Via electronic mail

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Re: Recommended approaches for setting interim significance thresholds for greenhouse gases (GHGs) under the California Environmental Quality Act (CEQA)

Dear Mr. Karperos and Mr. Ito:

On behalf of the Community Alliance for Responsible Environmental Stewardship ("CARES"), we submit the following comments to the California Air Resources Board (CARB) regarding the above-referenced topic. CARES is an environmental coalition of California's dairy producer and processor associations, including the state's largest dairy producer trade associations (***Western United Dairymen, California Dairy Campaign*** and ***Milk Producers Council***) and the largest milk processing companies and farmer-owned cooperatives (including ***California Dairies, Inc., Dairy Farmers of America-California*** and ***Land O' Lakes***). Formed in 2001, CARES is dedicated to promoting a balance of economic and environmental sustainability for California dairies.

We appreciate the work of CARB staff on the important topic of developing guidance on GHGs for local and regional CEQA lead agencies. We agree that uniform and consistent guidance will assist these agencies with the task of ensuring a smooth permitting process

and responsible environmental review at the local level. Because evaluation of GHG emissions from projects and local programs is a novel area for most of these agencies, the need for legal and technical guidance is obvious and will be important to prevent unneeded bureaucratic delays, wasted government time, unnecessary litigation and other negative impacts.

Despite this need for guidance, GHG analysis, quantification and mitigation remains a nascent and rapidly developing area in both science and policy terms. It is important that any guidance issued by CARB creates substantial flexibility for CARB and the Office of Planning and Research (OPR) to offer revised guidance in the future, and for local agencies to consider emerging GHG information as it continues to flow into this rapidly developing field.

Numerical CEQA significance thresholds for GHGs

In some cases, lead agencies have chosen to develop numerical significance thresholds for projects, including dairies. Draft guidance from OPR and CARB to date, as well as from regional air districts, suggests that a numerical threshold is only one way to determine whether a project's GHG emissions are indeed significant.

For reasons discussed further below, CARES believes a CARB-established numerical significance threshold for dairy projects is a problematic approach at this time. We do not oppose the ability of local agencies to use a numerical threshold when it is deemed necessary based on local or project-specific considerations, but we believe establishing an interim numerical threshold guidance from CARB should be avoided at present for several reasons:

First, developing even an interim recommendation from CARB would merit significant further research. CARES does not believe that establishing a threshold simply to capture a target percentage of an industry or sector is appropriate. Rather, CEQA requires that the lead agency analyze whether the project will create a physical change in the environment. As CARB's Preliminary Draft Proposal on Significance Thresholds points out "A significant effect on the environment means a substantial or potentially substantial, *change* in the environment…" Even where the project-level impacts from the project may not be significant, if the incremental impacts of the project effect a physical *change* that may be cumulatively significant, then CEQA requires the preparation of an EIR.

While it is clear that CEQA must include the consideration of the impacts of greenhouse gas emissions from a project, it must do so within the legal framework and requirements of CEQA. Senate Bill 97 clarifies that GHGs must be considered in a CEQA review, but does nothing to expand the scope or purpose of CEQA. Likewise, AB 32 does not create any new requirements under CEQA, except to underscore the importance of considering the changes in the environment that a new project's GHG emissions may create. CEQA has and continues to require an analysis of the changes in the physical environment; it cannot be used as a vehicle to obtain mitigation where the new project does not create a cumulatively significant physical change in the environment, even if such mitigation might help achieve the goals of AB 32.

A numerical significance threshold, based mostly on the concept of requiring a specific percentage of new projects within an industry or sector to be determined to be significant, is essentially circular reasoning. It is an end run around the question of whether a specific project's emissions cause a cumulatively significant physical change in the environment, and a *de facto* conclusion – prior to meaningful analysis – that the specific percentage of future projects will indeed create a physical change in the environment, regardless of whether that determination is true. We believe that at this time, CARB does not have enough information, data or analysis to determine at what level a dairy project's emissions create a cumulatively significant physical change in the environment. We also are unaware of any other agencies with this information. Therefore we recommend that a CARB determination of an interim numerical project-level threshold should be preceded by meaningful inquiry into existing data and analysis of that question.

Secondly, we are concerned that were CARB to publish even an interim numerical threshold, it would send a policy message to local CEQA lead agencies that using a numerical project-level threshold is the preferred method and that alternate thresholds (numerical or performance standards) will be less defensible because they were not developed by CARB. For the very reason that CARB is considered the state's expert agency on GHGs, more analysis should go into development of any guidance or it could eventually put local CEQA lead agencies in the awkward position of having to choose to overrule CARB when adopting a numerical significance threshold that is evidence-based.

Finally and particularly pertinent to dairies, we believe non-numerical thresholds of significance should be the primary tool for determining thresholds of significance for dairy projects. For reasons explained further below, not all GHG emissions from new or expanding dairy projects are in fact additional to the global GHG emission inventory of dairies. New and modern dairies often offset older and less productive facilities in other parts of the United States and the world. Newer and more efficient dairies, including increased milk production on a per cow basis, mean that more milk is produced for each unit of GHGs. In this situation and for other reasons, a numerical CEQA threshold is less important than determining whether a project is compliant with existing state plans (such as AB 32), existing regional regulations (such as air district plans) and local ordinances and general plans (such as a county dairy ordinance).

This is not to say that a numerical threshold has no use. In counties or air districts where an appropriate general plan chapter or dairy regulations may not exist, the CEQA lead agency may determine that a project-specific numerical threshold is the best mode for determining whether a project's emissions are significant. However, in such a case, the agency must consider not only the likely environmental impacts of GHG emissions from the project, but local and project-specific factors that might inform what the threshold should be. These could include the types of management practices the dairy intends to use, whether the dairy is relocating from another area in the United States or California, and other factors that are necessarily specific to the project. In other words, for reasons completely consistent with CEQA law and practice, one agency may determine a numerical threshold of "X" for one theoretical project while another agency (or the same agency looking at another project) may determine another significance value of "Y".

Even if "X" does not equal "Y", both can be correct. For this reason, it is best to allow numerical threshold determinations to remain an option for local agencies to determine, particularly absent a meaningful analysis of the levels at which environmental impacts occur.

Recommended approaches

Most areas of California that have already large populations of dairies (primarily the Central Valley) also have components in the county general plans setting policy for land use for agriculture in general and dairies specifically. These policies typically include an environmental component. In addition, regional air quality and water quality agencies have developed environmental regulations and permitting policies for dairies that amount to regional plans. It is expected that any new or expanding dairy projects would have to be consistent with existing laws and regulations including local land use policies as expressed in county general plans, etc.

CARES recommends that CARB's guidance on CEQA significance thresholds for dairies recognizes and underscores that the overall GHG environmental impacts of a sector are a function of general plans. Much as a county would incorporate elements in its general plan for traffic, scenic open spaces and low-income housing (but would not require each project to reduce traffic, provide scenic open spaces and low-income housing), each county should have an inventory of its greenhouse has emissions and a general plan element that addresses these. General plans that include elements for dairies and livestock should be amended to include an inventory of greenhouse gas emissions and a plan for managing those emissions in a manner that will be consistent with the state's GHG reduction targets. That will allow each local CEQA lead agency to have its own specific targets and consider projects within that context. A county with a shrinking dairy industry due to increased urbanization will likely address the issues differently than a county with little or no growth in other sectors but a growing dairy industry. Again, one-size-fits-all guidance from CARB is unlikely to be useful. However, a discussion of the fact that counties should set overall goals, alter general plans accordingly, and adopt within those general plans standards for determining GHG significance will be of use in all dairy jurisdictions.

Unique concerns related to dairies

Dairies are unique in that they are projects that produce one product: milk. All milk is produced in the same way, from the lactation of cows. Cows, especially lactating cows, create enteric methane emissions as the inevitable result of natural processes. Cows also produce manure, which, depending on how it is handled and disposed of, will emit methane. There is a finite demand for milk in California and the U.S. The demand for milk is growing with increasing population. But, the number of cows necessary to meet that demand is decreasing due to efficiencies in milk production. The number of milk cows in the U.S. is declining while milk production has increased. The following figures were obtained from the USDA's National Agricultural Statistical Service[1]:

[1] www.nass.usda.gov

Total U.S. Milk Cows	
Year	**Population**
1990	9,993,000
2006	9,112,000
	-8.8%

Total U.S. Milk Production (mill. pounds)	
Year	**Milk Production**
1990	147,721 million lbs
2006	181,960 million lbs.
	+ 23%

Thus, fewer cows are producing more milk. **Indeed, the average U.S. cow produced 19,951 pounds of milk in 2006 compared to only 14,782 pounds of milk in 1990, an efficiency increase of nearly 35%[2].**

In many instances, new dairies may be the result of relocation of cows. Or it may be the result of consolidation of herds. In these instances, the new dairy is clearly not adding to the global inventory of GHGs, simply relocating the source. In the same way, even if not the result of dairy consolidation or relocation, new dairies are simply shuffling the location of the U.S. dairy herd. As new dairies come into California, the U.S. population of dairy cows will correspondingly adjust either in California or elsewhere.

California is a popular location for new dairies because of the significant infrastructure available for producers, including milk processing, drying and cheese-making facilities. The availability of support services that concentrated dairy operations bring, such as veterinarians, nutritionists and other services, help make California dairies among the most efficient in the country. Hence, new dairies in California that displace operations elsewhere actually help to bring the overall amount of milk produced per cow even higher. More milk produced per cow, means the less GHGs that are produced via enteric fermentation per volume of milk. Thus, new dairies in California help to increase the overall milk-to-GHG efficiency of the overall U.S. dairy herd. Because GHGs are a global concern as opposed to a local one, an increase in California offset by a decrease elsewhere results in a net environmental balance.

Total GHG emissions from enteric fermention increase as the amount of milk produced by each cow increases, due to the increased consumption of feed and other factors.

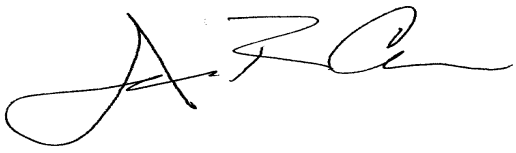
[2] www.nass.usda.gov

However, due to improved production efficiency, the increase in milk production is *greater than* the increase in GHG emissions. This results in fewer emissions of GHG per unit of milk produced. Therefore, even though U.S. milk production has increased approximately 23 percent since 1990, this was accomplished with 8.8 percent fewer dairy cows. **As a result, according to U.S. EPA's inventory of greenhouse gas emissions, the overall U.S. dairy cattle population produced 2.9% less enteric GHG emissions in 2006 than in 1990**[3]. However, emissions from manure management increased over the same period largely due to changes in manure management practices.

Thus, one approach that Air Resources Board may take is to consider the relatively static nature of enteric emissions (i.e. the natural emissions from cows) as emissions that are not causing a physical change in the environment, regardless of whether new dairies are constructed or not.

For significance purposes, the only emissions which should be considered are those that arise from manure management. Importantly, these are emissions which also have the most potential for mitigation if and when anaerobic digesters become technically and economically feasible. In any event, CARB's guidance should expressly consider, or urge lead agencies to consider, the fact that a new dairy does not necessarily result in any net change in greenhouse gas emissions.

On behalf of CARES, we look forward to working with your Board to realize the goals outlined in AB 32 and improving the environment and economy for all the people of California.
Sincerely,



J.P. Cativiela
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[3] http://www.epa.gov/climatechange/emissions/downloads/08_Agriculture.pdf, page 6-3, Table 6-3.