-10). 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.
19. 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 (DEIR, p. 12-11), implementation of the project would result in a less-than-significant impact.

XI. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The DEIR identified several significant environmental effects (or “impacts”) that approval and implementation of the John B. Pires 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 John B. Pires Dairy Expansion project is set forth in pages 5-1 through 5-13 of the DEIR, DEIR Appendices D, E, F, and G, and RFEIR pages 4-1 through 4-3. 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 and Nitrogen Oxides) emissions from dairy operations, farm equipment, and increased traffic (DEIR, pps. 5-19 to 5-22)*

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

Explanation:

Dairies that exceed the threshold of 5 tons/year of VOCs must obtain a Permit to Operate from the SJVAPCD as well as undergo New Source Review (Rule 2201) requirements to determine if new emission sources trigger Best Available Control Technology (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 John B. Pires Dairy Expansion are presented in DEIR Table 5-5. VOC emissions associated with the proposed expansion would be 54.63 tons/year, with an increment of increase of 13.73 tons/year over existing operations. The estimated total NO_x emissions from expanded project operations would be 4.01 tons/year, or a net decrease of 1.67 tons/year of NO_x emissions (DEIR, p. 5-21).

The proposed dairy expansion would exceed SJVAPCD permit criteria of five tons/year of VOC, and would trigger New Source Review and BACT; an ATC/PTO would be required prior to the initiation of construction. As part of the PTO, the dairy operator is required to submit a PTO application detailing an emission mitigation plan listing all chosen BACT/BARCT (Best Available Retrofit Control Technology) mitigation measures. The SJVAPCD will consider implementation of the selected mitigation measures as conditions of the ATC permit required by District Rule 2201.

As stated above, VOC/ROG emissions for the dairy expansion project would increase by 13.73 tons/year. Because the increase of 13.73 tons/year of VOCs would exceed the SJVAPCD significance thresholds, the project-level impact would be significant (DEIR, pps. 5-21 to 5-22).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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-3:

The proposed dairy expansion would exceed SJVAPCD permit thresholds for ROG emissions; therefore, in order to reduce emissions to below SJVAPCD permit thresholds, prior to the initiation of operations, the applicant is required to 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 DEIR; and Rules 4701 and 4702, Internal Combustion Engines.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the John B. Pires 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 John B. Pires Dairy Expansion project by requiring the implementation of measures to reduce ozone precursor emissions. This would be a significant and unavoidable impact for the following reasons: the BACT/BARCT measures required by the above Mitigation Measure AQ-3 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; 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§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-6: Adverse odor from project operations (DEIR, pps. 5-26 to 5-30)

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

Explanation:

Operations and manure management at the John B. Pires 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). The closest residences are located approximately 1,000 feet to the north and 450 feet to the south of active dairy facilities (see Figure 3-4 in DEIR Chapter 3, *Project Description*).

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 30 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. 5-27).

As stated above, the nearest residences are located approximately 1,000 feet north and 450 feet south of existing facilities (see DEIR Figure 10-1). While the proposed heifer pens would shorten the distance to the residence to the north from 1,000 feet to 700 feet (see DEIR Figure 10-1), in accordance with Merced County Code Chapter 18.48.040 (B)(2), a Merced County Setback Waiver has been signed by the owner of the off-site residence to allow a reduced setback distance. No odor complaints have been reported at the John B. Pires Dairy and submitted to Merced County Division of Environmental Health (DEH) (Merced County Public File Review, June 28, 2011).

Chapters 18.48.050 H, 18.48.055 C.8.a, and 18.48.040 B.1 of the ACO (see DEIR 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. 5-28).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact from adverse odors is expected to be significant since the nearest residence is located less than 1,000 feet from proposed active dairy facilities, and there is 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 AQ-6a:

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 and corrals at a frequency that would 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-6b:

Implement the land use control measures set forth in Mitigation Measure LU-2a and HAZ-1c.

Mitigation Measure AQ-6c:

Implement the nuisance control measures set forth in Mitigation Measures HAZ-1 and HAZ-2.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the John B. Pires 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 John B. Pires Dairy Expansion project by requiring housekeeping and management measures and providing a physical barrier for the dispersal of odors to nearby residents located to the north of the project site. Because a Merced County Setback Waiver has been signed by the owner of the off-site residence to the north to allow a reduced 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§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 John B. Pires 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 6-21)

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 nest approximately 5.5 miles from the project site. No potential nest trees are present on the project site, and no trees are proposed for removal with construction of the proposed dairy expansion. However, because approximately 12 acres of cropland that has been previously cultivated in low growing row crops would be converted to active dairy facilities, and Swainson's hawks are known to hunt for prey up to 18 miles from their nest tree, the loss of Swainson's hawk foraging habitat may occur. According to the California Department of Fish and Game (CDFG) Staff Report regarding Mitigation for Impacts to Swainson's Hawks (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) (DEIR, pps. 6-20 to 6-21).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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, and 12 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-1:

Prior to project approval, the project applicant shall obtain necessary approval and authorization from USFWS and/or CDFG for the following mitigation for loss of Swainson's hawk habitat. Based on CDFG requirements, for projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, the project applicant must provide 0.5 acres of Habitat Management (HM) land for each acre of urban development authorized (0.5:1 ratio). The proposed project is expected to develop 12 acres of potential Swainson's Hawk foraging habitat approximately 5.5 miles from an active nest tree; therefore, prior to construction, a total of 6 acres of mitigation lands shall be placed in a conservation easement or fee title and managed for the benefit of the species in perpetuity. Appropriate HM lands include agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk. Preferred foraging habitats for Swainson's hawks include: alfalfa; fallow fields; beet, tomato, and other low-growing row field crops; dry-land and irrigated pasture; rice land (during the non-flooded period); and cereal grain crops (including corn after harvest). Since several of the project parcels are located within the Grasslands Wildlife Management Area, following consultation and approval from the USFWS Ecological Office, a conservation easement may be established with the Grasslands Wildlife Management Area for this mitigation requirement. Alternatively, the project applicant can purchase Swainson's hawk credits through an approved mitigation bank.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measure is rejected and revised as noted under substitute mitigation below. The Planning Commission further finds that the above measure is deficient in the identified timing of implementation, as it would be infeasible for the County to require and monitor for this measure prior to approval of the project. Additionally, the Planning Commission finds that the above-stated measure does not include a requirement that the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game as appropriate approve the measure as meeting agency requirements prior to its implementation. The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Revised Mitigation

Mitigation Measure BIO-1a:

Prior to obtaining a building permit or any expansion of the dairy herd size beyond the 10 percent threshold (or 4,535 cows) pursuant to Section 18.48.040 of the Animal Confinement Ordinance, which ever comes first, the project applicant shall obtain prior written approval from the U.S. Fish and Wildlife Service (USFWS) and from the California Department of Fish and Game (CDFG) for each proposed biological mitigation measure that the mitigation measures satisfy the U.S. Endangered Species Act and the California Endangered Species Act.

Mitigation Measure BIO-1b:

Prior to obtaining a building permit, the project applicant shall obtain necessary written approval and proof of authorization from CDFG and/or USFWS for the following mitigation for loss of Swainson's hawk habitat. Based on CDFG requirements, for projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, the project applicant must provide 0.5 acres of Habitat Management (HM) land for each acre of urban development authorized (0.5:1

ratio). The proposed project is expected to develop 12 acres of potential Swainson's Hawk foraging habitat approximately 5.5 miles from an active nest tree; therefore, prior to construction, a total of 6 acres of mitigation lands shall be placed in a conservation easement or fee title and managed for the benefit of the species in perpetuity. Management plans shall include e.g., mapping, signage, status reports, photographs. HM agricultural lands shall preclude agricultural activities that are incompatible with the Swainson's hawk and agricultural activities shall be limited to suitable habitat for Swainson's hawk including: alfalfa; fallow fields; beet, tomato, and other low-growing row field crops; dry-land and irrigated pasture; rice land (during the non-flooded period); and cereal grain crops (including corn after harvest). Since several of the project parcels are located within the Grasslands Wildlife Management Area, following consultation and approval from the USFWS Ecological Office, a conservation easement may be established with the Grasslands Wildlife Management Area for this mitigation requirement. Alternatively, the project applicant can purchase Swainson's hawk credits through a CDFG-approved mitigation bank.

Findings on Revised Mitigation

The Planning Commission finds that the above-stated revised mitigation measure is made a condition of approval of the John B. Pires Dairy Expansion project. The Planning Commission finds that the measure as revised would improve the effectiveness of the mitigation by modifying the timing of implementation following project approval but prior to issuance of a building permit, and ensuring approval from from CDFG and USFWS. The Planning Commission further finds that the above measure as revised is appropriate and feasible, and would substantially lessen the potential adverse environmental effects associated with the John B. Pires Dairy Expansion project by requiring compliance with CDFG mitigation requirements to avoid "take" of special status species. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact BIO-2: Loss of foraging and nesting habitat for sensitive bird species including burrowing owl (DEIR, pps. 6-22 to 6-23)

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

Explanation:

Construction and operation of the proposed dairy expansion would result in a loss of foraging and nesting habitat for some special-status and migratory birds. Three birds that are species of concern in California were observed foraging within the boundaries of the project site: tricolored blackbirds, California horned lark, and northern harrier. Special-status species that may be affected include loggerhead shrike, northern harrier, and burrowing owl. Burrowing owls are known to occur along roadsides and in berms on nearby properties. The April 14, 2011 reconnaissance survey included specific searching for burrowing owl and their sign, especially in areas within the footprint of proposed construction. No burrowing owls or their sign were observed on the project site during the biological reconnaissance. No nesting habitat is present on the project site for tree-nesting raptors, and no special-status raptor nests have been recorded in the CNDDDB within five miles of the proposed project site. However, because approximately 12 acres of cropland that has been previously cultivated in low growing row crops would be converted to active dairy facilities, the loss of foraging and nesting habitat for sensitive bird species including burrowing owl may occur (DEIR, p. 6-22).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 the dairy expansion would be constructed on land that has been previously cultivated in low growing row crops, and the loss of foraging habitat may occur for special status and migratory bird 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-1, which requires that 6 acres of mitigation lands shall be placed in a conservation easement or fee title and managed for the benefit of sensitive bird species in perpetuity.

Mitigation Measure BIO-2b:

A preconstruction survey for burrowing owls shall occur over all areas of ground disturbance proposed for dairy construction in accordance with the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (The California Burrowing Owl Consortium, 1993). If possible, buffer areas around the occupied burrows should 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 buffer area.

Mitigation Measure BIO-2c:

Prior to construction, a Worker Awareness Program (environmental education) must be conducted to inform project workers of their responsibilities regarding sensitive biological resources.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measures are rejected and revised as noted under substitute mitigation below. The Planning Commission further finds that the above measure deficient in that it does not correctly identify Mitigation Measure BIO-1 as modified in these Findings, and that Mitigation Measure BIO-1 is deficient in the identified timing of implementation, as it would be infeasible for the County to require and monitor for this measure prior to approval of the project. Additionally, the Planning Commission finds that the above-stated measure does not include a requirement that the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game as appropriate approve the measure as meeting agency requirements prior to its implementation. The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Revised Mitigation

Mitigation Measure BIO-2a:

Implement Mitigation Measure BIO-1a and BIO-1b.

Mitigation Measure BIO-2b:

A preconstruction survey for burrowing owls shall occur over all areas of ground disturbance proposed for dairy construction in accordance with the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (The California Burrowing Owl Consortium, 1993). If possible, buffer areas around the occupied burrows should 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 buffer area.

Mitigation Measure BIO-2c:

Prior to construction, a Worker Awareness Program (environmental education) must be conducted to inform project workers of their responsibilities regarding sensitive biological resources.

Findings on Revised Mitigation

The Planning Commission finds that the above-stated revised mitigation measures are made conditions of approval of the John B. Pires Dairy Expansion project. The Planning Commission finds that the measure as revised would improve the effectiveness of the mitigation by modifying the timing of implementation following project approval but prior to issuance of a building permit, and ensuring approval from from CDFG and USFWS. 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 John B. Pires Dairy Expansion project by requiring dedication of mitigation lands for sensitive bird species foraging habitat, 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact BIO-4: Loss of habitat for the San Joaquin kit fox and/or American badger (DEIR, pps. 6-24 to 6-27)

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

Explanation:

Potential habitat for the San Joaquin Kit fox and American badger at the project site may include den sites used for shelter that can be located in flat terrain or gently sloping hills, in washes, drainages, or berm areas. However, there is no evidence, or signs of evidence (i.e. tracks, scat), on the project site of den entrances, or known den sites or burrows, for either San Joaquin Kit fox or American badger. While the San Joaquin Kit fox and the American badger are known to occur within six miles of the project site at the San Luis National Wildlife Refuge, no sign of either the San Joaquin Kit fox or American badger were observed on the dairy expansion project site. 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. However, there is no suitable foraging or den habitat on

the 12 acres of cropland to be converted to active dairy facilities. Conversion of this area of cropland would not directly impact den habitat, but construction vehicles and lighting could adversely impact potential transient foragers (DEIR, p. 6-24).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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, the kit fox may occur on site as transient foragers, and potential 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-4:

Prior to any construction activities within the area proposed for dairy construction, the project applicant must 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 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 2-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 Game (CDFG) 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 4-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 CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG 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 CDFG 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 CDFG 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 rejected and revised as noted under substitute mitigation below. The Planning Commission further finds that the above measure deficient in that it does not include approval of the measures by CDFG and USFWS to ensure satisfaction of the U.S. Endangered Species Act and the California Endangered Species Act.

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

Revised Mitigation

Mitigation Measure BIO-4a:

Implement Mitigation Measure BIO-1a.

Mitigation Measure BIO-4b:

Prior to any construction activities within the area proposed for dairy construction, the project applicant must 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 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 2-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 Game (CDFG) 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 4-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 CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or CDFG Central Region Habitat Conservation Branch (559) 243-4014. The Service should be contacted at the numbers below.
12. The Sacramento Fish and Wildlife Office and CDFG 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 CDFG contact is CDFG Central Region Habitat Conservation Branch at 1130 East Shaw Avenue Fresno, CA 93710, (559) 243-4014.
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 Revised Mitigation

The Planning Commission finds that the above-stated revised mitigation measures are made a condition of approval of the John B. Pires Dairy Expansion project. The Planning Commission finds that the measure as revised would improve the effectiveness of the mitigation by ensuring approval from from CDFG and USFWS prior to obtaining a building permit. 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 John B. Pires Dairy Expansion project by requiring preconstruction surveys for the kit fox and badger, preventative measures to avoid potential impacts to these species, and the required action should any animal be encountered. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact BIO-5: *Interference with animal migratory routes and night-active wildlife (DEIR, pps. 6-27 to 6-28)*

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

Explanation:

There is potential for migratory birds, especially ground nesters, to breed within the project site. Further, the existing cropland provides potential foraging habitat for a variety of special-status and migratory bird species as well as for small ground dwelling mammals that are prey species for special status raptors (DEIR, p. 6-27).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 since the project could result in increased artificial night-lighting that could disrupt foraging activities of night-active species. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure BIO-5a:

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:

- Anticoagulant bait shall only be applied to ground squirrel burrows not occupied by burrowing owls and shall be applied according to manufacturer guidelines.
- 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 Game.

Mitigation Measure BIO-5b:

Project-related lighting shall be minimized and directed away or shielded from sensitive areas. 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 measures are rejected and revised as noted under substitute mitigation below. The Planning Commission further finds that the above measure deficient in that it does not include approval of the measures by CDFG and USFWS to ensure satisfaction of the U.S. Endangered Species Act and the California Endangered Species Act. The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Revised Mitigation

Mitigation Measure BIO-5a:

Implement Mitigation Measure BIO-1a.

Mitigation Measure BIO-5b:

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:

- Anticoagulant bait shall only be applied to ground squirrel burrows not occupied by burrowing owls and shall be applied according to manufacturer guidelines.
- 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 Game.

Mitigation Measure BIO-5c:

Project-related lighting shall be minimized and directed away or shielded from sensitive areas. 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 Revised Mitigation

The Planning Commission finds that the above-stated revised mitigation measures are made conditions of approval of the John B. Pires Dairy Expansion project. The Planning Commission finds that the measure as revised would improve the effectiveness of the mitigation by ensuring approval from from CDFG and USFWS prior to obtaining a building permit. 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 John B. Pires Dairy Expansion project by requiring pre-construction surveys to occur prior to and during construction; protection measures to occur if potential breeding and nesting areas are discovered; and 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

C. GREENHOUSE GASES AND ENERGY

Setting information regarding Greenhouse Gases and Energy for the John B. Pires Dairy Expansion project is set forth in pages 7-1 through 7-14 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 7-15. 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. 6-19 to 6-20)

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

Explanation:

Proposed dairy and additional agricultural operations at the John B. Pires Dairy Expansion project site require 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. 7-19).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 in 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 John B. Pires 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 John B. Pires 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

D. HAZARDS

Setting information for Hazards for the John B. Pires Dairy Expansion project is set forth in pages 8-1 through 8-9 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 page 8-10. 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. 8-11 to 8-14)

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

Explanation:

Existing land uses on the project site include an existing dairy facility and irrigated cropland (i.e. oat / corn / sudan grass silage) to the east and smaller fields to the west. Adjacent properties to the immediate north and west are also in agricultural uses, such as a dairy facility located approximately 0.5 miles to the north, and field cropland with some rural residential uses to the west. The dairy facility and proposed expansion area are surrounded on all sides by low-growing forage row crops with some ruderal vegetation occurring along the agricultural drains and roadsides (see Figure 6-1 in DEIR Chapter 6, *Biological Resources*). The presence of low-growing forage row crops and other uses with few heterogeneous vertical structures, such as larger trees surrounding the dairy (areas), is likely to result in greater dispersal of house and stable flies from the dairy operation. The John B. Pires Dairy Expansion project area has few, if any, larger trees, except some medium-sized trees used for entrance landscaping. Instead, the majority of the project site (approximately 454 acres) consists of intensively managed, cultivated, and flood-irrigated silage fields, and other lands use for

the production of forage crops and the application of manure process water. The operators of the John B. Pires Dairy Expansion currently apply pest spray control as necessary to reduce the incidence of insect pests, and would continue to do so with implementation of the proposed expansion project (DEIR, p. 8-11).

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 (ponds, corrals, barns) and rural residences. As discussed in DEIR Chapter 10, *Land Use Compatibility*, the nearest residences are located approximately 1,000 feet north and 450 feet south of existing facilities (see DEIR Figure 10-1). While the proposed heifer pens would shorten the distance to the residence to the north from 1,000 feet to 700 feet, in accordance with Merced County Code Chapter 18.48.040 (B)(2), a Merced County Setback Waiver has been signed by the owner of the off-site residence to allow a reduced setback distance.

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 DEIR Appendix C). No Vector Control Plan has been prepared for the John B. Pires Dairy Expansion as of the date of the DEIR.

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 by requiring the annual submission of compliance reports and periodic random inspections. The Division also responds to complaints from neighbors of such facilities as described above. No fly complaints have been reported at the John B. Pires Dairy and submitted to DEH (Merced County Public File Review, June 28, 2011) (DEIR, p. 8-11).

As required by the ACO, DEH must implement the procedures outlined in DEIR page 8-12 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 - HAZ-1c (DEIR, p. 8-12).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 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 applicant 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. Regular scraping of corrals 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;
 - 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).

Mitigation Measure HAZ-1c:

Prior to issuance of a building permit, the applicant shall plant a triple row of large-leaf, fast growing trees along the northern boundary of the project site adjacent to the existing off-site residence to the north. If a deciduous tree species is chosen, it will be important to ensure leaf coverage of the tree during the fly seasons. Until the planted trees have grown to a height of 12 feet, the on-site fields adjacent to the off-site residences shall be planted in corn during the summer growing season to provide a vertical resting surface to intercept flies generated by the dairy.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated Mitigation Measure HAZ-1b is rejected and revised as noted under substitute mitigation below; Mitigation Measure HAZ-1a and HAZ-1c would remain unchanged. The Planning Commission further finds that the above measure deficient in that it does not identify the minimum amount of corral scraping required by the Animal Confinement Ordinance (Mitigation Measure HAZ-1b(1)(e)), nor does it specify Animal Confinement Ordinance requirements for timing of carcass removal (Mitigation Measure HAZ-1b(2)(a)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Revised Mitigation

Mitigation Measure HAZ-1a:

Prior to obtaining a building permit, the project applicant 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).

Mitigation Measure HAZ-1c:

Prior to issuance of a building permit, the applicant shall plant a triple row of large-leaf, fast growing trees along the northern boundary of the project site adjacent to the existing off-site residence to the north. If a deciduous tree species is chosen, it will be important to ensure leaf coverage of the tree during the fly seasons. Until the planted trees have grown to a height of 12 feet, the on-site fields adjacent to the off-site residences shall be planted in corn during the summer growing season to provide a vertical resting surface to intercept flies generated by the dairy.

Findings on Revised Mitigation

The Planning Commission finds that the above-stated revised mitigation measures are made conditions of approval of the John B. Pires Dairy Expansion project. The Planning Commission finds that the measure as revised would clarify requirements of the Animal Confinement Ordinance in regards to corral scraping and removal of animal carcasses. 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 John B. Pires Dairy Expansion project by requiring housekeeping and management measures and providing a physical barrier for the dispersal of nuisance insects to nearby residents located to the north of the project site. Because a Merced County Setback Waiver has been signed by the owner of the off-site residence to the north to allow a reduced setback distance, and no nuisance complaints have been recorded for the existing dairy facility, with implementation of the above mitigation measures, the potential impact from nuisance flies would be reduced to less than significant. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact HAZ-2: Increased mosquito production (DEIR, pps. 8-14 to 8-16)

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

Explanation:

Potential habitat for mosquitoes at the John B. Pires Dairy Expansion project includes the existing on-site waste management system, which consists of a wastewater storage pond and settling basin. Undesirable numbers of mosquitoes could occur if these facilities are improperly managed so that weeds build up along the sides of basins, mats of solids float within lagoons, or if water levels of “beach areas” of lagoons are not fluctuated to alternately flood or dry out areas where insects lay eggs. Lagoons that become mosquito breeding grounds are those with less than two feet of free bank space (freeboard) from surface to top of levee, that have “dead” corners where little wind action can occur, or where floating solids are not mechanically corralled to one end of the lagoon and removed (DEIR, p. 8-14).

In addition to the requirement for a vector control plan set forth in Impact HAZ-1, Sections 18.48.050 H, and 18.48.060 B, C, J, K, and S of the ACO contain provisions related to mosquitoes (see DEIR Appendix C). The Merced County Mosquito Abatement District provides guidelines for the construction and management of dairy wastewater systems to prevent significant mosquito production (outlined in DEIR Chapter 8 Regulatory Framework). The proposed project facilities are

in compliance with all but one of the provisions of the Mosquito Abatement District and the ACO related to site design to control mosquitoes. Both the existing wastewater storage pond and the proposed settling basin exceed the dimensions outlined in the ACO (Chapter 18.48.060 J) and those recommended by the Mosquito Abatement District. These guidelines state that wastewater holding ponds should not exceed 100 feet in width and settling basins should not exceed 60 feet in width. The existing wastewater holding pond for the project is approximately 780 feet wide by 1,230 feet long, and the existing settling basin to the south is 440 feet wide by 850 feet long. While the existing wastewater pond and proposed settling basin are located greater than 1,000 feet (each over 1,500 feet away) from any surrounding off-site residence, reducing the potential for nuisance conditions due to mosquitoes from the ponds, the oversized settling basin and retention pond may incur increased treatment costs for the District (DEIR, p. 8-14).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to nuisances from mosquitoes is expected to be significant since the existing wastewater holding pond and settling basin do not follow the ACO guidelines and could result in an increase in mosquitoes, and no vector control plan has been prepared to date. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure HAZ-2a:

As required by Mitigation Measure HAZ-1a, prior to obtaining a building permit, the project applicant 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-2b:

The vector control plan for mosquitoes required by the Merced County ACO shall contain, but not be limited to, the following operational measures to be implemented during project operations as identified by University of California Cooperative Extension (UCCE 1993):

- Owners shall be responsible for weed and floatage control.
- Separator bypass drains must be equipped to prevent pond floatage.
- Solids floating on the surface of ponds and lagoons shall be removed no less frequently than weekly.
- Lagoon/Pond-to-field discharges shall not stand more than 4 days.

Mitigation Measure HAZ-2c:

If requested, the project applicant shall pay any excess treatment cost related to the oversized wastewater holding pond and settling basin, to be expended by the Mosquito Abatement District.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the John B. Pires 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 John B. Pires Dairy Expansion project by requiring operational measures to reduce mosquito production and payment of excess treatment costs expended by the Mosquito Abatement District, if requested. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact HAZ-3: Contamination from manure pathogens during project operations (DEIR, pps. 8-16 to 8-17)

Finding: This would be a significant and unavoidable impact

Explanation:

The proposed dairy expansion would increase the dairy herd size from 2,369 milk cows and 1,754 support stock for a total of 4,123 animals to 3,200 milk cows and 2,850 support stock for a total of 6,050 animals, and would result in an increased volume of manure and associated pathogens produced at the project site associated with the additional 1,927 animals. 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 pathogen transport and contamination of groundwater (Impact HYD-3) and water supply wells (Impact HYD-7) at the project site are evaluated in DEIR Chapter 9, *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. Therefore, there is the potential for over-application of manure or surface water runoff from the receiving agricultural fields. Potential impacts to surface water quality at these off-site fields would be reduced since a significant amount of adsorption of nutrients to soil particles and inactivation of pathogenic organisms would be expected to occur in the fields (DEIR, p. 8-14).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 groundwater monitoring is required at non-dairy facilities 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 applicant 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.
- 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 applicant shall provide the most recent analysis of the dry manure, in writing, to the manure recipient. The signed agreement between the project applicant 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 John B. Pires 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 John B. Pires 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 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§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. HYDROLOGY AND WATER QUALITY

Hydrology and Water Quality setting information for the John B. Pires Dairy Expansion project is set forth in pages 9-1 through 9-16 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 9-16. 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 stormwater runoff during project construction (DEIR, pps. 9-18 to 9-19)

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

Explanation:

The proposed project entails the construction of active dairy facilities over approximately 12 acres of existing cropland. Stormwater runoff during the construction period could result in siltation and sedimentation of waterways draining the site. Construction activities disturbing one or more acres are required by the State Water Resources Control Board (SWRCB) to obtain a General Construction Activity Stormwater 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 General Permit has developed specific Best Management Practices (BMP) as well as numeric action levels and numeric effluent limitations in order to achieve minimum federal standards. In addition, the General Permit requires a Storm Water Pollution Prevention Plan (SWPPP) and Rain Event Action Plan (another dynamic, site-specific plan) to be developed, but has removed all language requiring the discharger to implement these plans. Instead, the discharger is required to comply with specific requirements. For new projects commencing on or after July 1, 2010, the applicant must electronically submit Permit Registration Documents (PRD) prior to commencement of construction activities in the Stormwater Multi-Application Report Tracking System (DEIR, p. 9-18).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential for degradation of water quality due to stormwater 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 stormwater 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 be required to submit permit registration documents for the Construction General Permit Order 2009-0009-DWQ to the SWRCB, and comply with all requirements of the permit. The annual fees are based on total disturbed area of the construction

project in acres. A Legally Responsible Person (LRP) shall electronically submit PRDs prior to commencement of construction activities in the Stormwater 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. All requirements of the site specific SWPPP shall be included in construction documents for the project.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measure is made a condition of approval of the John B. Pires 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 John B. Pires 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact HYD-3: Groundwater contamination from operation of the John B. Pires Dairy Expansion (DEIR, pps. 9-20 to 9-24)

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

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 collection required by the General Order, elevated concentrations of nitrates and salts (E.C.) have been observed in irrigation and domestic wells. Concentrations of E.C. and nitrate as nitrogen ranged up to 1.78 mmhos/cm and 13.2 mg/l respectively, exceeding the primary and secondary MCLs established by State and Federal Regulations (see DEIR Table 9-1). Due to the proposed project location in the groundwater basin, the number of nearby domestic and agricultural users, and the fact that elevated levels of pollutants already exist prior to development of the proposed expansion, additional impacts from the proposed dairy expansion are considered possible. Further, groundwater has been identified as shallow as five feet below ground surface at the project site (DEIR, p. 9-20).

Despite attempts to apply pond wastewater at agronomic rates, groundwater quality beneath crop fields may be impacted further above the MCL levels already observed for nitrate (10 mg/L as N and 45 mg/l as NO₃) and beyond agricultural groundwater quality standards (500 mg/L TDS). The NMP allows application of nitrogen at greater rates than the plant crops actually need with a 1.37 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 would be used to assess future changes in water quality and to determine if further degradation occurs (DEIR, p. 9-21).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 John B. Pires 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:

The applicant shall comply with requirements of the NMP/WMP, and implement applicable CVRWQCB requirements as required by an 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 meet agronomic rates for best management farming practice. Nutrient samples shall be collected prior to and during applications periods to confirm agronomic rates and 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:

A best practicable treatment or control (BPTC) evaluation to be submitted to the CVRWQCB shall be completed for the existing ponds prior to operation or final inspection. The evaluation shall meet the applicable requirements of the CVRWQCB and the approved WDR. The BPTC shall set forth a schedule (as short as practicable) for a systematic and comprehensive technical evaluation of the wastewater storage pond and settling pond to determine if the existing construction is protective of groundwater. Should the BPTC determine that additional nutrients are leaking underneath the ponds than previously assumed in the WMP, alterations to the WMP shall be completed to account for the difference in nutrient loading and avoid potential violations. Increased pond sizing or additional ponds to increase treatment surface area may be necessary. Prior to the enlargement of any of the existing storage lagoons or settling ponds; construction of any new lagoon or settling pond; or in the event that the design, construction, operation and/or maintenance of the lagoons and/or ponds is not protective of water quality, the project applicant shall submit a design for review and approval. The design shall conform to either of the options described below:

- Tier 1: A pond designed to consist of a double liner constructed with 60-mil high density polyethylene or material of equivalent durability with a leachate collection and removal system (constructed in accordance with Section 20340 of Title 27) between the two liners would be considered to be consistent with Resolution 68-16.
- Tier 2: A pond designed in accordance with California Natural Resource Conservation Service (NRCS) Conservation Practice Standard 313 or equivalent must demonstrate through submittal of technical reports that the alternative design is protective of groundwater quality as required in the WDR specifications.

Any necessary measures shall be incorporated into the individual WDR issued for the facility.

Mitigation Measure HYD-3d:

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-3e:

As a condition of the WDR issued for the facility, the CVRWQCB may require that monitoring wells within the shallow ground water or a regional ground water system be developed to assess water table gradients and water quality variation over time. A shallow ground water investigation has been proposed in the MWISP to the CVRWQCB submitted for the site. Should additional ground water monitoring wells be required, an addendum to the MWISP will be submitted to the CVRWQCB explaining the rationale for the addendum. Potential reasons for the additions include the need for additional hydraulic gradient information, or extreme changes in the depth to ground water. Monitoring well requirements and a monitoring schedule shall be incorporated into the WDR issued for the facility.

Mitigation Measure HYD-3f:

Groundwater monitoring of on-site wells as required under the General Order and an individual WDR shall be completed. Potential future groundwater monitoring wells shall be sampled as required by the WDR. Surrounding properties with a domestic water supply well within 500 feet of the land application property should be sampled 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-3g:

After project implementation and subsequent groundwater monitoring, if the dairy shows increased groundwater contamination, 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) shall be prepared. The ROWD shall clearly demonstrate that the herd size will not constitute a threat to water quality. If necessary, the CVRWQCB shall revise the WDR issued to the facility.

Mitigation Measure HYD-3h:

The Department of Planning and Community Development shall make a final inspection of the facility prior to the commencement of operations to confirm the dairy meets all 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 John B. Pires 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 John B. Pires Dairy Expansion project because the mitigation measures and any corrective actions deemed necessary by the CVRWQCB will allow ongoing monitoring of any operational changes which may impact the nutrient balance on the John B. Pires Dairy facility. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

Impact HYD-7: Water supply pathways for pollutant migration (DEIR, pps. 9-27 to 9-28)

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

Explanation:

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 Ordinance 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 DEH (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. 9-27).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, 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 John B. Pires 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 John B. Pires 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§15091, 15126.4, subd. (a)(2)). The Planning Commission has been presented with no evidence to contradict their conclusion in this regard.

F. LAND USE COMPATIBILITY

Setting information for Land Use Compatibility for the John B. Pires Dairy Expansion project is set forth in pages 10-1 through 10-17 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 10-18. 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. 10-19 to 10-21)*

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 John B. Pires dairy, the nearest off-site residences are located 450 feet to the south and 1,000 feet to the north of existing facilities. 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 Chapter 8, *Hazards* 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.

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, 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. For the proposed John B. Pires Dairy Expansion, the nearest off-site residences are located 1,000 feet to the north and 450 feet to the south from the site of existing dairy facilities. 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 off-site residences within 1,000 feet unless the off-site property owner provides written permission. The proposed expansion would not reduce the distance to the off-site residence located to the south. While the proposed heifer pens would shorten the distance to the residence to the north from 1,000 feet to 700 feet, a Merced County Setback Waiver has been signed by the owner of the off-site residence to allow a reduced setback distance (DEIR, p. 10-19).

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 of Supervisors 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 (DEIR, p. 10-20).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact due to land use incompatibility is expected to be significant because the active dairy facilities are located less than 1,000 feet from the off-site residence to the south, and the proposed expansion would decrease the distance between the off-site residence to the north from 1,000 to 700 feet, creating an increased potential for nuisance conditions at these residences. The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

Proposed Mitigation

Mitigation Measure LU-2a:

As required by Mitigation Measure HAZ-1c, plant a triple row of large-leaf, fast growing trees along the northern boundary of the project site adjacent to the existing off-site residences to the north and south. If a deciduous tree species is chosen, it will be important to ensure leaf coverage of the tree during the fly seasons. Until the planted trees have grown to a height of 12 feet, the on-site fields

adjacent to the off-site residences shall be planted in corn during the summer growing season to provide a vertical resting surface to intercept flies generated by the dairy.

Mitigation Measure LU-2b:

Implement the odor control measures set forth in Mitigation Measure AQ-6a.

Mitigation Measure LU-2c:

Implement the nuisance control measures set forth in Mitigation Measures HAZ-1a and HAZ-1b, and HAZ-2a, HAZ-2b, and HAZ-2c.

Findings on Proposed Mitigation

The Planning Commission finds that the above-stated mitigation measures are made conditions of approval of the John B. Pires 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 John B. Pires Dairy Expansion project by providing a physical barrier for the dispersal of nuisance insects and odors to nearby residents located to the north of the project site and requiring housekeeping and management measures to minimize nuisance insect and odor conditions. Because a Merced County Setback Waiver has been signed by the owner of the off-site residence to the north to allow a reduced setback distance, and as documented in Chapter 8, *Hazards*, no nuisance complaints have been recorded for the existing dairy facility, with implementation of the above mitigation measures, the potential impacts related to land use incompatibility with existing off-site residences would be reduced to less than significant. The above-stated measures would reduce the magnitude of this impact to a less-than-significant level (Pub. Resources Code, §21002; CEQA Guidelines, §§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 John B. Pires 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 John B. Pires 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 John B. Pires 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 John B. Pires Dairy Expansion project, and would continue to apply after approval of the currently requested actions. Therefore, the ACO EIR is related to the John B. Pires Dairy Expansion project and, pursuant to CEQA Guidelines §15152(a), the Merced County Planning Commission finds that tiering of environmental documents is appropriate (DEIR, p. 1-5).

The DEIR for the John B. Pires 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 §15152 (DEIR, pps. 1-5 to 1-7). The Planning Commission finds that the proper procedures for tiering were employed in the John B. Pires Dairy Expansion project EIR, consistent with the requirements of CEQA Guidelines §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 (John B. Pires Dairy Expansion project EIR, pps. 12-2 to 12-3; 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, PM₁₀ 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
- PM₁₀ 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 John B. Pires Dairy 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 less than significant. Similarly, impacts due to hazardous pollutant emissions of ammonia and hydrogen sulfide impacts were determined less than significant. Because the proposed project would not exceed established significance thresholds for GHG emissions, there would be a less-than-significant impact, and the proposed project would not make a cumulatively considerable contribution to a cumulatively significant effect (see analysis in Impact GHG-1 in DEIR Chapter 7, *Greenhouse Gases and Energy*). 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 PM₁₀, these emissions would be considered cumulatively significant. The project level-impact from ozone precursors (VOCs and NO_x) 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.

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 John B. Pires Dairy Expansion project DEIR and RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the John B. Pires 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, PM₁₀ (for only state standards), and PM_{2.5} as well. Any additional emissions from any source would make attainment more difficult.
- No attainment plan for PM_{2.5} is currently accepted by federal air regulatory agencies. 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_{2.5} precursor, and PM₁₀ 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, II, and OO.

Mitigation Measure CUM-1b:

The U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), and/or SJVAPCD should applicant 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, and 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 John B. Pires Dairy Expansion project would be cumulatively considerable, the requirements of these measures are made requirements of the John B. Pires Dairy Expansion project where applicable. For findings on the effectiveness of the air quality mitigation measures applicable to the John B. Pires Dairy Expansion project, see Section XI.A 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-2: Biological Resources Effects (John B. Pires Dairy Expansion Project EIR, pps. 12-3 through 12-4; 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:

- The CDFG's Section 1600 permitting process lacks 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 John B. Pires Dairy Expansion project, where applicable. Additionally, because the entire project site previously has been converted to flood-irrigated cropland and agricultural facilities and there is no remaining native habitat on the site, with implementation of mitigation measures required in this EIR, impacts to biological resources were determined less than significant, and 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 John B. Pires Dairy Expansion project DEIR and RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the cumulative contribution from the John B. Pires 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, so that implementation of the Project would not make a cumulatively considerable contribution to the less-than-significant cumulative effect. Notwithstanding the existence of significant and unavoidable adverse cumulative effects throughout the San Joaquin Valley as identified above, the John B. Pires Dairy Expansion project would not result in a cumulatively considerable contribution to this significant and unavoidable effect. Thus, the cumulative impact of the John B. Pires Dairy Expansion on biological resources would be less than significant. 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 John B. Pires 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 (Pub. Resources Code, § 21002; CEQA Guidelines, §§ 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

Impact CUM-5: Hazards (John B. Pires Dairy Expansion Project DEIR, p. 12-4; 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 John B. Pires Dairy Expansion project where applicable. With implementation of mitigation measures to reduce impacts due to mosquitoes and nuisance flies, the nuisance effects of the John B. Pires Dairy 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 John B. Pires Dairy Expansion Project DEIR, p. 10-4).

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 John B. Pires 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 John B. Pires Dairy Expansion project DEIR and RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the cumulative contribution from the John B. Pires 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.D 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

The Merced County Planning Commission further finds that because the contribution of the John B. Pires 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 (Pub. Resources Code, § 21002; CEQA Guidelines, §§ 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 (John B. Pires Dairy Expansion Project DEIR, p. 12-4; 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. Summarily, as set forth in the FEIR for the Animal Confinement Ordinance Revisions (pps. 4-131 to 137), these facts are:

- Nitrogen and salt production from confined animal facilities could increase by 90 percent in Merced County by 2010. The County currently has adequate acreage, properly zoned, to take up the potential doubling in nitrogen loading. The provisions of the Animal Confinement Ordinance requiring a Comprehensive Nutrient Management Plan (CNMP) for all dairies address the proper application of wastewater. As assessed in 2002, 42,014 tons of nitrogen was produced annually by dairies, compared to County-wide nitrogen requirements by crops of 152,675 tons. Accordingly, within Merced County, impacts to water quality would be less than significant.

- Other Counties within the watershed have no such protections for the over application of salts and nutrients, especially in Fresno County where confined animal facilities are permitted by right without the need to obtain a County permit. In this County, regulation of confined animal facilities is under the jurisdiction of the CVRWQCB. Over application of salts and nutrients in these counties could result in the retirement of land that has become too salty for crop production, and result in the human health effects.

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 John B. Pires Dairy Expansion project where applicable. With implementation of water quality mitigation measures, because the surface water and groundwater effects of the John B. Pires Dairy Expansion would be less than significant, construction and operation of the John B. Pires Dairy Expansion would not make a cumulatively considerable contribution to these water quality significant and unavoidable effects. However, disposal of manure from the John B. Pires Dairy 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 John B. Pires Dairy Expansion project DEIR and RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the John B. Pires 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 John B. Pires Dairy Expansion to off-site locations, including those outside of Merced County, was found to be significant and unavoidable despite mitigation measures as identified in Section XI.E of these Findings, the

construction and operation of the John B. Pires 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 §7.13.040 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; §7.13.045 A, B, C.4.d, C.8.m, D, E, and F; and §7.13.050 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, §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 HAZ-3, 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 Environmental Health Division 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 a 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 John B. Pires Dairy Expansion project would be cumulatively considerable, the requirements of these measures are made requirements of the John B. Pires Dairy Expansion project where applicable. For findings on the effectiveness of the water quality mitigation measures applicable to the John B. Pires Dairy Expansion project, see Section XI.E 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 (John B. Pires Dairy Expansion Project DEIR, p. 12-5; 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. Merced County has adopted the mitigation measures identified for this cumulative impact in the ACO EIR, and applied the measures to the John B. Pires Dairy Expansion project where applicable. Adverse effects to existing rural residences adjacent to existing animal confinement facilities were identified as less than significant with implementation of land use mitigation measures.

Adverse effects due to incompatibility of the proposed dairy expansion with existing wildlife uses and land uses within the City of Gustine Specific Urban Development Plan (SUDP) boundary were found to be less than significant. However, the proposed dairy expansion project may be incompatible with potential future uses within the SUDP. A portion of the project fields west of the active dairy facilities are located within the City's Sphere of Influence (SOI) and adjacent to lands within the SUDP boundary. Lands within the SOI designation are intended to accommodate all classifications of urban land use and are otherwise known as "urban expansion areas." As recognized by Merced County, the City of Gustine, and the Merced County Local Agency Formation Commission (LAFCo), all land within the SOI is planned for eventual development in urban or urban-related uses. The adjacent parcels within the SUDP boundary are identified as undesignated lands by the County General Plan Gustine SUDP map, and the City's General Plan designates the project fields as Agricultural-commercial. The City's Urban Expansion Goals, Policies, and Actions provides for an efficient urban service area that "limit[s] development and development related impacts on agricultural and resource lands along the City's urban fringe" (Policy 4.2.1.a). The City and County recognize potential land use conflicts between urban and agricultural uses, and have established policies to create a buffer between these uses. Therefore, potential future land uses in this area would likely consist of agricultural and rural residential similar to existing uses, or commercial agricultural facilities such as packing plants. Neither land use type would be classified as a sensitive receptor that could interfere with continued agricultural operations. Because the land use effects of the John B. Pires Dairy Expansion project would be less than significant, and future land uses within the Gustine SUDP/SOI are planned to minimize conflicts with existing agricultural uses, construction and operation of the dairy would not make a cumulatively considerable contribution to this significant cumulative effect (ACO FEIR, p. 4-137 and John B. Pires Dairy Expansion project DEIR, p. 12-5).

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 John B. Pires Dairy Expansion project DEIR and RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the John B. Pires 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 animal confinement facilities were identified as less than significant with implementation of land use mitigation measures, this impact would be less than significant. Therefore, the John B. Pires 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 §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 John B. Pires Dairy Expansion project where applicable. The Merced County Planning Commission further finds that because the contribution of the John B. Pires 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 (Pub. Resources Code, § 21002; CEQA Guidelines, §§ 15091, 15126.4, subd. (a)(3)). The Planning Commission has been presented with no evidence to contradict its conclusion in this regard.

Impact CUM-10: Transportation and Circulation Effects (John B. Pires Dairy Expansion Project DEIR, p. 12-6; 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 John B. Pires Dairy Expansion project where applicable. Local access to the John B. Pires Dairy Expansion project site is currently provided by a private driveway off of Kniebes Road. Since Kniebes Road is within Merced County, it would be subject to the adopted roadway integrity mitigation measure, if warranted. DEH has determined the implementation of ACO roadway integrity mitigation measures are not required and the roadway integrity effects of the John B. Pires Dairy Expansion project would be less than significant (RFEIR, pps. 3-11 to 3-12). 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 John B. Pires Dairy Expansion project DEIR and RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission specifically finds that the contribution from the John B. Pires 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 John B. Pires Dairy Expansion project would be less than significant with implementation of conditions of approval. Notwithstanding the existence of adverse cumulative effects throughout the San Joaquin Valley as identified above, the contribution from John B. Pires 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

The Planning Commission further finds that because the contribution of the John B. Pires 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 (Pub. Resources Code, § 21002; CEQA Guidelines, §§ 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 (John B. Pires Dairy Expansion Project DEIR, pps. 12-4 to 12-6; ACO FEIR, pps. 4-123 through 4-139)*

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

Explanation:

For cultural 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 John B. Pires 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. The Planning Commission specifically finds that with implementation of Merced County conditions relating to undiscovered cultural resources, the cultural resource effects of the John B. Pires Dairy 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 John B. Pires Dairy Expansion project on cultural resources would be less than significant (ACO FEIR, p. 4-131 and John B. Pires Dairy Expansion Project DEIR, p. 12-4.)

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 John B. Pires Dairy Expansion project where applicable. The Planning Commission specifically finds that because of the operation of this measure, the fact that the John B. Pires Dairy Expansion project would have no above-ground impoundments (the subject of the cumulative impact identified in the ACO EIR), and because the geological resource effects of the John B. Pires 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 John B. Pires Dairy Expansion project on geological resources would be less than significant (ACO FEIR, p. 4-131 and John B. Pires Dairy Expansion Project DEIR, p. 12-4).

For mineral resources, no cumulatively significant effect after the imposition of mitigation was identified in the ACO FEIR. Merced County has adopted the mitigation measure identified for this cumulative impact in the ACO EIR, and applied the measures on the John B. Pires Dairy Expansion project where applicable. The Planning Commission specifically finds that because the mineral resource effects of the John B. Pires 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 John B. Pires Dairy Expansion project on mineral resources would be less than significant (ACO FEIR, p. 4-137 and John B. Pires Dairy Expansion Project DEIR, p. 12-5).

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 John B. Pires Dairy Expansion project where applicable. The Planning Commission specifically finds that because the noise effects of the John B. Pires 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 John B. Pires Dairy Expansion project on noise would be less than significant (ACO FEIR, p. 4-137 and John B. Pires Dairy Expansion Project DEIR, p. 12-6).

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 John B. Pires Dairy Expansion project where applicable. The Planning Commission specifically finds that because the utilities and services effects of the John B. Pires 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 John B. Pires Dairy Expansion project on utilities and services would be less than significant (ACO FEIR, p. 4-137 and John B. Pires Dairy Expansion Project DEIR, p. 12-6).

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 John B. Pires 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 RFEIR, 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 John B. Pires Dairy Expansion project is expected to not be cumulatively considerable because the John B. Pires Dairy Expansion project has no identified impacts in these areas. This conclusion is consistent with CEQA Guidelines 15130(a)(3). 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 contribution of the John B. Pires 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 (Pub. Resources Code, §21002; CEQA Guidelines, §§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 John B. Pires Dairy Expansion project is set forth in pages 12-6 through 12-7 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 12-6. 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. 12-6 to 12-7)

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

Explanation:

Implementation of the John B. Pires Dairy Expansion project would not result in any direct growth inducement. There are 13 existing on-site residences associated with the existing dairy and agricultural operations. The dairy currently employs a staff of 17 workers. With implementation of the proposed project, the number of employees would increase to approximately 23 workers. No new residences would be constructed on site. The existing workforce within Merced County (106,700 workers, of whom 19.5 percent, or 20,800 people, were unemployed in April 2011) could accommodate additional labor needs for construction or operation of the project without requiring the importation of large numbers of workers. Similarly, any additional housing demands caused by project employees could be accommodated by existing and planned housing resources within Merced County (DEIR, p. 12-6).

The proposed John B. Pires Dairy 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 John B. Pires Dairy 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*) (DEIR, p. 12-7).

The proposed dairy project is consistent with County land use plans, and does not include any changes in zoning or land use designations which would directly increase the potential for growth. Therefore, the John B. Pires Dairy Expansion project would not induce growth beyond that which has been anticipated in County planning documents (DEIR, p. 12-7).

Finding on Significance of Impact

Based on the analysis contained within the DEIR and the RFEIR, other considerations in the record, and the impact evaluation criteria, the Planning Commission finds that the potential impact of growth inducement caused by the John B. Pires 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 John B. Pires Dairy Expansion project is expected to be less than significant, no mitigation measures are required (DEIR, p. 12-7). Under CEQA, no mitigation measures are required for impacts that are less than significant (Pub. Resources Code, §21002; CEQA Guidelines, §§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

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 Sequoiah 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)
- Contamination from manure pathogens from exported dry manure (Impact HAZ-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 Pub. Resources Code, § 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 sponsor 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 also 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 can 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, p. 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 §15126.6(f), several alternatives were considered for the John B. Pires Dairy Expansion project, but rejected as infeasible. These alternatives rejected as infeasible included: Additional Acreage for Solid Manure Disposal Alternative; Relocation of Animal Confinement Facilities; Alternative Sites Outside the San Joaquin Valley; and Organic Dairy Farm Management Alternative. 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.

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 John B. Pires Dairy, as well as expected agricultural development at the site under the current zoning requirements (DEIR, p. 11-2).

Under the No Project Alternative, construction of the John B. Pires Dairy Expansion would not occur. The existing dairy and agricultural operations currently developed on the project site would continue under the No Project Alternative. The existing herd size of 4,123 animals, including approximately 2,369 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, agricultural activities permitted by Merced County zoning designations and currently developed on the project site would continue under the No Project Alternative (DEIR, p. 11-2).

Evaluation of Alternative 1

There are four significant and unavoidable impacts that have been identified for the proposed project—two for air quality, one 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 and off site transport of manure pathogens due to the proposed project. The No Project Alternative would not create any construction impacts or potential new conflicts with surrounding land uses 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 John B. Pires Dairy Expansion project (DEIR, p. 11-3).

Implementation of the No Project Alternative would not fully meet the following goals of the project applicant in proposing the John B. Pires 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 (*no dairy expansion would be developed to maintain competitive operations*).
- To fully use land and facilities currently owned and operated by the project sponsor without the need to purchase additional land (*no dairy expansion would be developed to maximize production from the existing land base*).
- 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*) (DEIR, p. 11-5).

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 John B. Pires 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 August 2011 regarding the applicant's Project objectives, pages 11-2 through 11-4 of the DEIR dated August 2011 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.

B. ALTERNATIVE 2 – ANAEROBIC DIGESTER ALTERNATIVE

Definition of Alternative 2

Under the Anaerobic Digester Alternative, the existing wastewater lagoon would be covered and reconstructed as an anaerobic digester. All other improvements and herd size increase associated with the proposed dairy expansion project would occur under the Anaerobic Digester Alternative. This alternative was selected to reduce odors and reduce greenhouse gas emissions (DEIR, p. 11-6).

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. It is estimated that combustion of biomethane for energy recovery will convert up to 99 percent of the methane into carbon dioxide. Taking the effect of the CO₂ produced from the combustion of CH₄ into account, an overall reduction of 63.5 percent of fugitive CH₄ emissions can be achieved by the use of properly designed and controlled anaerobic treatment. Of the 15 operating anaerobic digesters at California dairies as reported by the U.S. EPA AgSTAR program, the average methane emission reduction is 7,654 metric tons CO₂ equivalents per year, or a 3.9 metric tons CO₂ equivalents per year reduction per dairy cow (DEIR, p. 11-6).

The methane from a digester is destroyed through combustion in an engine, flare, or other device. Combustion actually produces CO₂ and water (H₂O). Burning biogas reduces greenhouse gas emissions in two ways: first, when manure is stored in a conventional liquid handling system without a digester, it typically emits a certain amount of methane-containing biogas. When that methane is collected in a digester and burned, it then will not escape into the atmosphere and cause warming. Second, electricity generated from that digester biogas will typically replace fossil fuel-generated electricity. There will be a reduction in CO₂ emissions from not burning that fossil fuel (DEIR, p. 11-6).

Despite the benefits of anaerobic digestion systems in relation to greenhouse gases and odors, these systems could result in increased nitrogen oxide emissions, and soil and groundwater contamination. Uncontrolled emissions from combustion of biogas may contain between 200 to 300 ppm of NO_x. 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 devices such as Selective Catalyst Reduction (SCR) units can reduce NO_x emissions and 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 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. 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. 11-6 to 11-7).

Evaluation of Alternative 2

There are four significant and unavoidable impacts that have been identified for the proposed project—two for air quality, one for water quality, and one for contamination from manure transport off site. The Anaerobic Digester Alternative would reduce the magnitude of anticipated environmental impacts associated with the proposed project. The Anaerobic Digester Alternative would reduce, but not avoid odor 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 offsite, because the dry manure exported offsite 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 offsite. Based on the foregoing, the Anaerobic Digester Alternative would result in fewer environmental effects than the proposed John B. Pires Dairy Expansion project (DEIR, p. 11-7).

Implementation of the Anaerobic Digester Alternative would not fully meet the following goals of the project applicant in proposing the John B. Pires 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, and wouldn't ensure compliance with applicable laws and regulations to the extent that the project would*).
- To construct improvements that can be permitted within a reasonable time frame and would represent commensurate benefit with cost (*this alternative may be difficult to permit with the SJV APCD since the digester typically results in increased ozone precursor emissions*). (DEIR, p. 11-9)

Finding of Feasibility on Alternative 2

The Merced County Planning Commission rejects Alternative 2, Anaerobic Digester 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 Alternative is rejected as infeasible because it does not fully advance the adopted Project objectives of the project applicant for pursuing the John B. Pires 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 August 2011 regarding the applicant's Project objectives, pages 11-6 through 11-9 of the DEIR dated August 2011 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 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 John B. Pires Dairy Expansion project would result in a corresponding limitation in manure and associated air emissions. The alternative would restrict total herd size to 5,385 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 John B. Pires Dairy Expansion herd increase by approximately 11 percent as shown in DEIR Table 11-3 and Table 11-4 (DEIR, pps. 11-9 to 11-10).

Evaluation of Alternative 3

There are four significant and unavoidable impacts that have been identified for the proposed project—two for air quality, one for water quality, and one for contamination from manure transport off site. Limiting the size of the John B. Pires Dairy 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 PM₁₀ 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. Dry manure generated by the dairy would also be exported off site to be applied as fertilizer at another location. The amount of process water and manure generated at dairy under this alternative would be expected to be proportional to the herd size (DEIR, p. 11-10).

Implementation of the Air Emissions Limited Herd Size Alternative would not fully meet the following goals of the project applicant in proposing the John B. Pires 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 (*while the dairy facilities would be expanded, a reduced herd size would make it difficult to maintain competitive operations*).
- To fully use land and facilities currently owned and operated by the project sponsor without the need to purchase additional land (*a reduced herd size would not maximize production from the existing land base*).
- 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*). (DEIR, p. 11-13)

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 John B. Pires 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 August 2011 regarding the applicant's Project objectives, pages 11-9 through 11-13 of the DEIR dated August 2011 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.

XIII. STATEMENT OF OVERRIDING CONSIDERATIONS

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 §21081; CEQA Guidelines §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 John B. Pires 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 17.5 percent unemployment rate, compared to a rate of 11.9 percent for the state as a whole (<http://www.labormarketinfo.edd.ca.gov/> [August 2011]). Growth of the dairy industry, including at the John B. Pires 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 John B. Pires 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 John B. Pires Dairy Expansion project promotes the goals, objectives, and policies included in the Merced County General Plan, including the Land Use, Open Space/Conservation and Agricultural, which seek to protect and preserve agricultural soils, lands, and uses. Goal 7 of the Land Use Element is "*Conservation of productive agricultural and other valuable open space lands.*" (General Plan, p. I-57) Goals 1 through 3 of the Agricultural Element include: "*1) The financial viability of the agricultural sector is improved; 2) Agricultural areas are protected from conversion to nonagricultural uses*" (General Plan, pps. VII-38 through VII-43). This Project is consistent with these goals, thus encouraging continued agricultural use of land in the County.

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.