# SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

# ENVIRONMENTAL ANALYSIS

# **PROPOSED RULE 496 (LARGE CONFINED ANIMAL FACILITIES)**

June 2006

## SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

## Initial Study/Environmental Checklist

## **Rule 496 (Large Confined Animal Facilities)**

#### Public Review Period Begins: June 21, 2006 Public Review Period Ends: July 21, 2006 at 5:00 P.M.

## A. <u>PROJECT BACKGROUND INFORMATION</u>

1. Project Title: Rule 496 (Large Confined Animal Facilities)

#### 2. Lead Agency Name and Address

Sacramento Metropolitan Air Quality Management District 777 12<sup>th</sup> Street, Third Floor Sacramento, CA 95814-1908

#### 3. Contact Person:

CEQA: Mr. Charles Anderson (916) 874-4831 Rule: Mr. Joe Carle (916) 874-4838

#### 4. **Project Location:**

This Rule applies to any large confined animal facility located within the boundaries of the Sacramento Metropolitan Air Quality Management District, which is Sacramento County (see Figure 1, Map of District Boundaries).

#### 5. Project Sponsor's Name and Address:

Sacramento Metropolitan Air Quality Management District 777 12<sup>th</sup> Street, Third Floor Sacramento, CA 95814-1908

# 6. **Project Description**:

This Initial Study is based on Draft Rule 496, dated June 19, 2006. The Draft Rule is intended to reduce emissions of volatile organic compounds (VOC) from large confined animal facilities. Annual VOC emissions from large confined animal facilities are estimated to be approximately 33.5 tons per year. Averaged over 365 days, daily emissions are approximately 0.09 tons per day. Confined animal facility emissions are temperature dependent with the highest emissions occurring during the summer when

the SMAQMD experiences the largest number of exceedances of the Federal health based ozone standards.

Rule 496 meets the requirements of State Senate Bill (SB) 700. Under SB 700, Confined Animal Facilities (CAFs) that exceed the California Air Resources Board (ARB) definition of a "large CAF" must implement an emission mitigation plan to reduce their VOC emissions. According to the requirements of the proposed rule, the emission mitigation plan will need to show Best Available Retrofit Control Technology (BARCT).

There are three large CAFs currently operating in the District that will be affected by the requirements of this rule. New CAFs with actual VOC emissions that exceed ½ of the District's major source threshold (25 tons/year) will be required under proposed Rule 215, AGRICULTURAL PERMIT REQUIREMENTS AND NEW AGRICULTURAL PERMIT REVIEW, to implement the Best Available Control Technology (BACT), which is generally more stringent than BARCT. Therefore, these large new sources will meet or exceed Rule 496 by implementing controls required during the District's new agricultural source review and permitting process.

Draft Rule 496 incorporates a cafeteria-based approach that would require each large CAF to select mitigation measures that reduce emissions. The VOC reductions achieved by this rule would equate to annual emission reductions of approximately 8.2 tons. Operators would have the flexibility to comply with the Rule using any combination of the following emission reduction measures:

- A. Feed and silage management practices such as: using feed formulation practices; increased feed removal and cleaning practices; feed and silage storage practices; and others.
- B. Increased cleaning of the milk parlor, where applicable.
- C. Increased cleaning frequency in various areas of animal housing.
- D. Minimization of moisture in various areas of animal housing.
- E. Use of manure additives in corrals or pens.
- F. Management practices for storing manure and separated solids such as: covering dry manure piles, removing manure from the facility; use of a digester; and others.
- G. Management practices for lagoons such as: proper operation and use of anaerobic, phototropic, or mechanically aerated lagoons; use of a solid separator; and others.
- H. Management practices for land application of animal waste such as: land incorporate all solid manure within seventy-two (72) hours; only apply waste that has been anaerobically treated; minimize moisture content of solid manure that is land applied; and others.

I. Use of control devices with VOC control efficiencies of at least 80% for certain operations.

Please refer to Draft Rule 496 and draft staff report which are available at the District's website at <u>www.airquality.org</u> for a detailed discussion of the provisions of the Draft Rule.

The Rule provides operators flexibility to pursue the most cost effective strategy for reducing their emissions. Given the cost differential between installing VOC controls on lagoons and enclosing their housing and pursuing emissions reductions elsewhere, it is unlikely that the industry will install VOC controls. The most likely approach for complying with Rule 496 is for operators to mitigate emissions by feeding according to National Research Council (NRC) guidelines; increased cleaning and removal of spilled feed; increased cleaning of animal housing and milk parlors, covering of dry manure piles; using solid separation devices or phototrophic lagoons; and rapidly incorporating manure into the land.

## 7. Environmental Setting:

CEQA requires that an initial study identify the project area's environmental setting. (CEQA Guidelines, sec. 15063, subd. (d)(2).) Appendix G of the CEQA Guidelines also suggests that an initial study should include a discussion of the project's environmental setting. The purposes of an environmental setting section are to identify baseline conditions for evaluating the significance of impacts, and to identify conflicts between the proposed project and existing plans. The section should provide a basis for understanding the significant effects of the proposed project. (CEQA Guidelines, sec. 15125.)

Sacramento County is located at the southern end of the Sacramento Valley, which is bounded by the Coast and Diablo ranges on the west and the Sierra Nevada on the east. The county is 55 miles northeast of the Carquinez Strait, a sea-level gap between the Coast Range and the Diablo Range; the intervening terrain is flat.

The prevailing wind is from the south, primarily because of marine breezes through the Carquinez Strait, although during winter, the sea breezes diminish and winds from the north occur more frequently.

Between late spring and early fall, a layer of warm air often overlays a layer of cool air from the Delta and San Francisco Bay, resulting in an inversion. Typical winter inversions are formed when the sun heats the upper layers of air, trapping below them air that has been cooled by contact with the colder surface of the earth during the night. Although each inversion type predominates at certain times of the year, both types can occur at any time of the year. Local topography produces many variations that can affect the inversion base and thus influence local air quality.

The Sacramento region's air quality has attained the federal ambient air quality standards for carbon monoxide (CO) and particulate matter 10 microns or less in diameter (PM10), but exceeds the California and federal ambient standards for ozone. Ozone is a regional air pollutant that is not directly emitted into the air, but is generated through photochemical reactions between nitrogen oxides and reactive organic gases. Mobile sources (vehicles) represent the primary source of these ozone precursors in the Sacramento region. Some ozone is transported to the Sacramento region from other regions to the south and to the west.

In 2005, there were 35 days when exceedances of federal 8-hour ozone standards occurred in the Sacramento nonattainment area.<sup>1</sup> These exceedances have adverse health impacts on people who live and work in the region. Planning scenarios that delay ozone reduction efforts, delay both attainment of the air quality standard, and the associated public health benefits. A project component that facilitates motor vehicle use, with its associated emissions, could have similar effects.

Open space in the area is dominated by agricultural lands in the valley, rangelands in the foothills, and forested land at the higher elevations. Studies show that pine forests and agricultural crops are adversely affected by elevated levels of ozone. In addition, studies show a continuing decline in the amount of agricultural land, as residential and commercial development increases in the region. Thus, planning scenarios that delay ozone reduction efforts perpetuate harm to pine trees and agricultural crops. Also, potential control measures that impose additional costs or operational restrictions on agricultural enterprises may have adverse effects on the productivity of the land. However, potential control measures that promote denser development, and thereby convert less agricultural land to nonagricultural uses, help to reduce agricultural land losses.

The nonattainment area hosts a dazzling array of habitat types. These include links in the Pacific Flyway used by migratory birds that travel throughout the Americas. These include rare plant habitat. These include habitat for sensitive, threatened, and endangered species. These include habitat for game animals. Continuing development is reducing the available space for rare plant and wildlife habitat. Local, state and federal agencies are working together to implement plans to preserve suitable habitat. A project component that facilitates more residential and economic development of wildlife habitat may have adverse environmental impacts.

The State of California has experienced electricity supply shortages in recent years. The adequacy of future electricity supplies in the State of California is a matter of great concern. Potential control measures that increase the peak period demand for electricity may contribute to brown outs and black outs that adversely affect the human environment.

<sup>&</sup>lt;sup>1</sup>ARB website (www.arb.ca.gov/adam/welcome.html) - air quality trends summary, accessed June 1, 2006.

A broad spectrum of land uses characterizes the developed lands in the region. Sacramento County has high-rise office buildings and high density housing in downtown Sacramento, surrounded by sprawling suburban development to the north, south and east. Placer and El Dorado Counties have sprawling suburban development at the lower elevations closest to the City of Sacramento, while their higher elevations tend to have larger lots and more rural uses. Sutter and Yuba Counties are planning major residential developments in the next planning horizon, in part to house commuters. Potential control measures that promote denser development and mixed uses may not be suitable for some land use designations in existing land use plans.

Highways are among the noise sources in the nonattainment area. A project component that facilitates highway expansions in the Sacramento region could exacerbate noise impacts in the area.

The population of the Sacramento region continues to grow. From 1990 - 2005, the population in Sacramento County grew from approximately 1,031,000 to 1,362,000, and the population in five nearby counties (Placer, El Dorado, Yolo, Sutter, and Yuba) grew from about 534,000 to 790,000.<sup>2</sup>

Among the many recreational opportunities in the nonattainment area are boating, offroad vehicle (ORV) use, and game hunting. The State Department of Parks and Recreation, and the State Department of Boating and Waterways, have done extensive planning, and made substantial investments in, facilitating ORV use and boating in the nonattainment region. Potential control measures that make boating and ORV use more expensive, or less frequently available, impact recreational opportunities in the region. On the other hand, the State Department of Fish and Game has done planning and spent money to promote the maintenance of habitat for game species. Thus, potential control measures that promote denser development, and that degrades less wildlife habitat, may have a beneficial impact.

The Sacramento region's transportation infrastructure is dominated by freeways. The City of Sacramento is the hub where Highway 50, Interstate 5, and Interstate 80 intersect. Other north-to-south highways in the area include Highway 49 in the foothills, Highway 70 in Yuba County, and Highway 99. Other east-to-west highways include Highway 20 in the north and Highway 88 to the south. Rail transit in the area includes Amtrak and Sacramento Regional Transit's Light Rail. In addition, there are bus services that vary by county. From 1990-2005, vehicle miles traveled in the Sacramento region grew at a faster rate than population<sup>3</sup>. Delays in the funding and construction of regional transportation projects could delay their benefits, such as reduced traffic congestion. However, the adverse impacts of transportation projects, such as noise and loss of open space, would also be delayed.

<sup>&</sup>lt;sup>2</sup>SACOG website demographic data, accessed June 2, 2006.

<sup>&</sup>lt;sup>3</sup>VMT data from 2002 Milestone Report (p. 47) and 8-Hour Ozone Rate-of-Progress Plan, February 2006 (p. D1-7).

## 8. Other Agencies Whose Approvals Is Required and Permits Needed:

Modified and new dairies may require permits from the Regional Water Quality Control Board, California Integrated Waste Management Board, and counties. No other agencies have discretionary authority over this project. The United States Environmental Protection Agency must also approve the Rule.

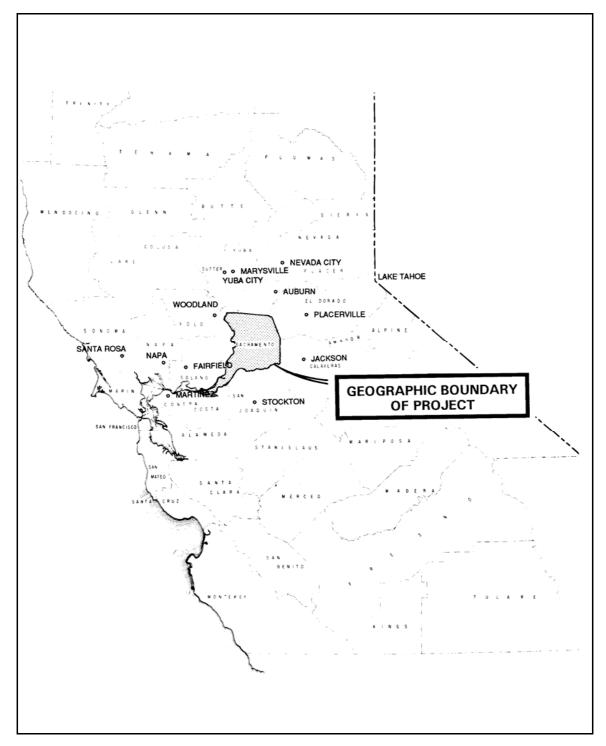
#### 9. Project Compatibility with Existing Zones and Plans:

Adoption of this Rule will not affect any land use zones or plans.

#### 10. Name of Person Who Prepared Initial Study:

Mr. Charles Anderson Air Quality Planning Program Coordinator





# B. 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 Resources	Air Quality
Biological Resources	Cultural Resources	Energy
Geology / Soils	Hazards & Hazardous Materials	Hydrology / Water Quality
Land Use / Planning	Mineral Resources	Noise
Population / Housing	Public Services	Recreation
Transportation/Traffic	Utilities / Service Systems	Mandatory Findings of Significance

# C. <u>DETERMINATION</u> (To be completed by the Lead Agency)

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 MITIGATED NEGATIVE DECLARATION will be prepared.
- □ 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:

Printed Name: Charles Anderson

Title: Program Coordinator

# D. ENVIRONMENTAL IMPACT CHECKLIST

Explanations of all answers on the checklist are located in section E.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X
<b>II. AGRICULTURE RESOURCES</b> : In deter are significant environmental effects, lead Land Evaluation and Site Assessment Mo Conservation as an optional model to use Would the project:	agencies ma del (1997) pi	ay refer to the C repared by the (	California Agri California De	cultural pt. of
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-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
<b>III. AIR QUALITY</b> Where available, the air quality management or air pollution co following determinations. Would the proje	ntrol district r			
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
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)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
IV. BIOLOGICAL RESOURCES Would	ine project:			v
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?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 US Fish and Wildlife Service?				X
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?				x
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?				x
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				x
V. CULTURAL RESOURCES Would th	e project:		· · · · · · · · · · · · · · · · · · ·	
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				x
VI ENERCY Mould the project				
VI. ENERGY Would the project:				
a) Conflict with adopted energy conservation plans?				X
<ul> <li>b) Result in the need for new or substantially altered power or natural gas utility systems?</li> </ul>				X
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?				X
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?				X
e) Comply with existing energy standards?				X
VII. GEOLOGY AND SOILS Would the	project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	F-0,000			x
i) 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.				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?				Х
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				Х
b) Result in substantial soil erosion or the loss of topsoil?				X
c) 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, subsidence, liquefaction or collapse?				X
d) 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?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
VIII. HAZARDS AND HAZARDOUS MAT	ERIALS W	/ould the projec	xt:	
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) 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?				X
IX. HYDROLOGY AND WATER QUALIT	Y Would th	e project:		
a) Violate any water quality standards or waste discharge requirements?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with recharge such that there would be a net deficit in aquifer volume or lower 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 uses or planned uses for which permits have been granted)?				X
c) 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?				X
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?				x
e) 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?				x
f) Otherwise substantially degrade water quality?				x
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 flood hazard delineation map?				x
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) 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?				х
j) Inundation by seiche, tsunami, or mudflow?				X
X. LAND USE AND PLANNING Would	the project:			
a) Physically divide an established community?				X
b) Conflict with any 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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XI. MINERAL RESOURCES Would the	project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
<b>XII. NOISE</b> Would the project result in:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				x
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				Х
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				Х
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) 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?				X
XIII. POPULATION AND HOUSING Wo	L Duld the proje	ect:		
a) 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)?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				Х
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				Х
Schools?				Х
Parks?				Х
Other public facilities?				Х
b) Cumulatively exceed official regional or local population projections?				X
c) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure?				X
d) Displace existing housing, especially affordable housing?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. RECREATION				
a) Would the project 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?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				x
				_
XVI. TRANSPORTATION/TRAFFIC Wo	ould the proje	ect:		
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				x
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?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				Х
f) Result in inadequate parking capacity?				Х

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVII. UTILITIES AND SERVICE SYSTEM	<b>IS</b> Would t	he project:		
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				x
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				Х
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGN	IFICANCE			
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?				X
b) 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)?				X
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?				x

#### I. Aesthetics

There will be no significant adverse aesthetic impacts from Draft Rule 496 (Large Confined Animal Facilities) because potentially affected sites are already developed as confined animal facilities and any aesthetic impact would already exist. New sites subject to the provisions of Draft Rule 496 would incorporate any necessary equipment into the design to minimize potential aesthetic impacts in accordance with local agency standards. Draft Rule 496 would not create aesthetically offensive sites visible to the public. Draft Rule 496 would not create a new source of substantial light or glare, which would have a significant adverse effect on day or nighttime views in potentially effected sites. No significant adverse aesthetic impacts are anticipated.

## II. Agriculture Resources

Most of the potentially affected sites are exclusively devoted to agricultural use so there will be no direct significant adverse impact. Any additional infrastructure will be related to agricultural production and may include modification of an existing structure such as a lagoon.

In the event that a potentially affected site chooses to install VOC control systems on their confined animal facility, the systems will likely occupy a maximum of 4,000 square feet for the largest sites and smaller areas for smaller facilities. The affected site owner/operator retains the option to determine specifically where to install the VOC control systems. Options are also available for the affected site owner/operators to choose VOC control options that do not occupy any space, such as increased flushing. Therefore, selecting a site devoted to agriculturally productive land for installation of a VOC control system or use of a VOC control that will occupy space instead of a management practice will be a decision resting solely upon the potentially affected site owners/operators.

Draft Rule 496 will not result in a substantive conversion of prime or unique farmland to non-agricultural use. As noted above, installing a VOC control system on a site devoted to agriculturally productive land will be a decision resting solely upon the potentially affected site owners/operators and in any case would require very small amounts of land. Since the dairy is an agricultural use, there will be no impact or conflict with existing zoning for agricultural use, or Williamson Act contract.

#### III. Air Quality

The Sacramento region is classified as a serious ozone nonattainment area and a moderate PM10 nonattainment area for the health-based air quality standards established by the federal Clean Air Act. The Sacramento area is also classified as serious nonattainment for the California ozone standard and nonattainment for the

California PM10 and PM2.5 standards. VOC is a precursor of both ozone and to some extent PM10 and PM2.5. It is expected that Draft Rule 496 will result in reductions of VOC air emissions of approximately 8.2 tons annually. The net decrease in air emissions associated with operation of an approved emissions control device or management practice will result in a positive air quality benefit.

Draft Rule 496 will not violate any air quality standard, result in a cumulatively considerable net increase in any criteria pollutant, expose sensitive receptors to substantial pollutants, or create any additional objectionable odors.

#### IV. Biological Resources

Implementing the provisions of Draft Rule 496 will not have a significant adverse effect on the habitat of sensitive species, riparian areas, federally protected wetlands, or interfere with any migratory fish or wildlife species with established migratory corridors. Draft Rule 496 will not conflict with any local policies or ordinances protecting biological resources or conflict with any Habitat Conservation Plan. No additional significant adverse impacts to biological resources are expected to result from Draft Rule 496 because it is expected to affect only agricultural/commercial areas where biological resources are already disturbed.

#### V. Cultural Resources

Effects from implementing Draft Rule 496 will occur at existing potentially affected facilities generally located in agricultural/commercial areas. As a result, significant adverse impacts on cultural resources including: historical resources, archaeological resources, paleontological resources, geologic features, or the disturbance of any human remains is highly unlikely. Implementing the provisions of Draft Rule 496 would not include any substantial excavation. Any new facilities subject to the Rule that are constructed in the future will go through a local agency approval and in most counties an environmental review process where screening for cultural resources would be addressed.

#### VI. Energy

Draft Rule 496 could conceivably cause some owners/operators to install VOC control equipment on their facilities. While decreasing emissions, some of this equipment could minimally increase the amount of energy needed to operate the facilities. It is expected that regulated sources would comply with any applicable energy conservation standards in effect at the time new equipment is installed. With these considerations, it is not expected that this proposed rule will impact or conflict with existing energy standards or energy conservation plans.

#### VII. Geology and Soils

Draft Rule 496 provides an option for some owners/operators to install VOC controls on their facilities. Installation of VOC controls on existing sources could result in modifications to the existing facilities to accommodate additional control equipment. Modification of an existing site is expected to constitute the most extreme compliance strategy. Draft Rule 496 contains a provision for additional scraping of drylots that could require disruption or over-covering of soil, minor changes in topography or surface relief features, or a change in existing siltation rates. Typically, scraping is needed to keep the manure pack from building up and does not cause a change to the underlying soil. Scraping drylots is a common management practice; therefore no new impacts are expected. Implementing the provisions of Draft Rule 496 will not increase the exposure of people of property to geologic hazards.

#### VIII. Hazards and Hazardous Materials

Owners/Operators may elect to install and operate VOC emissions control systems. These systems would most likely consist of ductwork used to collect emissions and transport them to an emissions control device. These are established technologies and employed in other industries. Owners/Operators must comply with federal, state, and local safety and environmental regulations. Existing regulations are considered adequate to minimize significant worker exposure and potential environmental hazards.

Draft Rule 496 will not result in a significant adverse impact to hazard and hazardous materials.

#### IX. Hydrology and Water Quality

Affected sites are zoned for agricultural uses. In the event that a potentially affected site chooses to install VOC control systems on their facilities, the systems will occupy a maximum of 4,000 square for the largest sites and smaller areas for smaller facilities. The potentially affected site retains the option of where it will specifically install the VOC control systems, thus selecting a site within the 100-year flood zone will be a decision by the site owners/operators and the local agency issuing a building permit for construction of the equipment and must comply with the regulations of the Regional Water Quality Control Board. Use of additional water for flushing or control devices on lagoons is a few of many control options available to site owners/operators. Water application to crops must be accomplished at rates that do not result in excessive nutrients impacting groundwater and surface water. [See also discussion of Utilities.] The majority of the facilities recycle flush water; therefore additional flushing would not result in significant increases in water use at the facilities.

Draft Rule 496 will not result in a significant adverse impact to hydrology nor will water quality be significantly adversely impacted by the proposed project

#### X. Land Use and Planning

There are no provisions in Draft Rule 496 that would affect land use plans, policies, or regulations. It is also expected that Draft Rule 496 will not affect infrastructure development or require changes to existing zone designations because the draft provisions primarily regulate existing facilities. Local governments determine land use and other planning considerations, and no land use or planning requirements will be altered. Therefore, Draft Rule 496 will not result in a significant adverse impact to present or planned land uses in the region.

#### XI. Mineral Resources

The implementation of Rule 496 will take place at existing facilities, so there will be no new impacts on mineral resources. No significant adverse impacts on mineral resources are anticipated. Future sites subject to the rule will be evaluated for Mineral Resources impacts as part of the review process for new developments regularly undertaken by agencies with land use authority.

#### XII. Noise

A facility selecting to implement the retrofitting provisions of Draft Rule 496 is not expected to result in significant noise impacts. The affected facilities operate in agricultural/commercial settings where operational noise levels are already established and the resident human population is low. Any increase in noise associated with the installation of add-on control equipment is expected to be minor. Any increase in noise associated with operation of add-on control equipment is expected to be minor. Any increase in noise associated with operation of add-on control equipment is expected to be negligible. Noise levels will remain below significant levels and no significant adverse impacts are anticipated.

#### XIII. Population and Housing

There are no provisions in Draft Rule 496 that would result in the creation of any industry that would significantly affect population growth, or directly or indirectly induce significant construction of single- or multiple-family units. No significant population relocation or growth inducement is expected from implementation of Draft Rule 496. No significant adverse impacts are anticipated.

#### XIV. Public Services

Draft Rule 496 does not mandate any change in facilities, or installation and operation of any control device or system that would result in a substantial change or significant adverse impact on existing demands for public services. Draft Rule 496 will not result in significant adverse effects on fire protection, police protection, schools, parks, or other public facilities.

Implementing the provisions of Draft Rule 496 is not expected to adversely affect or change recreational facilities and resources in the District. No significant adverse aesthetic or recreation impacts are expected from implementing the provisions of Draft Rule 496.

#### XVI. Transportation/Traffic

Draft Rule 496 will not increase the number of confined animal facilities operating in the District and the amount of commodities produced at each farm will not increase. The existing facilities are located in existing agricultural/commercial areas where deliveries and commodity hauling are routine. As a result, Draft Rule 496 will not cause a substantial increase in the number of transport trips to confined animal facilities delivering raw materials or operational supplies. Future sites will be evaluated for Transportation/Traffic impacts as part of the review process for new developments regularly undertaken by agencies with land use authority.

## XVII. Utilities and Service Systems

The provisions of Draft Rule 496 will not result in exceedences of wastewater treatment requirements or require that new wastewater treatment facilities be built. Construction of new storm water drainage facilities will not be required. Draft Rule 496 is not expected to require expansion of water supply systems. Waste disposal needs will not increase significantly as a result of meeting the requirements of the rule.

Controlling VOC emissions from CAFs could require increased flushing, however the water is typically reused, and therefore no significant net increase in water use is expected. Therefore, implementing the provisions of Draft Rule 496 are not expected to result in significant adverse impacts on existing water resources or the need to explore new water resources.

Facilities selecting to install VOC control systems may be required to comply with requirements of the Regional Water Quality Control Board (RWQCB). Site by site evaluations will determine if potentially affected sites must receive approvals from the RWQCB in the form of General Stormwater Permits for Construction and Industrial Activities, Waste Discharge Permit, preparation of a Storm Water Pollution Prevention Plan, or other permit or plan.

#### XVIII. Mandatory Findings of Significance

This project does not 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.

This project does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals. Neither does this project have impacts, which are individually limited, but cumulatively considerable. This project will have no potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Based upon consideration of the information provided in the comments to the Environmental Checklist and other analyses performed for this project, it does not have the potential to degrade the quality of the environment or to interfere with either short-term or long-term environmental goals. There will not be any significant cumulative impacts. Finally, the project will not cause any direct or indirect substantial adverse effects on human beings.