# NOTICE OF PREPARATION

To:

cc: State Clearinghouse

Interested Persons

	County of Merced Department of Planning and Community Development 2222 'M' Street Merced, CA 95340 (209) 385-7654
Contact:	David Gilbert, Senior Planner
,	Notice of Preparation of a Draft Environmental Impact Report for the Antonio Azevedo Dairy Expansion project (Conditional Use Permit No. CUP-09-011)
for the propose Study. We need content of the of the scope and c	will be the Lead Agency and will prepare an Environmental Impact Report (EIR) and Antonio Azevedo Dairy Expansion project as described in the attached Initial to know the views of interested persons and organizations as to the scope and environmental information to be included in the EIR. Agencies should comment on content of the environmental information that is within the agency's statutory in connection with the proposed project.
attached materi	scription, location, and the probable environmental effects are contained in the als. A copy of the Initial Study is attached. Copies of all project related documents d at the Department of Planning and Community Development.
	e limits mandated by state law, your response must be sent at the earliest possible ter than 30 days after receipt of this notice.
above. If an org	ar response to David Gilbert, Senior Planner, at the Merced County address shown ganization or agency, please include the name of a contact person so that we have the ct you further during the EIR preparation process.
Project Title:	Antonio Azevedo Dairy Expansion
Project Locati	on: El Nido Merced nearest community County
Project Applic	eant: Antonio Azevedo 2025 W. El Nido Road El Nido, CA 95317
Date:	Signature:
	David Gilbert, Senior Planner

## PROJECT DESCRIPTION / LOCATION

The project consists of the expansion of an existing dairy located approximately 2 miles west of the community of El Nido in unincorporated Merced County. The existing Antonio Azevedo Dairy and the proposed expansion are located on an approximate 45-acre portion of a 550-acre site. Approximately 505 acres of the project site is used for the production of forage crops and application of manure process water. This project proposes CUP 09-011 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 7,266 animals. This would represent an increase of 2,126 animals from existing numbers. The proposed project would include construction of a new freestall barn, heifer pens, cattle shades, wastewater treatment and storage ponds, and a mechanical manure separator. Construction of the proposed facilities would result in the conversion of approximately 50 acres from cropped uses to active dairy facilities. With conversion of these cropped acres, approximately 455 acres of the project site would be used for the production of forage crops and the disposal of wastewater.

#### POTENTIAL AREAS OF ENVIRONMENTAL IMPACT

An initial evaluation of the proposed Antonio Azevedo Dairy Expansion project indicates that the project has the potential to result in significant adverse effects on the environment for the following issue areas:

- Land Use Compatibility
- Air Quality and Greenhouse Gases
- Hydrology and Water Quality
- Hazards

The Environmental Impact Report will concentrate upon the impacts associated with these areas. In addition to the above, the Antonio Azevedo Dairy Expansion EIR will also include analysis of project alternatives and cumulative effects.

# INITIAL STUDY AND ENVIRONMENTAL EVALUATION

Project Title: Antonio Azevedo Dairy Expansion

Conditional Use Permit No. 09-011

**Lead Agency Name and Address:** Merced County

Planning and Community Development Department

2222 'M' Street Merced, CA 95340

Contact Person and Phone Number: David Gilbert, Senior Planner

Phone: (209) 385-7654

General Plan Designation: Agricultural (Merced County General Plan)

**Zoning:** A-1 (General Agricultural; Merced County)

# 1. DESCRIPTION OF PROJECT

The project under evaluation in this Initial Study (IS) is the expansion of an existing dairy near the community of El Nido in Merced County.

#### LOCATION

The existing Antonio Azevedo Dairy and the proposed expansion are located on an approximate 45-acre portion of a 550-acre site in an unincorporated area of Merced County on the west side of W. El Nido Road and north of Newhall Road, approximately 2 miles west of the community of El Nido. The project's location is within the central California region (see Figure 1 and 2). The project site is located on several parcels, identified as Merced County Assessor's Parcel Numbers (APN) 074-110-019 (297 acres), - 021 (21 acres), -022 (154 acres), and -025 (78 acres). The project site is located in Section 22, Township 9 South, Range 13 East, Mount Diablo Base and Meridian; 37°7252.763N, 120°31243.073W.

# Figure 1 Regional Location

Figure 2 Project Vicinity

## PROJECT HISTORY

The dairy facility was originally placed in operation in 1950, and operations ceased at some point thereafter. The dairy was reopened in 2000 and permitted for 1,500 animal units with Merced County (AA 00-077). As established by a Report of Waste Discharge (ROWD) submitted to the Regional Water Quality Control Board (RWQCB) in 2005, the maximum number of cows permitted by the RWQCB to be at the dairy is 1,360 mature cows plus 15 percent, for a total of 1,564 milk and dry cows combined. An Existing Conditions Report (ECR) and Preliminary Dairy Facility Assessment (PDFA) Report received by the RWQCB on December 28, 2007 showed cow numbers in excess of the maximum number of cows allowed on the facility. An Application to Construct (ATC) for the proposed expansion was filed with the San Joaquin Valley Air Pollution Control District (SJVAPCD) on December 22, 2009 (Project # N1094218), and a Permit to Operate (PTO) was issued. The existing ATC/PTO would allow an expanded herd of 3,163 milk cows, 792 dry cows, 1,117 heifers (15-24 months), 553 heifers (7-14 months), 357 calves (3-6 months), and 60 mature bulls.

To bring the existing dairy facility into compliance with both RWQCB and Merced County permit requirements and allow the future expansion of the dairy herd, the project applicant has submitted an application to Merced County for a Conditional Use Permit (CUP) and will be required to obtain individual Waste Discharge Requirements (WDR) from the RWQCB.

#### **EXISTING CONDITIONS**

The existing animal confinement facility is located on an approximately 45-acre portion of the 550-acre project site. The existing facilities include the following:

- milk barn
- hospital pens
- dry pen
- milk cow pens
- commodity barn
- one settling basin
- 1 diesel generator

- milk cow loafing barns
- materials pen
- close-up cow pen
- fresh pen
- one wastewater storage pond
- five mobile homes occupied by employees
- one residence occupied by owner

As established at the time of NOP preparation (September 2010), there are 5,140 animals at the dairy, including 2,300 milk cows, 350 dry cows, 1,140 bred heifers (15-24 months), 1,000 heifers (7-14 months), and 350 calves (4-6 months). Approximately 505 acres of the project site is used for the production of forage crops and application of manure process water.

The existing facility consists of cattle pens, shades, and feed stanchions as itemized above. Animal wastes from feed alleys and other concrete-surfaced areas are flushed to an on-site waste management system that consists of a settling basin and wastewater storage pond. Solid manure within pen areas is scraped.

<sup>1</sup> The RWQCB permits establish limits on herd size by number of milk and dry cows, but the RWQCB does not establish limits on immature cows.

Wastewater is mixed with irrigation water and applied to crop land. Stormwater runoff is directed to the wastewater ponds. Receiving fields are graded to guide excess applied wastewater to an existing tailwater return system. Collected tailwater is recycled and returned to the nearest field pipe access for reapplication. A portion of the wastewater is applied to off-site fields under written agreement.

Dry manure is scraped from pens two times per year. Approximately 10-15 percent of dry manure generated from the facility and scraped from the pens is exported off site annually. The remaining dry manure is stored on site just south of the wastewater storage pond and settling basin area over an earthen surface and used for bedding and fertilizer. Pens are regraded with dirt added as needed to retain proper slope to minimize ponding.

All crops grown on site are used for the growth of dairy feed crops and supplement imported grain and hay. Fermenting corn and oats produces silage for feed.

Operations at the dairy are 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. The dairy currently employs a staff of 15 workers. Four of the workers live on site.

Domestic water to the residences is provided by on-site water wells. Although no water system permit currently exists, the Merced County Division of Environmental Health will require a State Small Water System Permit due to the presence of five (5) residences, as long as the number of people served at the residences is fewer than 25. This permit will need to be obtained prior to issuance of the certificate of occupancy by the Merced County Buildings and Safety Division.

According to County records, no building permits were obtained from Merced County for the five existing mobile homes on the project site. As required by the Merced County Department of Public Works, the existing mobile homes on site must be made legal or a demolition permit is required to remove them from the site. To legalize the homes, plans for mobile home foundation systems would be submitted to Merced County for review and approval. According to County building regulations all new construction would require preparation and submission of a geotechnical report.

Project details such as adjacent land uses and cropping patterns could change over the course of evaluation and from those existing at the time of this Initial Study; however, these changes would consist of agricultural and ancillary uses consistent with the Merced County General Plan and would not affect the analysis contained in this Initial Study.

### SURROUNDING LAND USES AND SETTING

There are several off-site single-family residences associated with other agricultural operations located on parcels to the northeast, south, east, and west of the project site. Of these, several 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 Figure 3). The nearest off-site residence is located to the south within 1,000 feet of the existing active dairy facilities of the Antonio Azevedo Dairy, approximately 650 feet south of existing facilities (see Figure 3).

Figure 3 Active Dairy Facilities and Nearby Residences Located in the Windshed

Table 1	Surrounding Land Uses at the Antonio Azevedo Dairy							
Location	Land Use	General Plan	Zoning					
ON SITE	Dairy / Irrigated agriculture / 6 residences	Agricultural	General Agricultural (A-1)					
NORTH	Agriculture / Poultry Ranch / residences	Agricultural	General Agricultural (A-1)					
EAST	Agriculture / residences	Agricultural	General Agricultural (A-1)					
SOUTH	Agriculture / residences	Agricultural	General Agricultural (A-1)					
WEST	Agriculture / residences	Agricultural	General Agricultural (A-1)					

Source: Application Materials; Project Site Visit, 2010.

# ESTABLISHING THE PROPER "BASELINE" FOR THE PROPOSED DAIRY EXPANSION

To determine whether an impact is significant, a "baseline" set of environmental conditions is required against which agencies can assess the significance of project impacts. As established by CEQA Guidelines section 15125(a), the existing environmental setting, usually established at the time a notice of preparation is issued, should normally constitute the baseline. Therefore, "the impacts of a proposed project are ordinarily to be compared to the actual environmental conditions existing at the time of CEQA analysis, rather than to allowable conditions defined by a plan or regulatory framework." (Communities for a Better Environment v. South Coast Air Quality Management District (2010) 158 Cal.App.4th 1336). Essentially, prior operating permits or permit levels do not in themselves establish a baseline for CEQA review of a new project.

As most recently set forth in Communities for a Better Environment v. South Coast Air Quality Management District, 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 Antonio Azevedo Dairy Expansion project, the current permitted limit for the dairy established by the County is 1,500 animal units, and 1,564 milk and dry cows combined as established in the 2005 ROWD for the RWQCB. 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, comprising a total of 5,140 animals, including 2,300 milk cows.

# **PROJECT CHARACTERISTICS**

The project sponsor has applied for a Conditional Use Permit (defined below) 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 7,266 animals (see Table 2 below). This would represent an increase of 2,126 animals from existing numbers.

Table 2 Existing and Proposed Herd at the Antonio Azevedo Dairy									
	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)	Total Animals		
Existing	2,300	350	1,140	1,000	350	0	5,140		
Proposed	4,105	565	1,160	1,086	350	0	7,266		
Change	1,805	215	20	86	0	0	2,126		

Source: Application Materials; Planning Partners 2010.

Most of the proposed construction would occur within the existing footprint of the facility on land that has previously been graded for construction of the existing facilities. The project under evaluation in this Notice of Preparation includes the following proposed physical improvements as shown on the site plan (see Figure 4):

- Two 160-head dry cow pens
- Five 70-head heifer cow pens
- Two 160-head heifer cow pens
- Nine 120-head heifer pens
- existing separation basin and storage pond to be backfilled
- treatment pond (650 x 330 feet)
- mechanical manure separator, stacking pad, and pump pit

- One 2,500-foot-long freestall barn (2,480head)
- One 126-head heifer pen
- Four 150-head heifer cow pens
- cattle shades associated with cow pens
- liquid manure storage pond (350 x 330 feet)
- freestall bedding and manure storage area
- removal of the diesel generator

Construction of the proposed facilities would result in the conversion of approximately 50 acres from cropped uses to active dairy facilities. With conversion of these cropped acres, approximately 455 acres of the project site would be used for the production of forage crops and the disposal of wastewater. See Figures 4, 5, and 6 for the dairy site plan, dairy site and field plan, and typical freestall barn.

Animal wastes from feed alleys and other concrete-surfaced areas, such as those within the proposed freestall barn, would continue to be flushed to an on-site waste management system. Solid manure within pen areas would continue to be scraped. Flushed animal wastes would handled by a new mechanically separated treatment system. The existing wastewater storage pond and settling basin would be backfilled, and one new wastewater treatment pond and one new storage pond would be constructed with synthetic liners. (No decommissioning plans for the existing lagoon have been prepared at the time of preparation of this Notice of Preparation.) Liquid manure would be directed to the proposed storage pond following mechanical manure separation in the processing pit and then treated in the wastewater treatment pond. Therefore, the liquid waste management system would consist of a storage pond and mechanical manure separator (to remove solids), a treatment pond, and pipelines and irrigation facilities to apply the wastewater to irrigated crops on the remainder of the project site.

# Figure 4 Site Plan

Figure 5 Dairy Facility Site, Fields and Vicinity



Wastewater would continue to be mixed with irrigation water and applied to crop land. Stormwater runoff would be directed to the new wastewater pond. Currently, there are 505 cropped acres that are available for disposal of dairy wastewater; with the proposed expansion, approximately 50 acres would be removed from crop production and developed with active dairy facilities, so that 455 cropped acres would be available for disposal of dairy wastewater. Receiving fields are graded to guide excess applied wastewater to an existing tailwater return system. Collected tailwater is recycled and returned to the nearest field pipe access for reapplication. No changes to the irrigation systems are proposed. (Figure 7 illustrates the nutrient cycling process used to manage animal excrement at the dairy.) Approximately 18,025,000 gallons of wastewater would be applied to off-site fields under written agreement.

Dry manure would be separated from liquids with the proposed mechanical manure separation system and accumulated on site within manure storage area as depicted on the site plan (see Figure 4). The dry manure would be used for bedding and fertilizer, or hauled off site for use as fertilizer and soil amendments. Pens would continue to be scraped two times per year. Approximately 38,600 tons per year of dry manure would be exported off site, increasing dry manure removal from the dairy from approximately 10-15 percent to 75 percent of manure generated from the facility. Pens would continue to be regraded with dirt added as needed to retain proper slope and minimize ponding.

All crops grown on site would continue to be utilized for dairy feed and would supplement imported grain and hay. Fermenting corn and oats produces silage for feed.

Operations at the dairy would continue to occur 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. The dairy currently employs a staff of 15 workers. With implementation of the proposed project, the number of employees would increase to 25 workers. Four of the workers live on site.

A Comprehensive Nutrient Management Plan (CNMP) was completed for the dairy facility in June 2000. The CNMP sets forth the design specifications of the waste system required to manage dairy wastes so that adverse effects to environmental resources are minimized. Since issuance of the CNMP, regulations from the RWQCB have been issued, and the project applicant has prepared a Waste Management Plan (WMP) Report (dated 8/27/2010) and Nutrient Management Plan (NMP) to meet the July 2009 deadline (extended to July 2010) as required by the Central Valley RWQCB General Order No. R5-2007-0035 and to reflect the proposed expansion (see Appendix I).

# Figure 7 Process Diagram

### Circulation and Parking

Currently, the site is served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Existing daily trips by all classes of vehicle are estimated at 100 average daily trips. All trips currently access W. El Nido Road. The proposed dairy herd expansion would result the addition of approximately 30 trips per day (see Table 3 below).

Table 3 Antonio Azevedo Dairy Expansion Trip Generation and Assignment								
	Daily Trip	-	Daily	Local				
Trip Type/Purpose	Generation Factor	Type of Vehicle	Existing	With Project	Route of Trip			
Residential Dwellings (on-site) <sup>1</sup>	9.5 trips per residence	Auto/Light Truck	57	57	El Nido Rd			
Employees (off-site) <sup>2</sup>	3 trips per employee	Auto/Light Truck	33	63	El Nido Rd			
Milk Tanker		Heavy Truck	2	3	El Nido Rd			
Commodities transport from off-site (hay, minerals, feed concentrates, other)		Heavy Truck	2	3	El Nido Rd			
Solid manure distribution to off-site fields	*see note 3	Heavy Truck	4	5	El Nido Rd			
Rendering Service		Medium Truck	0.7	0.7	El Nido Rd			
Veterinarian	1 X week	Light Truck	0.2	0.2	El Nido Rd			
Administrative/Farm Management	4 per person	Light Truck	4	4	El Nido Rd			
Purveyor sales	2 per facility office	Auto/Light Truck	2	2	El Nido Rd			
Total Auto/Light Truck Trips			96.2	126.2				
Total Medium Truck Trips			0.7	0.7				
Total Heavy Truck Trips			8	11				
Total Trips			104.9	137.9				

#### Notes:

- 1. One existing residence occupied by the owner and five existing mobile homes occupied by employees
- 2. There are 15 existing employees (4 live on-site, 11 off-site). With the proposed expansion, there would be 25 employees (4 on-site, 21 off-site)
- 3. Information provided by project applicant

Source: Planning Partners September 2010.

# PROJECT PHASING

Construction of the proposed expansion is scheduled to begin during spring 2011, with expanded operations to begin in summer 2012. The project would be constructed in a single phase.

### REQUIRED APPROVALS

A listing and brief description of the regulatory permits and approvals required to implement the proposed project is provided below. This environmental document is intended to address the environmental impacts associated with all of the following decision actions and approvals.

## **Merced County**

- Preparation and approval of an Environmental Impact Report Merced County will act as the lead agency as defined by the California Environmental Quality Act (CEQA), and will have authority to determine if the Environmental Impact Report is adequate under CEQA.
- Approval of the Conditional Use Permit Merced County will consider the proposed dairy
  project as a "Conditional Use Permit." Conditional Use Permits are discretionary permits for
  uses of land that require special review to ensure that they are compatible with the
  neighborhood and surrounding residences. They are considered more likely to affect
  surrounding land uses than uses permitted by right in a zoning district or those uses
  permitted under Administrative Permits.
- Additional Dwelling Occupancy Monitoring Permit (ADOMP) The Merced County Planning & Community Development Department will require an ADOMP permit for five of the six existing residences. Five separate permits will be required. According to the Zoning Code, one residence is allowed in the A-1 (General Agricultural) zone by right with additional dwelling units allowed by a discretionary permit (will be added as part of the Conditional Use Permit). A Resident living in an additional dwelling unit must be bona fide farmer, a qualified agricultural worker, or an immediate family member.
- State Small Water System Permit The Merced County Division of Environmental Health will require a State Small Water System Permit due to the presence of five (5) on-site residences, as long as the number of people served at the residences is fewer than 25. This permit must be obtained prior to issuance of the certificate of occupancy by the Buildings and Safety Division.
- Hazardous Material Business Plan (HMBP) The storage of any hazardous material stored
  on site over threshold quantities (55 gallons; 200 cu. ft.; or 500 pounds) would require a
  HMBP to be filed with the Merced County Division of Environmental Health. Any quantity
  of hazardous waste generated on site also requires that a HMBP be filed.
- Building Permit Merced County will require a building permit for the proposed dairy expansion project.
- Legalize existing structures or Demolition Permit Merced County will require a demolition permit to remove existing mobile home structures on site, or the project applicant must submit plans for the mobile home foundation systems to legalize existing structures.
- Encroachment Permit The Merced County Department of Public Works will require 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.

• Roadway Impact Evaluation or Roadway Impact Agreement - A roadway impact evaluation to assess the potential impact that the project may have on Merced County roadways, or a roadway impact agreement, issued by the Merced County Department of Public Works, Road Division to mitigate potential effects to roadway integrity from heavy truck traffic, is generally required prior to issuance of a building permit. The evaluation or agreement will determine an amount for the applicant to pay to the Merced County Road Fund to compensate the County for the increased cost of maintaining the County roadways impacted by the applicant's project.

### San Joaquin Valley Air Pollution Control District

- Authority to Construct / Permit to Operate The owner or operator of any facility or activity (including agricultural activities) that emits criteria air pollutants or their precursors above certain thresholds must first obtain an Authority to Construct from the San Joaquin Valley Air Pollution Control District (SJVAPCD). All new sources exceeding thresholds will be required to apply for an Authority to Construct (ATC) and Permit to Operate (PTO); this essentially is one permit that is issued in two steps. The applicant first obtains an ATC with specific conditions for implementation during construction; then an inspection is completed and, if all the conditions of the ATC are met during construction, the applicant is issued a PTO. Beyond the ATC and PTO, preparation of an Air Quality Impact Assessment (AQIA) would be required, in addition to compliance with other district regulations.
- Conservation Management Practices (CMP) Plan The owner or operator of any agricultural facility of 100 acres or more, or an animal confinement facility in excess of 500 mature cows (for a dairy operation), must submit a CMP plan to the SJVAPCD prior to June 30, 2004 for existing uses, and prior to operation for proposed uses. The Antonio Azevedo Dairy will be submitting a modification request to their existing CMP Plan based on their proposed expansion. A CMP plan requires that farm operators implement dust reduction practices for each of the following categories: harvest; unpaved roads; unpaved equipment/vehicle yards; and, other. One CMP Plan must be submitted for each crop currently grown or that will be grown within the two-year time frame of each Plan.

#### State of California - State Water Resources Control Board

• General Construction Activity – The State Water Resources Control Board (SWRCB) has adopted a General Construction Activity Storm Water Permit for storm water discharges associated with any construction activity, including clearing, grading, excavation, reconstruction, and dredge and fill activities, that results in the disturbance of at least one acre of total land area, or whose projects disturb less than one acre but are part of a large common plan of development that disturbs one or more acres. 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 BMPs as well as numeric action levels (NALs) and numeric effluent limitations (NELs) in order to achieve these minimum federal standards. In addition, the General Permit requires a Storm Water Pollution Prevention Plan (SWPPP) and Rain Event Action Plan (REAP) (another dynamic, site-specific plan) to be developed.

# State of California – Regional Water Quality Control Board - Central Valley Region - Waste Discharge Requirements

• The owner or operator of any facility or activity that discharges, or proposes to discharge, waste that may affect groundwater quality or from which waste may be discharged in a diffused manner (e.g., erosion from soil disturbance) must first obtain a Waste Discharge Requirements (WDR) permit from the RWQCB. The RWQCB regulates discharges from dairies and other confined animal facilities according to the anti-degradation requirements of the Porter-Cologne Water Quality Control Act and the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.

# APPLICATION OF THE MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE AND ZONING CODE

On October 22, 2002, Merced County adopted revisions to the County's Animal Confinement Ordinance (ACO). Additional revisions to the Merced County ACO and Merced County Code Chapter 18.02.02 (Zoning Code Agricultural Zones) were adopted on February 8, 2005. (The Merced County ACO is included as a section of Title 18 Zoning of the Merced County Code.) The ACO regulates the design, construction, and operation of animal confinement facilities within the county. Because the Ordinance is regulatory rather than permissive, all existing and proposed animal confinement facilities within the county are required to comply with the terms of the Ordinance, including the proposed Antonio Azevedo Dairy Expansion project.

Following is a summary of major ACO provisions. Copies of the complete text of the Ordinance are available from: the Merced County Division of Environmental Health (DEH), 260 E. 15<sup>th</sup> Street, Merced, California, 95340; the Merced County Planning and Community Development Department, 2222 'M' Street, Merced, California 95340; and on the County's Internet site at <a href="http://www.qcode.us/codes/mercedcounty/">http://www.qcode.us/codes/mercedcounty/</a>

Merced County's ACO provides environmental compliance regulations that affect dairies and other animal confinement facilities in Merced County. The Ordinance requires that all animal confinement facilities, existing and new, complete and implement a Comprehensive Nutrient Management Plan (CNMP) – for existing animal confinement facilities, CNMPs must be completed by December 31, 2006, and for the construction of a new facility, or for modification or expansion of an existing animal confinement facility, the CNMP must be completed prior to construction. The purpose of the CNMP is to ensure a balance between manure/wastewater application and nutrient uptake by crops in order to minimize impacts to groundwater. Since adoption of the ACO, the Regional Water Quality Control Board has issued new requirements for preparation of a Nutrient Management Plan (NMP) and Waste Management Plan (WMP), which would serve in place of the CNMP as allowed by County Code Chapter 18.48.055K.

In addition to the CNMP, the ACO includes measures designed to increase protection of surface and groundwater resources. Both liquid and dry manure are regulated by the Ordinance under detailed management requirements. For example, the ACO prohibits the storage or application of manure (liquid or dry) within 100 feet of a surface water body or irrigation well unless adequate protection is provided. Dry manure storage and application is regulated to prevent groundwater or surface water contamination. In addition, the liquid manure management system must include provisions for appropriate cropland application and collection of tailwater from cropland irrigated

with liquid manure. The ACO requires that all off-site discharge of drainage water from cropland application areas meet the discharge and receiving water standards of the appropriate irrigation or drainage district and the RWQCB.

The ACO also includes design and management provisions for the construction of retention ponds and settling basins to prevent groundwater contamination, obnoxious odors, or excessive fly or mosquito breeding. The retention pond provisions of the Ordinance apply only to new or expanding animal confinement facilities. The ACO measures for retention ponds and settling basins include capacity requirements, maintenance guidelines, size restrictions, and minimum design standards of  $10^{-6}$  centimeters per second seepage velocity or less.

To prevent nuisances from odors or vectors, the ACO requires animal confinement facilities to implement both odor control measures and a vector control plan. The need for specific control measures is determined by the Merced County DEH on a site-specific basis. Additionally, the Ordinance prohibits the location of new animal confinement facilities within one-half mile of urban areas or areas zoned for residential uses, or concentrations of rural residences. To provide additional protection from the nuisances mentioned above, the ACO generally prohibits the location of animal confinement facilities within 1,000 feet of an off-site residence, unless written permission from the off-site resident or property owner is given.

To ensure compliance with the provisions of the ACO, the Ordinance requires routine inspections of animal confinement facilities by Merced County DEH. Enforcement of the provisions contained in the revised ACO is conducted by Merced County DEH and the Planning and Community Development Department. In addition, the ACO includes penalties for any person who violates or fails to comply with the provisions of the ACO.

#### TIERING FROM THE MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE EIR

"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 this subject document, which focus primarily on issues unique to a smaller project within the larger program or plan. Tiering focuses the environmental review on the project-specific significant effects that were not examined in the prior environmental review or are susceptible to substantial reduction or avoidance by specific revisions in the project, by the imposition of conditions, or by other means. The tiering concept will be discussed more fully in the EIR for this project.

In the case of the Antonio Azevedo Dairy Expansion project, the environmental analysis for this Initial Study is tiered from the EIR for the *Merced County Animal Confinement Ordinance Revision*. The Merced County Board of Supervisors certified the EIR and adopted the revised ACO 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 ACO regulates the design, construction, and operation of animal confinement facilities within the County; all existing and proposed animal confinement facilities within the County are required to comply with the terms of the Ordinance, including the Antonio Azevedo Dairy Expansion project. To reflect this, the requirements of the Ordinance and conclusions of the environmental analysis contained in the ACO EIR were incorporated in this Initial Study.

The ACO EIR comprehensively evaluated the potential environmental effects of implementing the revisions to the ACO and from approval of new or expanding animal confinement facilities. 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 Antonio Azevedo Dairy Expansion project is subject to the requirements of the ACO for new and expanding animal confinement facilities, those previously adopted mitigation measures and conditions apply to the Antonio Azevedo Dairy Expansion project, and would continue to apply after approval of the currently requested actions. Therefore, the Antonio Azevedo Dairy Expansion project is related to the ACO EIR and, pursuant to Section 15152(a) of the CEQA Guidelines, tiering of environmental documents is appropriate.

The 2002 ACO EIR can be reviewed at the following location:

Merced County Division of Environmental Health 777 West 22nd Street Merced, California 95340

Based on the reasoning set forth above, this environmental evaluation implements, and is consistent with, mitigation measures and study protocols adopted by Merced County in its certification of the EIR for Revisions to the ACO and its approval of the Revised Ordinance. Because of its importance relative to understanding the environmental analysis that has occurred to date with respect to the potential environmental impacts associated with the construction and operation of animal confinement facilities in Merced County, the ACO EIR is hereby incorporated by reference pursuant to CEQA Guidelines §15150 as though fully set forth herein.

## 2. ENVIRONMENTAL ANALYSIS

#### PURPOSE AND LEGAL BASIS FOR THE INITIAL STUDY

As a public disclosure document, this Initial Study also provides local decision makers and the public with information regarding the environmental impacts associated with the proposed project. According to Section 15063 of the CEQA Guidelines, the purpose of an Initial Study is to:

- 1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
- 2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
- 3. Assist in the preparation of an EIR, if one is required by:
  - a. Focusing the EIR on the effects determined to be significant,
  - b. Identifying the effects determined not to be significant,
  - c. Explaining the reasons for determining that potentially significant effects would not be significant, and
  - d. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
- 4. Facilitate environmental assessment early in the design of a project.
- 5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
- 6. Eliminate unnecessary EIRs.
- 7. Determine whether a previously prepared EIR could be used with the project.

#### INITIAL ENVIRONMENTAL CHECKLIST

Following each major category in the Initial Study, there are four determinations by which to judge the project's impact. These categories and their meanings are shown below:

"No Impact" means that it is anticipated that the project will not affect the physical environment on or around the project site. It therefore does not warrant mitigation measures.

"Less-than-Significant Impact" means the project is anticipated to affect the physical environment on and around the project site, however to a less-than-significant degree, and therefore not warranting mitigation measures.

"Less than Significant with Mitigation Incorporated" applies to impacts where the incorporation of mitigation measures into a project has reduced an effect from "Potentially Significant" to "Less Than Significant". In such cases, and with such projects, mitigation measures will be provided including a brief explanation of how they reduce the effect to a less-than-significant level.

"Potentially Significant Impact" means there is substantial evidence that an effect is significant, and no mitigation is possible.

#### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Geology / Soils
Greenhouse Gas Emissions 🏻	Hazards & Hazardous Materials	Hydrology / Water Quality
Land Use / Planning	Mineral Resources	Noise
Population and Housing	Public Services	Recreation
Transportation / Traffic	Utilities / Service Systems	Mandatory Findings of Significance

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I.	AF	ESTHETICS:				
	Wo	uld the project:				
	a)	Have a substantial adverse effect on a scenic vista?				1
	b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				1
	c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			/	
	d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			1	
	e)	Expose residential property to unacceptable light levels?			1	

The project site is currently in agricultural use (agricultural crops and an existing dairy) and surrounded by agricultural uses and associated residences.

**Question a: No Impact.** Viewers are limited to motorists on perimeter roadways and residents of surrounding agricultural facilities and operations. No scenic vista is visible from the project site; nor is the site visible from any nearby scenic vista.

**Question b: No Impact.** No state- or locally-designated scenic highway is visible from the project site; nor is the site visible from any nearby designated scenic highway (Caltrans 2007). Further, no important scenic resources are located on the project site.

Question c: Less-than-significant Impact. Developed agricultural facilities in the vicinity range from irrigated pasture to confined animal facilities, such as dairies and poultry barns. Though the existing dairy facilities are visible from perimeter roads, their appearance is a common sight in rural areas, and the visual effects of the dairy are reasonable and expected effects in the context of the Agriculture land use designation. The proposed project would appear similar to existing facilities in the project area, and would be considered common and appropriate to the region by most viewers. Since the proposed project is consistent with the existing and planned agricultural uses of the area,

implementation of the project would not degrade the existing visual character of the site or surroundings.

**Question d, e: Less-than-significant Impact.** The project may add an additional source of light to the area for new security lighting. While there are sensitive receptors for nighttime light and glare located in the vicinity of proposed active dairy operations, County standards require that all new lighting be directed away from or be properly shaded to eliminate light trespass or glare within a project or onto surrounding properties. County requirements would reduce any light and glare effects to less-than-significant levels.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact					
II.	A	GRICULTURE AND FOREST RESOURCES:									
	refe De det age reg Leg	In determining whether impacts to agriculture resources are significant environmental effects, lead agencies may refer to the California Agriculture Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.									
	Would the project:										
	a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agriculture use?			/						
	b)	Conflict with existing zoning for agriculture use, or a Williamson Act Contract?			1						
	c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				1					
	d)	Result in the loss of forest land or conversion of forest land to non-forest use?				1					
	e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture use or conversion of forest land to non-forest use?				1					

The project site is currently in agricultural use and surrounded by agricultural uses and associated residences. Expansion of the permitted dairy herd would represent a continuation of agricultural uses.

**Question a: Less-than-significant Impact.** According to the California Department of Conservation's (DOC) Important Farmlands Map of Merced County, the project site is designated as Prime Farmland, Unique Farmland, and Farmland of Local Importance, except for the area of existing active dairy facilities, which is designated Confined Animal Agriculture (FMMP 2008).

Prime Farmland as defined by DOC is land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. Confined Animal Agriculture lands as defined by DOC include poultry facilities, feedlots, dairy facilities, and fish farms. Construction of the proposed facilities would convert Prime Farmland and Unique Farmland to an active dairy facility, an agricultural use. Therefore, implementation of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use.

Predominant soils in the area of the project site as classified by the Natural Resources Conservation Service (NRCS) consist of Fresno loam, moderately saline alkali, 0 to 1 percent slopes (FrA), Fresno loam, strongly saline-alkali, 0 to 1 percent slopes (FsA), Hanford fine sandy loam, 0 to 1 percent slopes (HaA), Pachappa fine sandy loam, 0 to 1 percent slopes (PaA), and Pachappa sandy loam, deep over hardpan, slightly saline- alkali, 0 to 1 percent slopes (PfA). The area of the proposed dairy facilities are located on the PfA soil type. The ratings of the soils are set forth in the following table:

Table 4 Antonio Azevedo Dairy On-site Soil Types									
Soil	Approx. % Project Site	CA Revised Storie Index Grade	Prime Soil?						
Fresno loam, moderately saline alkali, 0 to 1 percent slopes (FrA)	31%	5 - Very Poor	No						
Fresno loam, strongly saline-alkali, 0 to 1 percent slopes (FsA)	6%	6 - Nonagricultural	No						
Hanford fine sandy loam, 0 to 1 percent slopes (HaA)	2%	1 - Excellent	Yes, if irrigated						
Pachappa fine sandy loam, 0 to 1 percent slopes (PaA)	7%	1 - Excellent	Yes, if irrigated						
Pachappa sandy loam, deep over hardpan, slightly saline- alkali, 0 to 1 percent slopes (PfA)	54%	3 - Fair	Yes, if irrigated						

Source: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey.

Available online at http://websoilsurvey.nrcs.usda.gov/ accessed October 7, 2010.

Question b: Less-than-significant Impact. The project site and area are designated for agricultural uses by the Merced County General Plan and Zoning Ordinance. The existing use, a dairy, is an agricultural use consistent with the General Plan and Zoning Ordinance. Adjacent properties are also in agricultural uses, namely field crops in all surrounding areas and a poultry ranch to the north. No feature of the project would preclude or limit the agricultural use of the project site or adjoining parcels. There are several off-site single-family residences associated with other agricultural operations located on parcels to the northeast, south, east, and west of the project site. The nearest off-site residence is located within 1,000 feet of the existing active dairy facilities of the Antonio Azevedo Dairy, approximately 650 feet south of existing facilities. The proposed dairy expansion would not reduce the distance between the off-site residences and active dairy facilities (see Section X for land use compatibility discussion). These residences would not conflict with continued agricultural production on the site (for location of off site residences, see Figure 3).

Thus, the proposed project would be the continuation of an existing agricultural use consistent with County policies, and would not conflict with adjacent agricultural and/or non-agricultural uses. One parcel of the project site planted in crops (APN 074-110-022) is currently under a Williamson Act Contract; however, the proposed dairy expansion would not modify conditions of that contract.

Question c, d: No Impact. The project site is not zoned for forest land or timberland, nor are there any forest resources located on the project site.

**Question e: No Impact.** The proposed dairy expansion project would not involve the development of any use inconsistent with the project site's agriculture zoning, and would not result in the development of non-agricultural uses.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III.	<b>A</b> I	R QUALITY:				
		ere available, the significance criteria established by the applicable trol district may be relied upon to make the following determination		managemer	nt or air po	llution
	Wo	uld the project:				
	a)	Conflict with or obstruct implementation of the applicable air quality plan?	/			
	b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	1			
	c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	,			
	d)	Expose sensitive receptors to substantial pollutant concentrations?	1			
	e)	Create objectionable odors affecting a substantial number of people?	1			
	f)	Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter?				1

Air quality influences public health and welfare, the economy, and quality of life. Air pollutants have the potential to adversely impact public health, the production and quality of agricultural crops, visibility, native vegetation, and buildings and structures.

Merced County is located in the San Joaquin Valley air basin (SJVAB) and air quality within the County is regulated by the San Joaquin Valley Air Pollution Control District (SJVAPCD) under both federal and state Clean Air Acts. The Air Basin is in "severe" nonattainment for the state 1-hour ozone standard; "extreme" nonattainment for the revoked federal 1-hour ozone standard; "extreme" nonattainment for the federal 8-hour ozone standard; attainment of federal  $PM_{10}$  standards; nonattainment of state  $PM_{10}$  standards; and nonattainment for federal and state  $PM_{2.5}$  standards.

In response to SB 700 and other state and federal attainment planning requirements, the SJVAPCD's Rule 2010 applies to agricultural uses, including dairies, and states that "any person who plans to or does operate, construct, alter, or replace any source of emission of air contaminants" must obtain approval of the Air Pollution Control Officer and receive the following permits: an Authority to Construct (ATC) and a Permit to Operate (PTO).

In addition to the ATC and PTO permits, dairies must comply with many other air district rules and regulations including at least Regulation VIII, New Source Review, and health risk assessments in compliance with AB 2588. Developed as part of the 2003 PM<sub>10</sub> Planning process, Regulation VIII includes specific emission control strategies for fugitive dust from construction/demolition, bulk materials, carryout, open areas, paved and unpaved roads, equipment on unpaved roads, paved road dust, fugitive windblown dust, and farming operations. Regulation VIII and Rules 8011-8081,

including preparation of a dust control plan, apply to the Antonio Azevedo Dairy Expansion project.

New sources of air pollution, and modifications of existing sources, must comply with District Rule 2201 (New and Modified Source Review), also known as New Source Review (NSR) and include Best Available Control Technology (BACT), Best Available Retrofit Control Technology (BARCT) and Offsets.

Question a-e: Potentially Significant Impact. The proposed dairy expansion is anticipated to have potentially significant impacts from the following sources that will be evaluated further in the DEIR: construction-related emissions of reactive organic gases, nitrogen oxides and fugitive dust; operations-related emissions of carbon monoxide, ozone precursors, fugitive dust, and hazardous pollutants; and odors from project operations. A health risk assessment will be prepared and will address emissions from: ammonia; particulate matter and its toxic components (e.g., aluminum, lead, manganese, nickel, etc.); and xylenes, formaldehydes, and carbon tetrachloride from Volatile Organic Compounds (VOCs).

**Question f: No Impact.** The proposed dairy expansion does not involve the construction of residences or other sensitive land uses, and no impact would result.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV.		OLOGICAL RESOURCES: ould the project:				
	a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	/			
	b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				1
	c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				/
	d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	1			
	e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				1
	f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				/
	g)	Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species?	/			

Question a, d, g: Potentially significant Impact. A reconnaissance-level biological survey of the project site, including dairy owned cropland that currently receives or would be irrigated with dairy wastewater with the proposed expansion, was conducted on August 20, 2010 to assess existing biological conditions (Planning Partners 2010). There are several special-status wildlife species that may occur on the site from time to time. The project site may provide occasional foraging opportunities for a number of additional sensitive wildlife species including various species or raptors and migratory birds that are protected by the Migratory Bird Treaty Act. Conversion of cultivated farmland to dairy facilities would contribute to the loss of foraging habitat for some special-status species. This would be a potentially significant impact that will be evaluated further in the DEIR.

Question b, c: No Impact. Sensitive habitats are those that are considered rare within the region, support sensitive plant and/or wildlife species, or function as corridors for wildlife movement. The reconnaissance-level biological survey found that no sensitive habitats were present on site. No riparian habitat or wetlands were identified on site.

**Question e, f: No Impact.** The project would not conflict with local policies or ordinances protecting biological resources nor conflict with the provisions of an adopted Habitat Conservation Plan or other approved conservation plan since there are limited biological resources on site, and the proposed dairy expansion would not result in the modification of natural habitat.

			Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
V.	Cı	JLTURAL RESOURCES:		Incorporated		
		ould the project:				
	a)	Cause a substantial adverse change in the significance of a historical resource as defined in CCR §15064.5?				/
	b)	Alter or destroy a historic site?				/
	c)	Alter or destroy an archaeological site?			1	
	d)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR § 15064.5?			1	
	e)	Disturb any human remains, including those interred outside of formal cemeteries?			1	
	f)	Restrict existing religious or sacred uses within the potential impact area?				/
	g)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			1	

A cultural resources investigation of the area affected by the proposed dairy expansion project was completed in July 2010, and an addendum to the report was completed in October 2010. The cultural resources assessment of the proposed project was undertaken to determine whether prehistoric or historical cultural resources are present within the project. The assessment included thorough inspection of the approximate 50-acre area of cropland to be converted to active dairy facilities. There was no evidence of cultural resources within the investigation area of the proposed project.

Question a, b: No Impact. The entire project area has been cultivated for agricultural uses during past decades; seasonal streams have been diverted, and wastewater storage ponds have been constructed. Prefield research conducted for the cultural resources investigation indicates that no historical sites were present on the proposed project tract in 1854. The 1948 edition of the Sandy Mush USGS 7.5' map references "Potter Field" as occupying Section 22, T9S R13E. It was an auxiliary air field developed for flight training in 1943. Although remnants of the U. S. Air Force operations could be present within the project area, only limited additional grading and ground disturbance would be necessary to prepare the construction areas for the erection of the proposed improvements. Therefore, this project would not alter or destroy a historic site or cause substantial adverse changes in the significance of a historical resource.

Question c, d, e: Less-than-significant Impact. Archaeological resources are suspected to be minimal because the dominant land use has been for agricultural uses (including leveling, cultivation, grading, and construction of the existing dairy). The Central California Information Center (CCIC) records were searched to determine whether any archaeological or historical cultural resources have been reported found on or near the proposed project. The in-house records search revealed that there are no documented cultural resources within the area of the proposed project. The nearest known archaeological site is approximately one mile north; its present condition unknown.

From the perspective of prehistoric Native Americans, the area was an integral part of the greater San Joaquin River resource exploitation zone, and thus could have been visited or occupied seasonally or occasionally by Yokuts and their Miwok or Costanoan neighbors, or by other Native Americans. Intensive cultural resources inspection of portions of the proposed project area revealed no evidence of the presence of prehistoric or historic archaeological resources.

Impacts upon cultural resources within the proposed project area could be manifested as the direct result of construction activities, or may be indirect (the result, for example, of erosion or deposition of soil on areas adjacent to the project), or may be cumulative, resulting from aggregation of multiple effects. Potential impacts on private land often include clearing of vegetation, excavation or blading of construction pads, access roads and utility trenches, and conducting other operations that involve removal of vegetation and excavation or disturbance of subsurface strata. The relevant background literature, including the files of the Office of Historic Preservation California Historical Resources Information System, and all other pertinent cultural resources files were consulted prior to and during the course of in-field survey of the proposed project area. Examination of these files, the archaeological literature, and sources of historical information, revealed that no prehistoric or historic archaeological resources had been found within the proposed project area.

Though the entirety of the project site has been disturbed by previous agricultural activities, Merced County through its Zoning Ordinance has imposed conditions relating to undiscovered cultural resources pursuant to §5097.98 of the State Public Resources Code, and §7050.5 of the State Health and Safety Code. Following is the text of this requirement.

The applicant shall inform in writing all contractors and subcontractors for the project of the potential discovery of significant archaeological and historical resources below the ground surface in the project area. If any cultural resources are found or disturbed during project operations, all work must be halted within the area and the Merced County Planning Department and a qualified archaeologist must be contacted to evaluate the find (Merced County Code §18.41).

If remains are found, the County Coroner is to be notified, and if the remains are determined to be Native American, the Native American Heritage Commission shall be notified and recommended procedures shall be adhered to in the treatment and disposition of the remains. This regulatory measure would be included as a Condition of Approval by the County.

**Question f: No Impact.** The project site is actively cultivated for agricultural use. The project area is not located within an area known to be used for traditional cultural uses.

**Question g: Less-than-significant Impact.** There are no paleontological or unique geological resources known from the site or area.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI.	GE	OLOGY AND SOILS:				
		uld the project expose people or structures to potential substantial ry, or death involving:	adverse ef	fects, includ	ding the ris	k of loss,
	a)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				,
	b)	Seismic-related ground failure, including liquefaction?			1	
	c)	Strong seismic ground shaking?			1	
	d)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, collapse, or rockfall hazards?			1	
	e)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?			1	
	f)	Such as seiche, mudflow or volcanic hazard?				/
	g)	Change topography or ground surface relief?			1	
	h)	Create, cut, or fill slopes greater than 2:1 or higher than 10 feet?			1	
	i)	Result in grading that affects or negates subsurface sewage disposal systems?				1
	j)	Result in substantial soil erosion or the loss of topsoil?	1			
	k)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			1	
	l)	Change deposition, siltation or erosion which may modify the channel of a river or stream or the bed of a lake?	1			
	m)	Result in any increase in water erosion either on- or off-site?			1	
	n)	Be impacted by or result in an increase in wind erosion and blowsand, either on-or off-site?			/	

The Antonio Azevedo Dairy project site is located within the Great Central Valley of California. The Central Valley is composed primarily of alluvial deposits from erosion of the Sierra Nevada Mountains located to the east and of the Coastal Ranges located to the west. The elevation of the

project site ranges from approximately 121-132 feet above mean sea level (MSL). The topography of the project site is generally flat, with varying agricultural field elevations sloping downward from east to west.

**Question a: No Impact.** The project is not located within a mapped fault hazard zone and there is no record or evidence of faulting on the project site (Figure 10-1 of the Merced County General Plan Background Report). No fault traces underlie the project site.

Question b: Less-than-significant Impact. While the County has not recognized any specific areas subject to liquefaction hazard, there is potential for occurrence where unconsolidated sediments and a high water table coincide (Merced County 2007). Probable areas for liquefaction hazards include the County's wetland areas. Based on historic water levels from the El Nido School located east of the project site, and from dairy monitoring wells to the south, groundwater levels in the area range in depth from approximately 65 feet to 100 feet below ground surface for the uppermost unconfined aquifer. Further, because no massive structures would be constructed with project implementation, and all built areas would be constructed on concrete pads, the risk of liquefaction and subsequent building failure is low.

Question c: Less-than-significant Impact. The site is located in an area with a maximum expectable earthquake intensity category II. Within this zone expected levels of ground shaking are generally less than design levels as defined in the Uniform Building Code (UBC). The proposed project is categorized as a low risk use that is considered suitable in all ground-shaking zones. Merced County requires that all new construction comply with the seismic safety requirements of the UBC. Compliance with the UBC would reduce risks on the project site from seismic ground shaking to levels considered acceptable for the State and region, and no significant risks from groundshaking would occur (Merced County 1990).

Question d: Less-than-significant Impact. Soils present in the area of the proposed expansion of active dairy facilities include Fresno loam, moderately saline alkali, 0 to 1 percent slopes (FrA), Fresno loam, strongly saline-alkali, 0 to 1 percent slopes (FsA), Hanford fine sandy loam, 0 to 1 percent slopes (HaA), Pachappa fine sandy loam, 0 to 1 percent slopes (PaA), and Pachappa sandy loam, deep over hardpan, slightly saline- alkali, 0 to 1 percent slopes (PfA). The agricultural ratings of the soils are set forth in Section II, Agriculture and Forest Resources, above. While these soils have minor building limitations due to flooding and shrink-swell potential (NRCS 2008), the limitations would be minimized by project design; further, the proposed agricultural facilities would not be used for human habitation. The project area is not noted for unstable geologic formations susceptible to landslide or ground failure (Merced County General Plan Safety Element). A field reconnaissance of the site indicated that the modified topography surrounding the active dairy facilities is generally level. Given this existing topography and the distance to active faults, landslides at this location are considered unlikely. Because the area of the proposed expansion of active dairy facilities is not considered unstable, nor would construction of the dairy facilities result in soil instability, this would be a less-than-significant impact. Further, all new construction requires a soils report completed by a California licensed soils engineer. The building engineer must review the report before designing the foundation to ensure that all requirements from the soils engineer are met.

**Question e: Less-than-significant Impact.** Subsidence is the settling or sinking of parts of the earth's surface layer. The project site is located within a known area of subsidence according to the Merced County General Plan. However, no subsidence has been noted on the project site. The proposed dairy expansion would not result in substantial increases in the amount of groundwater being used, and is not expected to result in localized subsidence in the project area.

**Question f: No Impact.** The project is located in an area distant from the ocean, large water bodies, or volcanic features. Therefore, no hazards from these features would be expected to occur.

Question g: Less-than-significant Impact. The proposed project would result in minimal grading on an approximate 50-acre portion of the project site. The existing elevation of the area where the dairy facilities would be constructed is approximately 127 feet mean sea level. The proposed dairy expansion would not significantly change the project site topography or ground surface relief.

Question h, i: Less-than-significant Impact. There would be minimal to no cut or fill necessary for implementation of the proposed project since the topography of the site is predominantly flat. Though the project would result in a minor amount of grading, this would not result in a significant impact because of existing County engineering and building requirements. Prior to the initiation of construction, Merced County would review proposed grading and construction plans for consistency with Merced County requirements and good engineering practice. Once the County approves plans, implementation of the approved plans would be monitored during periodic building inspections. Further, no new sewage disposal systems are included as a part of the proposed dairy expansion, nor would the proposed improvements impact existing subsurface sewage disposal systems.

**Question j, l: Potentially significant Impact.** Since grading of the building sites was completed with original construction of the dairy, there would be little need for grading and excavation with implementation of the proposed expansion project. However, construction of the proposed expansion would occur over an approximate 50-acre area, and stormwater runoff during the construction period could result in the erosion of on-site soils and siltation and sedimentation of waterways draining the site. Project impacts due to surface drainage and runoff will be evaluated further in the EIR for the proposed project in the Hydrology and Water Quality chapter.

**Question k: Less-than-significant Impact.** The soils present in the area of the proposed expansion of active dairy facilities appear to exhibit relatively low plasticity and expansion characteristics. Due to the low expansion characteristics, with implementation of the Uniform Building Code, there would be a less-than-significant impact due to potential for soil expansion.

Question m: Less-than-significant Impact. The proposed dairy expansion project would result in the construction of freestall barns, cow pens, barns, and new wastewater treatment and storage ponds. Stormwater generated at the project site that has contacted manure from existing and proposed areas with impermeable surfaces would be collected and routed to the proposed process water management system with project implementation. No additional drainage would reach regional waterways as a result of the project. All fields are currently graded, bermed, and developed with tailwater return systems to maintain all irrigation water on the project site. Run-on and runoff water would be prevented from entering or leaving the facility.

Question n: Less-than-significant Impact. Construction of the proposed project would result in the disturbance of on-site soils and potential exposure to wind erosion. The soil types found on the project site are susceptible to "slight" erosion hazard, which indicates that erosion is unlikely under ordinary climactic conditions (NRCS 2008).

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII.		EENHOUSE GAS EMISSIONS: uld the project:				
	a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	1			
	b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	1			

**Question a-b: Potentially Significant Impact.** Construction and operation of the dairy expansion project would result in greenhouse gas emissions from direct and indirect sources. The proposed dairy expansion is anticipated to have potentially significant impacts from greenhouse gases (including methane) that will be evaluated further in the DEIR.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII.		IAZARDS AND HAZARDOUS MATERIALS: uld the project:				
	a)	Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	1			
	b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			1	
	c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school?				1
	d)	Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				/
	e)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			1	
	f)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			1	
	g)	Create significant nuisance conditions to the public or the environment through the generation of insects due to project operations?	1			

**Question a: Less-than-significant Impact.** During project operation, the feed lanes, silage storage area, and wastewater collection ponds are treated with spray and biological controls to minimize nuisance insect populations. The dairy operator would continue to use Roundup annually to spray weeds on the project site and would continue to store and use diesel fuels. The storage of any hazardous material on site over threshold quantities (55 gallons; 200 cu. ft.; or 500 pounds) would

require a hazardous material business plan (HMBP) to be filed with the Merced County Division of Environmental Health. Any quantity of hazardous waste generated on site also requires that a HMBP be filed. The potential risk of release is further reduced within the project area and region because nutrient-rich process water would be used to fertilize on-site crops, thereby precluding the need for large amounts of chemical fertilizers. Similarly, available dry manure would be used off site for fertilizer and soil amendment, in place of chemical fertilizers.

Previous evaluations of dairy operations conducted by Merced County (Merced County Animal Confinement Ordinance Revision DEIR, February 2002; Vander Woude Dairy FEIR Staff Presentation to Planning Commission, March 30, 2004) indicate that the following activities and operations at dairies do not result in the release of hazardous substances to the environment:

Potential Source	Explanation	Information Source
Supplements in cattle feed	No complete exposure pathways	Animal Confinement Ordinance DEIR, February 2002, pps. 5-141 to 5- 145
Genetically modified crops (grown as forage for dairy animals)	Cattle digestive process breaks down components in feeds, including protein into amino acids, and DNA into nucleic acids, that are then excreted; Unpublished research indicates no adverse effects on dung beetles from ingesting manure from cows feeding on Bt corn; Incomplete exposure pathway  NONE GROWN AT THE PROJECT	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25
Recombinant Bovine Growth Hormone	bST is a complex protein that is immediately broken down into small, inactive amino acids and peptides and rendered ineffective when it enters a cows digestive system; Incomplete exposure pathway  NONE USED AT THE DAIRY	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25
Antibiotics	Use of antibiotics is prohibited for the milking herd; only segregated sick animals receive antibiotics	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25

No proposed operation or facility of the Antonio Azevedo Dairy would alter the results of these previous evaluations regarding the release of hazardous substances to the environment from dairy operations.

Question b: Potentially Significant Impact. Animal agriculture, such as dairies, results in the production of copious amounts of manure. Animal wastes contain zoonotic pathogens, which are viruses, bacteria, and parasites of animal origin that cause disease in humans. Implementation of the proposed Antonio Azevedo Dairy Expansion project could result in increased export of dry manure and associated pathogens and residual contaminants, potentially causing adverse human health impacts. These effects will be evaluated more fully in the EIR prepared for the project.

**Question c: No Impact.** The nearest existing school, El Nido Elementary School, is located approximately 1.4 miles east of the project site. Therefore, the dairy operations would not result in hazardous emissions or handle hazardous waste within 0.25 miles of an existing or proposed school.

Question d: No Impact. The project site is not listed in the roll of hazardous waste sites maintained by the State of California and Merced County for County addresses pursuant to Government Code §65962.5 (List consulted October 8, 2010 (DTSC 2007)).

Question e: Less-than-significant Impact. According to Map 17 of the Merced County General Plan, the project site is not located adjacent to any emergency evacuation traffic control points. Traffic control points are intended to direct evacuees away from geologic risk areas. However, no modification of area intersections is proposed by the project, and the project would not add significant amounts of traffic that could interfere with emergency response. Further, the Antonio Azevedo Dairy Expansion project would not result in the modification or blockage of any evacuation route, or result in an increased concentration of large numbers of persons in an at-risk location.

**Question f: Less-than-significant Impact.** The Merced County General Plan designates the project site and area as having a low risk of wildland fire.

Question g: Potentially Significant Impact. While the existing agricultural character of the project vicinity tends to minimize incompatibility to existing uses, implementation of the Antonio Azevedo Dairy Expansion project could introduce an additional source of flies and other insects in the area of the adjacent residences. In efforts to minimize these conflicts, there is a required minimum setback between new or expanded confined animal facilities and individual off-site rural residents to 1,000 feet, and the construction of new off-site dwellings is prohibited within 1,000 feet of an existing animal confinement facility. For the Antonio Azevedo Dairy Expansion project, the nearest off-site residence is located approximately 650 feet south of existing facilities. The proposed dairy expansion would not shorten the distance between the off-site residences and active dairy facilities. Because of the proximity of adjacent residences, and because expanded operations at the dairy could result in an increase in nuisance intensity and frequency, the proposed project may be incompatible with existing uses in the project vicinity. These effects will be evaluated more fully in the EIR prepared for the project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII-1. A	AIRPORTS:				
Wo	ould the project:				
a)	Result in an inconsistency with the Airport Land Use Compatibility Plan?				/
b)	Require review by the Airport Land Use Commission?				1
c)	For a project located within an airport area of influence boundary, would the project result in a safety hazard for people residing or working in the project area?				/
d)	For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?			1	

**Question a: No Impact.** The Merced Municipal Airport is located approximately 10 miles from the project site. The project site is not located in an area for which an Airport Land Use Plan has been prepared (Merced County ALUC 1999).

**Question b: No Impact.** Because the project site is not located in an area for which an Airport Land Use Plan has been prepared, it would not require review by the Airport Land Use Commission.

**Question c:** No Impact. The project site is not located within an airport area of influence boundary, and no impact would occur.

**Question d: Less-than-significant Impact.** There is a private airstrip (Emmett Field) located approximately 3 miles south of the project site. These airstrips are generally used for agricultural purposes and would not result in a safety hazard for employees of the Antonio Azevedo Dairy Expansion project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. H	YDROLOGY AND WATER QUALITY:				
V	Would the project:				
a	Violate any water quality standards or waste discharge requirements?	✓			
t	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	1			
С	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	/			
d	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	,			
е	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	/			
f	Otherwise substantially degrade water quality?	/			
g	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance rate map or other hazard delineation map?			1	

There are no natural water features on the project site or vicinity.

Question a, f: Potentially Significant Impact. Dairy facilities pose a number of potential risks to water quality, primarily related to the amount of manure and process water that they generate. Manure and process water from dairy facilities can contribute pollutants such as nutrients (nitrogen), ammonia, organic matter, sediments, pathogens, hormones, antibiotics, and total dissolved solids (salts). These pollutants, if uncontrolled, can cause several types of water quality impacts, including contamination of drinking water, impairment of irrigation systems, and impairment of surface waters.

For the proposed Antonio Azevedo Dairy Expansion project, liquid manure would be directed to the proposed storage pond following mechanical manure separation in the processing pit and then treated in the wastewater treatment pond. Therefore, the liquid waste management system would consist of a mechanical manure separator (to remove solids), a storage pond, a treatment pond, and pipelines and irrigation facilities to apply the wastewater to irrigated crops on the remainder of the project site. Currently, there are 505 cropped acres that are available for disposal of dairy wastewater; with the proposed expansion, approximately 50 acres would be removed from crop production and developed with active dairy facilities, so that 455 cropped acres would be available for disposal of dairy wastewater. Receiving fields are graded to guide excess applied wastewater to an existing tailwater return system. Collected tailwater is recycled and returned to the nearest field pipe access for reapplication. Approximately 18,025,000 gallons of wastewater would be applied to off-site fields under written agreement.

Dairy process water contains many contaminants, including elevated levels of salts and nitrogen. Because of their environmental and chemical characteristics, nitrogen and salts are used as the chemical markers for assessing the safety and effectiveness of process water management for confined dairy and cattle facilities. For regulatory purposes, if all of the nitrogen and salt generated by a proposed dairy or other animal confinement facility are safely and effectively managed, the other lesser constituents of the process water would be controlled as well. While the existing and proposed waste management systems would act to prevent groundwater contamination, the operation of the Antonio Azevedo Dairy Expansion project may result in degradation of groundwater resources and potential adverse effects to surface water quality. This would be a potentially significant impact to be evaluated further in the EIR for the proposed project.

**Question b: Potentially Significant Impact.** The facility is located within the El Nido Irrigation District. Water used by the project is currently provided by groundwater from on-site irrigation wells. The proposed expansion project includes the continued use of existing and newly installed irrigation wells. Water usage for the dairy would increase slightly with the proposed herd expansion. Project impacts to groundwater levels will be evaluated further in the EIR for the proposed project.

Question c, d, e: Potentially Significant Impact. The project would result in the construction of additional facilities including a freestall barn, cow pens and shades, and a new wastewater management system at a previously existing dairy. Stormwater runoff during the construction period could result in siltation and sedimentation of waterways draining the site. Project impacts due to surface drainage and runoff will be evaluated further in the EIR for the proposed project.

Question g: Less-than-significant Impact. The site of the Antonio Azevedo Dairy Expansion project is located in flood zone A as identified by the Federal Emergency Management Agency (FIRM 2008). Merced County has a floodplain management ordinance (Zoning Code Section 18.34) that meets minimum federal standards for participation in the National Flood Insurance Program. This ordinance requires that the base flood elevation on a project site be established, that structures be flood proofed, and that a development permit demonstrating compliance with the provisions of the floodplain management ordinance be obtained prior to the initiation of construction. Prior to submitting plans for any new building or to legalize any existing buildings, a licensed surveyor must be hired to determine the base flood elevation and the information must be submitted to the Public Works Department. Compliance with the floodplain management ordinance would result in a less-than-significant impact.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX-1.	FL	OODPLAINS:				
	Deg	gree of Suitability in 100-Year Floodplains.				
	Wo	ould the project:				
	a)	Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?			1	
	b)	Changes in absorption rates or the rate and amount of surface runoff?			1	
	c)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area)?			1	
	d)	Changes in the amount of surface water in any water body?				1

**Question a, b: Less-than-significant Impact.** The project site receives minimal off-site storm runoff. Runoff from additional development on the project site would be disposed of on surrounding agricultural lands owned by the project sponsor. All stormwater runoff is collected and maintained on the project sponsor's larger surrounding property as described above.

Question c: Less-than-significant Impact. As described above, the proposed project is located in Flood Zone A, which is defined as an area that would be inundated by a 100-year flood, but where no base flood elevations have been established. Compliance with Merced County regulations regarding floodplain management would provide protection of active dairy facilities from flood inundation. Prior to submitting plans for any new building or to legalize any existing buildings, a licensed surveyor must be hired to determine the base flood elevation and the information must be submitted to the Public Works Department. Compliance with the floodplain management ordinance would result in a less-than-significant impact. Therefore, implementation of the project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. Finally, the project would not be inundated by a seiche, tsunami, or mudflow.

**Question d: No Impact.** No surface water resources are on the project site or vicinity. No diversion of surface water is proposed as a part of the project.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Χ.		ND USE AND PLANNING: ould the project:				
	a)	Physically divide an established community?				/
	b)	Conflict with applicable land use plan policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	1			

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?				/
d)	Result in a substantial alteration of the present or planned land use of an area?			1	
e)	Be consistent with the site's existing or proposed zoning or planned land use of an area?	1			
f)	Be compatible with existing surrounding zoning?			/	
g)	Be compatible with existing and planned surrounding land uses?	1			
h)	Be consistent with the land use designations and policies of the Comprehensive General Plan (including those of any applicable Specific Plan) or planned land use of an area?	1			
i)	Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?				1

**Question a:** No Impact. The land surrounding the project site and in the vicinity is primarily developed for agriculture. Scattered rural residences are located in the general area of the project; most are associated with agricultural operations. Other than scattered rural residences, there is no established community in the project area. Because the project could not divide a community, no adverse effects would result and no mitigation would be necessary.

Question b, g, h: Potentially Significant Impact. Existing land uses on the project site include an existing dairy facility and irrigated crops. Land use within the project area is regulated by Merced County through the various plans and ordinances adopted by the County. These adopted plans include the Merced County General Plan and the zoning ordinance. The Merced County General Plan designates the project site and the surrounding areas as Agricultural. A goal of the Merced County General Plan is to restrict conversion of agricultural land while maintaining the farming aspect. The project site is within the Merced County A-1 (General Agricultural) zoning district. It is the intent of the A-1 zone to provide for areas of more intensive farming operations and agricultural commercial uses dependent on proximity to urban areas or location in sparsely populated low traffic areas.

In Merced County, animal confinement facilities, such as a dairy, may be permitted in all agricultural zones subject to approval of an Administrative Permit or Conditional Use Permit based on the number of off-site dwellings within the windshed (Merced County Code §18.02, Figure 2). As defined by the Merced County Code, animal confinement facilities face greater regulatory scrutiny for compatible land uses under the Conditional Use Permit if off-site residential dwellings are located within the windshed, defined as an area of 1,320 feet upwind to 2,640 downwind of the periphery of the animal facility (for a discussion of land use compatibility, see below). For the Antonio Azevedo Dairy Expansion project, there are four off-site residential dwellings within the windshed of the dairy. The County is considering the dairy project under its Conditional Use Permit process.

Within Merced County, Conditional Use Permits are discretionary permits for use of land that require special review and control to ensure that they are compatible with the neighborhood and surrounding residences. They are considered more likely to have greater impacts than uses permitted by right or uses permitted under Administrative Permits (Merced County Code §18.50.02b). The proponents of the proposed Antonio Azevedo Dairy Expansion project have made application to

the County of Merced for a Conditional Use Permit to bring the existing dairy facility into compliance with Merced County's permit requirements and to construct and operate the proposed dairy expansion.

Chapter 18.48.040 of the Merced County Code requires at least a 1,000-foot setback between animal confinement facilities such as the Antonio Azevedo Dairy and off-site residences. The setback distance is measured from the nearest point of active areas of the animal confinement facility to the nearest point of the residence. For the proposed Antonio Azevedo Dairy, the nearest residence is located 650 feet south of existing 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 the nearest residence. The proposed expansion would not reduce this distance. Additionally, the ACO prohibits the location of new animal confinement facilities within one-half mile of urban areas or areas zoned for residential uses, or concentrations of rural residences, and does not allow expansions to reduce this distance. The ACO provisions also protect isolated sensitive rural uses, such as schools, hospitals, jails, public or private recreational areas, parks, or all wildlife refuges from the nuisance affects of dairies by establishing a one-half mile setback from new dairies. The dairy site is located approximately 1.75 miles from the El Nido Specific Urban Development Plan (SUDP) boundary, and would not decrease this distance with the proposed dairy expansion.

While the existing agricultural character of the vicinity would tend to minimize incompatibility to existing uses in the project vicinity, implementation of the Antonio Azevedo Dairy Expansion project could introduce an additional source of odors, flies, and other insects in the area of the one residence. (Potential adverse odor effects are addressed in Section III, *Air Quality* of this Initial Study.) The EIR prepared for the Merced County Animal Confinement Ordinance Revisions assesses potential land use conflicts with rural residences for new and expanding dairies in Merced County. In efforts to minimize these conflicts, there is a required minimum setback between new or expanded confined animal facilities and individual off-site rural residents to 1,000 feet, and the construction of new off-site dwellings is prohibited within 1,000 feet of an existing animal confinement facility. For the proposed Antonio Azevedo Dairy, the nearest residence is located 650 feet south of existing facilities. Because of the proximity of adjacent residences, the proposed project may be incompatible with existing uses in the project vicinity. This would be a potentially significant impact to be evaluated in the EIR.

**Question c: No Impact.** The dairy site is located approximately 1.75 miles from the El Nido Specific Urban Development Plan (SUDP) boundary, and would not decrease this distance with the proposed dairy expansion. The project site is not located within a city sphere of influence.

**Question d: No Impact.** Existing land uses on the project site include an existing dairy facility and irrigated crops. The proposed dairy expansion would be a continuation of existing agricultural uses on the project site, and would be consistent with the agricultural zoning.

**Question e: Potentially significant Impact.** As stated above, the Merced County General Plan designates the project site as Agricultural, and the project site is within the Merced County A-1 (General Agricultural) zoning district. The proposed dairy expansion would be consistent with this zoning and land use designation. However, because the project may conflict with Merced County Code setback requirements as described in Question b above, this would be a potentially significant impact to be evaluated in the EIR.

**Question f: Less-than-significant Impact.** The project site and surrounding properties are within the Merced County A-1 (General Agricultural) zoning district. The proposed dairy expansion would be a continuation of existing agricultural uses on the project site, and would be consistent with the agricultural zoning of surrounding properties.

**Question i: No Impact.** As stated above, the land surrounding the project site and in the vicinity is primarily developed for agriculture. Scattered rural residences are located in the general area of the project; most are associated with agricultural operations. Other than scattered rural residences, there is no established community in the project area, including any low-income or minority communities. Because the project could not divide a community, no adverse effects would result and no mitigation would be necessary.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI.	M	INERAL RESOURCES:				
	Wo	ould the project:				
	a)	Result in the loss of availability of known mineral resource that would be of value to the region and the residents of the state?				/
	b)	Result in the loss of an availability of a locally important mineral resource recovery site delineated on a local general, specific plan or other land use plan?				/
	c)	Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?				1
	d)	Expose people or property to hazards from proposed, existing or abandoned quarries or mines?				1

Question a-d: No Impact. Mineral resources within Merced County consist of aggregate deposits located along the Merced River and adjacent existing and historic watercourses. According to Background Report for the Merced County General Plan Update (Figure 8-11), the project site is not located in an area of sand and gravel resources (Merced County 2007). No important mineral deposits, Mineral Resource Zones, or existing or previous mines are located in the area or on the project site. Because none of these resources and resource protection zones is located in the project area, no adverse effects would result and no mitigation would be necessary.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII.		OISE:				
	Wo	uld the project result in:				
	a)	For a project located within an airport area of influence boundary, would the project expose people residing or working in the project area to excessive noise levels?				/
	b)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			1	
	c)	Railroad Noise?				/
	d)	Highway Noise?			1	

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Other Noise?			1	
f)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			1	
g)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			1	
h)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			1	
i)	Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				1

**Question a: No Impact.** The Merced Municipal Airport is located approximately 10 miles from the project site. The project is not located within an airport area of influence boundary, and would not expose people in the project area to excessive noise levels.

Question b: Less-than-significant Impact. While there are several private airstrips located in the project vicinity, these airstrips are used for agricultural purposes and would not result in unusual or excessive noise levels in the project area.

**Question c: No Impact.** The project site is located over 10 miles from the Union Pacific Railroad, and it would not result in exposure to railroad noise.

**Question d: Less-than-significant Impact.** There are no site-specific noise level projections for the project area contained in the Merced County General Plan Noise Element. Active facilities of the project site are located approximately 2 miles west of State Route 152. There are no other major noise sources located in the project vicinity.

Question e: Less-than-significant Impact. The project site is located a significant distance from any considerable noise source. Because the project is in a rural area removed from noise impacts from significant noise sources, noise levels in the vicinity of the project site would be well within the Merced County Code noise standard of 70 dB Ldn for agricultural uses (Merced County Code Section 18.41.070C). Because the proposed project is in an area compatible with existing noise levels, and there are no important sources of noise in the project vicinity, no adverse effects to the project from high noise levels would occur and no mitigation would be necessary.

Question f, g, h: Less-than-significant Impact. Existing operations include dairy operations, crop cultivation, and surrounding agricultural operations including a poultry ranch. With project implementation, there would be little increase in existing noise levels in the project vicinity. Most noise events are associated with tractor and equipment operation. No new large machinery or other noise-producing activities would occur; no activities different than those currently occurring, or closer to nearby residences, are proposed. Noise levels produced during operation would not exceed those determined to be acceptable for agriculture by the Merced County General Plan (75 dB Ldn). Because the proposed project is in an area compatible with existing noise levels, and there are no

important sources of noise in the project vicinity, no adverse effects to the project from high noise levels would occur and no mitigation would be necessary.

**Question i: No Impact.** No feature of the project would cause noticeable levels of ground borne vibration or noise. Because the project would not expose adjacent residents or other sensitive receptors to excessive levels of ground borne noise or vibration, no adverse effect would result and no mitigation would be necessary.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIII.	Po	OPULATION AND HOUSING:				
	Wo	uld the project:				
	a)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				/
	b)	Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?			1	
	c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				/
	d)	Affect a County Redevelopment Project Area?				1
	e)	Cumulatively exceed official regional or local population projections?				/
	f)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure?)				/

**Question a, c: No Impact.** There are six residences located on site associated with the existing dairy operations. No direct loss or degradation of existing housing units would occur with project implementation. Since the existing residences would be unaffected by the proposed project, implementation of the project would not displace substantial numbers of people or existing housing units. The proposed project would not include any additional housing.

Question b: Less-than-Significant Impact. The dairy currently employs a staff of 15 workers. With implementation of the proposed project, the number of employees would increase to 25 workers. In August 2010, the labor force in Merced County totaled 109,100 persons, with an unemployment rate of 17.4 percent (or 18,900 unemployed persons) (EDD 2010). The increased labor needs of the project can be accommodated by this existing workforce within Merced County, and would not require the importation of workers. Similarly, any additional housing demands caused by project employees could be accommodated by existing and planned housing resources within Merced County. Any additional housing demands caused by project employees could be accommodated by existing and planned housing resources within Merced County.

**Question d: No Impact.** The proposed dairy expansion site is not located in a County Redevelopment Project Area, and no adverse impacts would occur.

**Question e, f: No Impact.** The Antonio Azevedo Dairy Expansion project site is located in an agricultural region developed with other animal confinement operations, including other dairies. Thus, it does not result in a new or different type of use for the area. The project does not create or

improve any infrastructure serving the site or region. The proposed project is consistent with Merced County land use plans, and no modification of land use and development policies would be necessary. Thus, no existing infrastructure or institutional barriers to growth would be removed. The population of Merced County on January 1, 2010 was estimated to be 258,495 (DOF 2010). The State Department of Finance projects that Merced County's population will be 652,355 persons in 2050 (DOF 2007). The projected future workers from the proposed Antonio Azevedo Dairy Expansion project, together with their dependents, would not constitute a significant component of the Merced County population change. The project would not exceed population projections or result in any significant growth inducing effects. Therefore, the proposed project would not result in substantial direct or indirect growth inducement.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. Public Services:				
Would the project result in substantial adverse physical impacts assorphysically altered governmental facilities, need for new or physically construction of which could cause significant environmental impact ratios, response times or other performance objectives for any of the	altered gove ts, in order to	ernmental f o maintain a	acilities, the	e
a) Fire Services?				
a) The betvices:			1	
b) Sheriff Services?			<i>J</i>	
,			<i>J J</i>	
b) Sheriff Services?			/ / /	

Question a: Less-than-significant Impact. The Merced County Fire Department, El Nido Fire Station 83 is located approximately 2 miles from the project site. Operation of the Antonio Azevedo Dairy Expansion project would include expansion of a large, developed use in an area without developed fire safety facilities. Because of this, fire risk and hazard could increase. In response to this common condition in agricultural areas of the County, the Merced County Fire Department generally imposes requirements for on-site water storage for fire protection. Compliance with measures as set forth by the Fire Department would be required as conditions of approval and would reduce fire risk and hazard to levels found acceptable by the Merced County Fire Department.

Question b-e: Less-than-significant Impact. Nearby services to the project site include El Nido Elementary school located approximately 1.4 miles east of the site, the Dos Palos Branch Library located approximately 10 miles south of the project site, and the Merced County Library located approximately 12 miles north of the project site. The Sheriff Department C. F. Bludworth (North) Sub Station provides service to the El Nido/Hilmar/Delhi areas. Hospital services in the County are located in Merced, Los Banos, and Dos Palos. No feature of the project would result in the need for new or altered services for police protection, schools, libraries, or health services. Because no new residences are to be constructed on site, and needed employees are expected to be drawn from the local labor pool, no substantial increase in population is expected to result from the proposed project, and no increases in the demands for public services such as schools, libraries, or health services requiring the construction of new facilities are expected. Additionally, no feature of the proposed use would pose unusual police protection demands. This, coupled with the lack of

population increase, indicates that no increased demands for police protection services would be expected. No significant impacts would occur and no mitigation would be necessary.

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV.	RE	CREATION:				
	Wo	uld the project:				
	a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				/
	b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				/

**Question a, b: No Impact.** No substantial increase in population would occur with implementation of the project. Thus, there would be no increase in the demand for neighborhood or regional parks or other recreational facilities that would require the construction of new facilities or modification of existing recreation resources. No existing public recreational resources are located on the project site or in the vicinity. No adverse effect would occur, and no mitigation would be necessary.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			,	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			1	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				1
d) Alter waterborne, rail, or air traffic?				/
e) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			1	
f) Cause an effect upon, or a need for new or altered maintenance of roads?			/	
g) Cause an effect upon circulation during the project's construction?			1	

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h)	Result in inadequate emergency access or access to nearby uses?			/	
i)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				1
j)	Bike Trails				/

Currently, the site is served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Existing daily trips by all classes of vehicle are estimated at 100 average daily trips. All trips currently access W. El Nido Road. State Highways 152 and 59 provide regional access to the dairy. Private internal roads would continue to be used for the agricultural operations and movement of harvested crops from the fields to the dairy.

Question a, c: Less-than-significant Impact. In addition to existing daily trips by all classes of vehicle estimated at 100 average daily trips (see Table 3 in the project description above), the proposed dairy herd expansion would result in the addition of approximately 30 trips per day, including an additional 3 heavy truck trips per day. Because of the existing low levels of traffic, and because minimal new trips would be generated by the proposed project expansion, there would be no reduction of the existing Level of Service on W. El Nido Road.

**Question b: Less-than-significant Impact.** Parking for employee vehicles and feed and commodity delivery trucks is provided on the project site according to standards set forth by Section 18.40 of the Zoning Code. No additional parking would be needed.

Question d, e: No Impact. The proposed project would not result in the generation of air traffic. There would be no air traffic impacts. Since no waterborne or rail facilities are located in the project area, implementation of the project would not result in any impacts to these facilities.

Question f: Less-than-significant Impact. No modifications to any existing roadway are proposed either during project construction or operation. Construction of the proposed dairy facilities would allow for the access of emergency vehicles and would not increase roadway hazards from the design of project roads. In addition, the County Fire Department maintains standards for access road to provide for adequate emergency access, and may require minor roadway improvements. There would be no impacts from hazards due to design features.

Question g: Less-than-significant Impact. The Merced County Public Works Department has instituted roadway improvement conditions for new or expanding projects that would impact the County's road system. The proposed dairy herd expansion would result in the addition of approximately 30 trips per day, including an additional 3 heavy truck trips per day (see Table 3 above). Therefore, to prevent the deterioration of the existing roadbed because of the traffic generated by the existing dairy and proposed expansion, structural improvement of W. El Nido Road may be necessary. The following condition is identified to fund needed improvement of adjacent roads and maintain adequate traffic circulation. With implementation of these conditions, identified impacts to road maintenance would be less than significant, and no additional mitigation would be necessary.

- 1. The applicant shall dedicate an additional ten (10) feet of right of way along the project's entire frontage on the north side of El Nido Road.
- 2. The applicant shall improve all driveways utilized 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. The applicant shall be required to obtain an Encroachment Permit from the County to perform said driveway improvements.
- 3. Roadway Impact Evaluation or Roadway Impact Agreement:
  - a. The applicant shall provide a roadway impact evaluation, prepared by a registered Geotechnical Engineer or Civil Engineer, to assess the potential impact that the project may have on Merced County roadways. This evaluation shall include both an analysis of the traffic characteristics of the roadways most impacted by the project, and a geotechnical analysis of the existing structural section of those roadways. The traffic analysis will require classification counts to determine the existing and projected Traffic Indices of said roadways; and, the geotechnical analysis will require corings of said roadways to determine their structural integrity. Based upon said evaluation, the Applicant shall pay to the Merced County Road Fund an amount equivalent to improving said roadways sufficient to sustain the truck load impacts for the future 20-years; or
  - b. In lieu of performing a roadway impact evaluation, the Applicant may opt to enter into a Roadway Impact Agreement with Merced County Department of Public Works Road Division. The Roadway Impact Agreement will stipulate that the Applicant shall pay a Road Impact Fee to the Merced County Road Fund to compensate the County for the increased cost of maintaining the County roadways impacted by the Applicant's project. The Road Impact Fee shall be paid annually, and shall be an amount equal to \$2.50 for every heavy truck (i.e. milk tankers, commodity deliveries, etc.) trip entering or leaving the project site during the previous 12 months, associated with the expansion approved by CUP 09-011. The Applicant shall also pay a fee of \$200.00 for processing said Roadway Impact Agreement.

**Question h: Less-than-significant Impact.** No modifications to any existing roadway are proposed during project construction; therefore, project construction would not result in an adverse effect on circulation in the project area.

**Question i: Less-than-significant Impact.** According to the Merced County General Plan, freeways and major County roads would be used for primary evacuation route. The project site is located off of W. El Nido Road, and no modifications to any existing roadway are proposed during project construction or operation, and no impacts to emergency access would result.

**Question j, k:** No Impact. No alternative modes (bicycle, pedestrian, transit) of transportation facilities or bike trails are located in the project vicinity; therefore, the project would have no effect on such facilities. No adopted policies with respect to alternative modes of transportation adopted as part of the Merced County General Plan apply to the proposed facility.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. U	TILITIES AND SERVICE SYSTEMS:				
Wo	uld the project:				
a)	Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?			1	
b)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			1	
c)	Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?			1	
d)	Result in a determination by the wastewater treatment provider which serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			1	
e)	Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			1	
f)	Comply with federal, state, and local statutes and regulations related to solid wastes (including the CIWMP (County Integrated Waste Management Plan)?			1	
g)	Electricity?			/	
h)	Natural gas?			/	
i)	Communications systems?			/	
j)	Stormwater drainage?			/	
k)	Street lighting?			/	
1)	Maintenance of public facilities, including roads?			/	
m)	Other governmental services?			/	
n)	Conflict with adopted energy conservation plans?			/	

Because confined animal facilities, including dairies, would not require additional public facilities beyond those typically provided in agricultural areas, the operations of facilities to serve the expanded herd would not be expected to increase the demand for public facilities beyond the levels provided and planned for by public utilities.

**Question a, b: Less-than-significant Impact.** Water used by the project is currently provided by groundwater from on-site irrigation wells. The proposed project includes the continued use of existing and newly installed irrigation wells. Implementation of the project would not require the development of any new or expanded surface water supply facilities on the project site or elsewhere. No significant impact would occur and no additional mitigation would be necessary. For additional information regarding the project's water use and supplies, see Section IX, above.

**Question c, d: Less-than-significant Impact.** There are no new residences proposed with the dairy expansion; therefore no sanitary disposal system for domestic wastewater would be required with project implementation.

Question e, f: Less-than-significant Impact. Implementation of the proposed project would not require extra stops for solid waste removal since business uses on the site would be unchanged. (Disposal of manure is outside of the normal waste stream, and is provided by the project proponent. Since the manure is used to fertilize agricultural fields, there would be no effect on landfill capacity or Merced County's adopted Integrated Waste Management Plan.) Provision of solid waste collection service to serve the proposed project would be subject to the normal tariffs and requirements of the service provider, and would not result in the need for any major new systems or substantial alterations to these utility systems.

**Question g: Less-than-significant Impact.** Power lines currently extend into the project vicinity to serve existing wells and pumps. Extension of additional electrical services to serve the project site would be subject to the normal tariffs and requirements of the service provider, and would not result in the need for any major new systems or substantial alterations to these utility systems.

Question h, i: Less-than-significant Impact. There are no new residences proposed with the dairy expansion, and no demands for natural gas or communication systems would result with project implementation.

Question j: Less-than-significant Impact. The project site receives minimal off-site storm runon. All stormwater generated at the project site from existing and proposed areas with impermeable surfaces is, and would continue to be, collected and routed to the existing wastewater management system. All stormwater generated by the project would be collected and maintained within the project proponent's larger property. Therefore, no adverse effects to storm drainage are expected, and no needs for, or modifications to, storm drainage systems in the project vicinity are necessary. For more information regarding storm drainage, see Section IX, above.

**Question k: Less-than-significant Impact.** Site access is provided via W. El Nido Road. Street lighting is not provided by Merced County in rural areas, and no feature of the project would require lighting of public streets.

**Question 1: Less-than-significant Impact.** As discussed in Section XVI above, the proposed dairy expansion would result in a minimal increase in new traffic trips, and would not require modification of existing roadways. Based on the transportation analysis, roadway maintenance may be required with implementation of the project, and would be included as a condition of approval.

**Question m: Less-than-significant Impact.** The proposed dairy expansion would not require the construction of additional facilities for energy generation, or require construction of new energy distribution facilities. The proposed project would not conflict with an adopted energy conservation plan.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. N	IANDATORY FINDINGS OF SIGNIFICANCE:				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	,			
b)	Does the project have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one, which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)			/	
c)	Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in California Code of Regulations, Section 15130)?	,			
d)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	1			

Question a: Potentially Significant. Because of existing conditions on the project site, the comprehensive regulation of potential impacts by local and state agencies as discussed above including the implementation of mitigation measures and requirements, the project does not have the potential to eliminate important examples of the major periods of California history or prehistory. However, the project may: exceed SJVAPCD criteria for air emissions, including greenhouse gases; adversely affect biological resources; degrade water quality; result in incompatible land uses; result in nuisance levels of insects; and cause hazards from off-site transport of dry manure. These would be potentially significant impacts to be evaluated further in the EIR for the Antonio Azevedo Dairy Expansion project.

**Question b: Less-than-significant Impact.** Because the project would accommodate long-term Merced County environmental goals to benefit agricultural operations within the County, and would not result in adverse environmental effects, the project would not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals. No significant impact would occur, and no mitigation would be necessary.

**Question c: Potentially Significant.** As discussed in this Initial Study, the Antonio Azevedo Dairy Expansion project has the potential to exceed exceed SJVAPCD criteria for air emissions, including greenhouse gases; adversely affect biological resources; degrade water quality; result in incompatible

land uses; result in nuisance levels of insects; and cause hazards from off-site transport of dry manure. Thus, it may contribute to cumulative effects in these areas. After mitigation, the project has been determined not to have significant project level effects for any additional environmental issue. Thus, implementation of the project would not contribute to any cumulative effects in these other areas. Because of potential cumulative impacts to the areas listed above, such impacts will be evaluated further in the EIR for the proposed project.

**Question d: Potentially Significant.** Because of the potential environmental impacts identified in this Initial Study, the proposed Antonio Azevedo Dairy Expansion project may have the potential to cause substantial adverse effects on human beings. This would be a potentially significant impact to be evaluated further in the EIR for the proposed project.

## LITERATURE CITED

The following documents were referred to as information sources during preparation of this document. They are available for public review at the web addresses shown after the listing. All documents without an Internet address are available at the County of Merced, Planning and Community Development Department 2222 'M' Street, Merced, California 95340.

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California, State of. Department of Finance. See DOF.

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- Merced County, 2007. Merced County General Plan. Public Review Draft Background Report. June 21, 2007. Prepared by Mintier & Associates, Planning Consultants.
- Merced County, 2007. An Ordinance Amending the Merced County Code to Modify Chapter 18.48.040 Entitled "Animal Confinement Facilities." February 13, 2007.
- \_\_\_\_\_\_, 2002. Revised Draft, Program Environmental Impact Report for the Merced County Animal Confinement Ordinance Revision. County of Merced, Division of Environmental Health, Merced, California.
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Merced County Planning Commission Resolution 97-1.

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NRCS. See United States, Natural Resources Conservation Service.

Site reconnaissance, September 24, 2010, by Planning Partners.

United States, Department of Agriculture. Soil Survey Staff, Natural Resources Conservation Service (NRCS), 2010. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/accessed October 7, 2010 by Raadha M. B. Jacobstein.

## DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A NEGATIVE DECLARATION will be prepared.

X I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
David Gilbert, Senior Planner	
Merced County Planning Department	