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February 8, 2008

By Facsimile and Overnight  
Robert Mansfield, Planner  
County of Madera - Planning Department  
2037 W. Cleveland Ave.  
Madera, CA 93637

RE: Madera County Dairy Standards Project, Draft EIR  
SCH No. 2006081050

Dear Mr. Mansfield:

The Attorney General submits these comments pursuant to the California Environmental Quality Act ("CEQA") on the Draft Environmental Impact Report ("DEIR") for the Madera County Dairy Standards Project ("Project").<sup>1</sup> The Project anticipates that the number of cows in Madera County will increase from about 160,400 cows in 2006 to 437,000 cows by 2030, and Madera County will go from being the smallest dairy county in the San Joaquin Valley Air Basin, to being the third largest, with the largest percent increase of any of the counties. Methane emissions in Madera County from the Project are projected to equal 51,533 tons per year by 2030 or an increase of 32,968 tons per year. The emissions are the equivalent of an increase of 692,328 tons per year of carbon dioxide (CO<sub>2</sub>). The DEIR concludes that the impacts from the increased greenhouse gas (GHG) emissions from the Project will be "significant and unavoidable." As the DEIR itself acknowledges, the Project conflicts with the goal of California's Global Warming Solutions Act, Assembly Bill 32 ("AB 32") of reducing up to 174 million metric tons of CO<sub>2</sub> equivalents per year.

Because the DEIR is intended to be a program EIR, streamlining applications for individual projects and narrowing the scope of future environmental review, it is critical that the County, in the DEIR, adequately consider the effects of GHG emissions from the Project,

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<sup>1</sup>The Attorney General provides these comments pursuant to his independent power and duty to protect the natural resources of the State from pollution, impairment, or destruction in furtherance of the public interest. (See Cal. Const., art. V, § 13; Cal. Govt. Code, §§ 12511, 12600-12; *D'Amico v. Board of Medical Examiners*, 11 Cal.3d 1, 14-15 (1974).) These comments are made on behalf of the Attorney General and not on behalf of any other California agency or office.

analyze in detail potential mitigation measures, and require all feasible measures that would substantially lessen or avoid the Project's GHG-related impacts. As discussed below, the DEIR, as currently drafted, fails to do this. Further, the DEIR fails to consider feasible alternatives to the Project that would reduce impacts. Because of these fundamental defects, the DEIR does not comply with CEQA.

### **Summary of Relevant CEQA Legal Requirements:**

Program EIRs: The CEQA Guidelines define a program EIR as one which is prepared on a series of actions that "can be characterized as one large project" and are related geographically, as part of a continuing program, or having similar environmental effects which can be similarly mitigated. (Cal. Code Regs., tit. 14 ("14 CCR"), § 15168, subd. (a).) The program EIR is intended to "(1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action, (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis, (3) Avoid duplicative reconsideration of basic policy considerations, [and] (4) Allow the lead agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts. . . ." (*Id.* at subd. (b).)

In order to be useful in reviewing future projects, the program EIR must be sufficiently specific and detailed:

A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

(*Id.* at subd. (c)(5).) A program EIR that has not adequately dealt with a given impact at the programmatic level is, however, of limited utility in streamlining future individual projects.

Alternatives: The EIR must discuss a "range of reasonable alternatives to the project. . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The lead agency must disclose its reasoning for selecting a range of alternatives. (14 CCR § 15126.6, subd. (a).) The EIR must discuss the rationale for selecting certain alternatives, and must identify alternatives that were considered but rejected as infeasible and explain the reasons for the determination. (*Id.* at subd. (d).) Finally, the lead agency must consider alternatives that could eliminate significant effects or reduce them to a less than significant level, even alternatives that could impede the attainment of the project's objectives to some degree. (*Id.* at subd. (b).)

**Comments on the DEIR:**

**The County Should Quantify All GHG Emissions and Adopt Enforceable Mitigation Measures to Reduce GHG Emissions from All Sources:**

There is a growing recognition – in the science and in laws such as AB 32 – that profound measures are required to reduce our GHG emissions. AB 32 and Executive Order # S-3-05 set aggressive State emissions reductions targets: we must reach 1990 levels by 2020, and 80 percent below 1990 levels by 2050, even as California continues to grow. The recent Bali accord suggests that even more aggressive reductions, cutting GHG emissions from 25 to 40 percent below 1990 levels by 2020, may be required to avoid the most catastrophic impacts of climate change.

CO<sub>2</sub> and methane are the two most significant GHGs that result from dairy operations. CO<sub>2</sub> is generated by combustion and is produced by equipment and vehicles used at the dairies. Methane, which is 21 times more potent than CO<sub>2</sub>, is generated by ruminant livestock and by manure decomposition. Methane accounts for approximately 5.7 percent of all GHG emissions in California, and half of the State's methane emissions comes from livestock and manure. Livestock and their manure emit GHGs equivalent to 13.2 million tons of carbon dioxide each year in California.<sup>2</sup>

Methane emissions in Madera County from the Project will increase by 32,968 tons per year by 2030, approximately a 0.12 percent increase in methane emissions from the United States,<sup>3</sup> and the equivalent of an increase of approximately 692,328 tons of CO<sub>2</sub> equivalent emissions per year. (DEIR at p. 3.3-27.) According to the EPA, average annual yearly emission of CO<sub>2</sub> from one car is 5.5 tons.<sup>4</sup> Thus, an increase in 692,328 tons of CO<sub>2</sub> equivalents is approximately equal to an additional 126,000 cars on the road. The Project therefore conflicts with the AB 32 goal of reducing GHG emissions. (DEIR at p. 3.3-27.) As the DEIR finds, such a substantial increase of GHG emission must be considered significant.

The Project will also result in other direct and indirect GHG emissions from the operation of the dairies, such as CO<sub>2</sub> emissions from equipment and vehicle operations and energy use. While the DEIR quantifies impacts from methane emissions (3.3-26 to 3.3-27), it does not

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<sup>2</sup> California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*, December 2006, Table 6.

<sup>3</sup>Based on U.S. Department of Energy figures, the U.S. emitted 26.6 million metric tons of methane in 2005. (DEIR at p. 3.3-27.)

<sup>4</sup> U.S. Environmental Protection Agency, *Emission Facts*, EPA420-F-05-004, February 2005, at p.2, available at <http://www.epa.gov/otaq/climate/420f05004.pdf>.

quantify these other GHG emissions or analyze their impacts.<sup>5</sup> It must do so.

One of CEQA's primary purposes is "to require public agencies to adopt feasible mitigation measures to lessen the environmental impacts of the projects they approve."<sup>6</sup> Under CEQA "feasible" means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, social and technological factors." (Pub. Res. Code § 21061.1.) Based on the projected methane emissions from the Project, the County correctly determined in the DEIR that the global warming-related impacts of the Project are cumulatively significant. This triggers the obligation to require feasible mitigation.<sup>7</sup> Further, the County must ensure that "measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, and other measures."<sup>8</sup>

The DEIR, however, fails in any meaningful way to discuss mitigation measures for the GHG emissions, instead incorporating by reference the Dairy Element. (DEIR at p. 3.3-27.)<sup>9</sup> There is no analysis in the Dairy Element, however, that remedies the deficiencies in the DEIR. Nothing in the Dairy Element speaks directly to global warming. While the Dairy Element mentions some mitigation measures to reduce Reactive Organic Compounds (ROGs), of which methane is one example (Exhibit B to DEIR at p. 3-10), it does nothing to quantify the efficacy of those mitigation measures in terms of GHG reduction, and does not discuss or analyze other of the most significant mitigation measures. Further, it does not address any measures to reduce CO<sub>2</sub> emissions from the operation of the dairies themselves. Finally, the Dairy Standards component of the Project,<sup>10</sup> which is intended to provide a set of regulatory standards and procedures the project proponents must implement to mitigate impacts from the Project (DEIR

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<sup>5</sup>The Dairy Element mentions CO<sub>2</sub> emissions in the context of construction activities (DEIR at Exh. B, pp. 2-4), but does not address the CO<sub>2</sub> emissions from the dairy operations themselves.

<sup>6</sup>*Woodward Park Homeowners Ass'n, Inc. v. City of Fresno* (2007) 150 Cal.App.4th 683, 690. See also 14 CCR § 15021, subd. (a).

<sup>7</sup>Pub. Res. Code § 21002.1, subd. (b); 14 CCR § 15130, subd. (b)(5); *City of Marine Board of Trustees* (2006) 39 Cal.4th 341, 360.

<sup>8</sup>Pub. Res. Code, § 21081.6; *Federation of Hillside and Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261.

<sup>9</sup>The Dairy Element is intended to identify the goals, policies, and implementation programs related to the dairies. (DEIR, Exh. B at p. B-1.)

<sup>10</sup> According to the DEIR, the Project consists of the Dairy Element and Dairy Standards components. (DEIR at ES-3-6.)

App. D at 1-1), does not address GHG emissions at all.<sup>11</sup>

In order to be adequate as a program EIR, the final environmental document must discuss in detail and evaluate all GHG emissions from the Project and require all feasible mitigation measures to reduce those emissions. There clearly are specific mitigation measures that the County can consider. Just as one example, methane digesters can reduce methane emissions and produce electricity. Methane digesters process animal waste under anaerobic conditions, yielding methane gas that is collected on site. The collected methane can be sold directly to utilities or used to generate electricity that can be used on the farm or sold to the utilities, bringing in revenue to the dairy. Methane digesters are increasingly being used on dairies in California. The California Energy Commission has provided grants to 14 dairies to generate electricity from animal waste, and these dairies are producing 3.5 megawatts of power.<sup>12</sup> Also, the California Public Utility Commission has approved a contract between Pacific Gas & Electric Company and a company called BioEnergy Solutions in Bakersfield to produce 8,000 million British thermal units (Btu) of methane from dairy farms in central California.<sup>13</sup> The AgSTAR program, a joint project of the U.S. Environmental Protection Agency, Department of Agriculture, and Department of Energy,<sup>14</sup> provides resources about farm methane digesters, including technical advice, financial assistance information, and a free software program to help farmers determine the feasibility of recovering methane from their operations. Finally, consistent with this trend, Fresno County has recently issued permits to two dairies to use methane digesters.<sup>15</sup> Technology is therefore available and increasingly being employed to turn a harmful emission into useful energy output. The DEIR must therefore examine the feasibility of methane digesters and other similar technology to mitigate methane releases from the new dairy.

Other feasible mitigation measures that may be considered and required include conservation practices and revised operational procedures to minimize the use of fossil-fuel vehicles and conserve water and energy. For example, the EIR should consider and impose more

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<sup>11</sup>The Standards for Air Quality Protection Measures (section 2.7) state only that the “County shall coordinate with the SJVAPCD and other local and regional agencies to develop air emissions control guidelines for agricultural uses, including dairy operations” (DEIR, Exh. D at 2-20), and that the County shall require each application to submit a Draft Conservation Management Practices in compliance with SJVAPCD Rule 4550 to address measures to reduce fugitive dust from the dairy.

<sup>12</sup>California Energy Commission, *Dairy Power Production Program, Dairy Methane Digester System 90-Day Evaluation Report, Eden-Vale Dairy*, December 2006 at p. 4.

<sup>13</sup> [http://cpuc.ca.gov/Final\\_resolution/68429.htm](http://cpuc.ca.gov/Final_resolution/68429.htm)

<sup>14</sup> <http://www.epa.gov/agstar/resources.html>

<sup>15</sup> Fresno County Notices of Intention to Adopt a Mitigated Negative Declaration (Unclassified Conditional Use Permits 3215-3218)

innovative mitigation measures that would be reasonable and feasible for this Project. These include “cool” roofing materials with high reflectivity and emittance, which would reduce ambient temperatures and the need to cool animals through other energy-intensive means;<sup>16</sup> solar hot water systems for heated water used in cleaning; and solar panels or wind turbines or other alternative energy sources for electricity generation.

Finally, to the extent that GHG emissions from the Project are not fully mitigated by such measures, the EIR should examine other options for reducing the global warming impact of the Project, such as the purchase of GHG offsets or payment into a mitigation fund. Dairies could, for example, fund off-site projects (*e.g.*, alternative energy projects) that will reduce GHG emissions, or could purchase “credits” from another entity that will fund such projects. The County should ensure that any mitigation taking the form of GHG offsets is specifically identified by project proponents and that such mitigation will in fact occur.

Because of the insufficiency of the discussion of GHG emissions and mitigation measures in the DEIR, future dairy project proponents will be unable to rely in any way on the Program EIR to address the GHG emissions from the individual projects. A sufficient program EIR that addresses and quantifies all of the GHG emissions, discusses their cumulative impacts, analyzes the effects of all feasible mitigations, and imposes those mitigations on the dairies, could streamline review of these issues in the individual project applications. The existing inadequate DEIR does not, however, serve this purpose.

### **The County Should Consider Additional Feasible Alternatives to the Project:**

The DEIR is inadequate in its discussion of alternatives to the Project as well. The DEIR considers only two alternatives: the no-project alternative, which permits dairy growth to continue based on the County’s existing general plan (DEIR at pp. 4-8 - 4-9), and the reduced herd size alternative, which is ten percent below the current Dairy Herd Capacity (“DHC”) estimate, or 393,300 animal units, an expansion of 235,900 animal units from the current levels. (DEIR at p. 4-12.) Both alternatives result in significant impacts to air quality based on particulate emissions and ozone precursors, and GHG emissions.

As the DEIR itself notes, section 15126.6(b) of the CEQA Guidelines requires that the lead agency consider alternatives that could eliminate significant effects or reduce them to a less than significant level, including alternatives that could impede the attainment of the project’s objectives to some degree. (DEIR at p. 4-1.) The Project’s objectives include guiding the future growth of the dairy industry while protecting the environment, avoiding an over-concentration of dairies in Madera County, protecting established dairies, and streamlining the permitting of new dairies. (DEIR at p. 4-3.) A smaller DHC capacity, beyond the ten percent reduction considered in alternative 2, is consistent with these objectives. Thus, the DEIR should consider as Project alternatives more significant reductions in DHC size, and should evaluate the environmental

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<sup>16</sup>See U.S. EPA’s Cool Roofs website at <http://www.epa.gov/hiri/strategies/coolroofs.html>; see also Lawrence Berkeley National Laboratory, Urban Heat Island Group, Cool Roofing Database at <http://eetd.lbl.gov/CoolRoofs>.

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impacts from such reduced DHC alternatives.

Through this Project and the program EIR accompanying it, Madera County has the opportunity to become a leader in reducing the global warming impact of livestock. We encourage the County to begin now, consistent with its obligations under CEQA, to evaluate the extent of the GHG emissions from the Project and to mitigate them to the fullest extent feasible.

We appreciate the opportunity to comment on the document and would be happy to meet with County staff to discuss these comments.

Sincerely,

/S/

SUSAN S. FIERING  
Deputy Attorney General

For EDMUND G. BROWN JR.  
Attorney General