# APPENDIX F-5

Air Quality Technical Appendix Proposed Greenhouse Gas Emissions Threshold This page intentionally left blank.

# PROPOSED GREENHOUSE GAS EMISSIONS THRESHOLD FOR THE OLIVEIRA DAIRY EXPANSION EIR

#### Introduction

The California Environmental Quality Act (CEQA) requires agencies to identify a project's potentially significant effects on the environment, and to mitigate significant effects whenever feasible. This includes the potential environmental effects of greenhouse gas (GHG) emissions. CEQA encourages public agencies to adopt "thresholds of significance" to use in determining the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative, or performance level of a particular environmental effect. Exceedance of a threshold of significance would normally result in a determination that the project would have a significant environmental impact. Conversely, non-exceedance of a significance threshold would normally result in a determination that project would not have a significant environmental impact. In regards to thresholds of significance for GHG emissions, CEQA Guidelines Section 15064.7(c) states that a lead agency "may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA requires projects to be evaluated for consistency with "applicable general plans and regional plans" (CEQA Guidelines Section 15125(e)). Such plans would include "plans for the reduction of greenhouse gas emissions" (CEQA Guidelines Section 15183.5(b)). These plans involve legislative or regulatory programs applicable to all projects or classes of projects within the region. They establish standards that are independent of the impact analysis described in the CEQA Guidelines (see provisions beginning with Section 15126). The program for GHG emission reductions and maintenance, which ultimately is intended to result from AB 32, would constitute such a regional plan **when adopted**. However, under AB 32, that program does not yet exist. Furthermore, at this time there is no regional or Merced County greenhouse gas reduction plan or climate action plan. Therefore, there is no local, regional, or statewide plan regulating global warming by which the proposed project can be measured. The California Air Resources Board (CARB) has established preliminary approaches to establishing significance thresholds, and the San Joaquin Valley Air Pollution Control District (SJVAPCD) has issued guidance for evaluating project-level GHG effects.

#### Threshold Options

In January of 2008, the California Air Pollution Control Officers Association (CAPCOA) released a resource document, *CEQA and Climate Change* (CAPCOA 2008), that collected and presented information to support local governments as they undertake a review of GHG emissions from projects subject to CEQA. The document considers various approaches to determining the significance of emissions, evaluates available methodologies and tools for quantifying GHG emissions, and provides a summary of GHG mitigation measures for projects.

The CAPCOA white paper discusses three basic options air districts and lead agencies can pursue when contemplating the issues of CEQA thresholds for greenhouse gas emissions. The paper explores each path and discusses the benefits and detriments of each. The three basic paths are:

- No significance threshold for GHG emissions;
- GHG emissions threshold set at zero; or
- GHG threshold set at a non-zero level.

The CAPCOA paper explores the basis and implications of setting no threshold, setting a threshold at zero, and two primary approaches for those who may choose to consider a non-zero threshold. Each has inherent advantages and disadvantages. Air districts and lead agencies may believe the state or national government should take the lead in identifying significance thresholds to address this global impact. Alternatively, the agency may believe it is premature or speculative to determine a clear level at which a threshold should be set. A brief summary of each methodology and its implications are included below.

# Implementing CEQA Without a Threshold

A lead agency is not required to establish significance thresholds for GHG emissions from stationary sources. The lead agency may find that it needs more information or experience evaluating GHG from these types of projects to determine an appropriate significance threshold. As with other project types, the lead agency could conduct a project specific analysis to determine whether an environmental impact report is needed and to determine the level of mitigation that is appropriate. The agency might also rely on thresholds established for criteria pollutants as a screening method, and analyze GHG emissions (and require mitigation) from projects with emissions above the criteria pollutant thresholds. Over time, the agency could amass information and experience with specific project categories that would support establishing explicit thresholds. The lead agency may also choose to base local CEQA thresholds on state guidelines or on the category-specific reduction targets established by ARB in its scoping plan for implementing AB 32. It is important to note here that lack of a threshold does not mean lack of significance. An agency may argue lack of significance for any project, but that argument would have to be carried forth on a case-by-case, project specific basis. By extension then, a decision not to establish thresholds for GHG is likely to result in a greater workload for responsible and lead agencies as they consider individual projects under CEQA.

#### Implementing CEQA with Threshold of Zero

A lead agency may find that any increase in GHG emissions is potentially significant under CEQA. If the zero threshold option is chosen, all projects subject to CEQA would be required to quantify and mitigate their GHG emissions, regardless of the size of the project or the availability of GHG reduction measures available to reduce the project's emissions. Projects that could not meet the zero-emission threshold would be required to prepare environmental impact reports to disclose the unmitigable significant impact, and develop the justification for a statement of overriding consideration to be adopted by the lead agency.

# Implementing CEQA with a Non-Zero Threshold

A non-zero threshold could minimize the resources spent reviewing environmental analyses that do not result in real GHG reductions or to prevent the environmental review system from being overwhelmed. The practical advantages of considering non-zero thresholds for GHG significance

determinations can fit into the concept regarding whether the project's GHG emissions represent a "considerable contribution to the cumulative impact" and therefore warrant analysis. Specifying a non-zero threshold could be construed as setting a de minimis value for a cumulative impact. In effect, this would be indicating that there are certain GHG emission sources that are so small that they would not contribute substantially to the global GHG budget. This could be interpreted as allowing public agencies to approve certain projects without requiring any mitigation of their GHG emissions.

### Thresholds Previously Adopted or Recommended

#### United States Environmental Protection Agency (EPA)

EPA's Final Mandatory GHG Reporting Rule became effective December 29, 2009. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (t/yr) or more of GHG emissions are required to submit annual reports to EPA. EPA estimates that the reporting rule will cover about 85 percent of GHG emissions in the United States.

For manure management systems, such as on a dairy, the animal population threshold level below which facilities are not required to report emissions is 3,200-cow dairy herd, which represents a conservative estimate of the 25,000 t/yr CO<sub>2</sub> equivalent (CO<sub>2</sub>e) threshold level. Facilities that meet or exceed these populations will need to conduct an analysis to determine if they emit more than  $25,000 \text{ t/yr CO}_2e$ . While congress restricted EPA from expending any funds in fiscal years 2010 through 2017 for the purpose of implementing the manure management section of the rule, this did not change the requirements of the rule, and facilities that meet the threshold size are advised to keep the appropriate records.

#### California Air Resources Board

On October 24, 2008, CARB released its Preliminary Draft Staff Proposal, Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act. CARB staff believes that zero thresholds are not warranted in light of the fact that (1) some level of emissions in the near term and at mid-century is still consistent with climate stabilization and (2) current and anticipated regulations and programs apart from CEQA will proliferate and increasingly will reduce the GHG contributions of past, present, and future projects. But any non-zero threshold must be sufficiently stringent to make substantial contributions to reducing the State's GHG emissions peak, causing that peak to occur sooner, and putting California on track to meet its interim (2020) and long-term (2050) emissions reduction targets. CARB staff's objective was to develop a threshold of significance that would result in the vast majority (~90 percent statewide) of the GHG emissions from new industrial projects being subject to CEQA's requirement to impose feasible mitigation (CARB 2008).

A key aspect of CARB's approach is to recognize that different GHG thresholds of significance may apply to projects in different sectors. Two primary reasons that sector-specific thresholds are appropriate are: (1) some sectors contribute more substantially to the problem, and therefore should have a greater obligation for emissions reductions, and, (2) looking forward, there are differing levels of emissions reductions expected from different sectors in order to meet California's climate objectives. CARB also believes that different types of thresholds - quantitative, qualitative, and performance-based - can apply to different sectors under the premise that the sectors can and must be treated separately given the state of the science and data. A sector-specific approach is consistent with CARB's proposed Scoping Plan.

CARB staff used existing data for the industrial sector to derive a proposed hybrid threshold. The threshold consists of a quantitative threshold of 7,000 t/y CO2e for operational emissions (excluding transportation), and performance standards for construction and transportation emissions. For residential and commercial projects, CARB staff recommended thresholds based on clear and stringent performance standards. Performance standards will address the five major emission subsources for the sector: energy use, transportation, water use, waste, and construction.

As of preparation of this EIR (January 2019), CARB has not finalized its recommendation, and has not scheduled any additional workshops or hearings on the draft proposals.

#### South Coast Air Quality Management District (SCAQMD)

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. As described below, the SCAQMD recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects.

A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

For the purposes of determining whether or not GHG emissions from affected projects are significant, project emissions will include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation. Construction emissions will be amortized over the life of the project, defined as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier. The following bullet points describe the basic structure of SCAQMD staff's tiered GHG significance threshold proposal for stationary sources.

- *Tier 1* consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- *Tier 2* consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan. If the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If the project is not consistent with a local GHG reduction plan, there is no approved plan, or the GHG reduction plan does not include all of the components described above, the project would move to Tier 3.

- *Tier 3* establishes a screening significance threshold level to determine significance using a 90 percent emission capture rate approach. This was calculated as 10,000 t/yr CO<sub>2</sub>e emissions. If the project exceeds the GHG screening significance threshold level and GHG emissions cannot be mitigated to less than the screening level, the project would move to Tier 4.
- *Tier 4* consists of a decision tree approach that allows the lead agency to choose one of three compliance options based on performance standards. The purpose of Tier 4 is to provide a means of determining significance relative to GHG emissions for very large projects that include design features and or other measures to mitigate GHG emissions to the maximum extent feasible, but residual GHG emissions still exceed the interim Tier 3 screening levels. This tier is being further developed by SCAQMD staff and not recommended for adoption.
- *Tier 5* under this tier, the project proponent would implement offsite mitigation (GHG reduction projects) to reduce GHG emission impacts to less than the proposed screening level. Any offsite mitigation measures that include purchase of offsets would require the project proponent provide offsets for the life of the project, which is defined as 30 years.

Residential/Commercial Sectors GHG Significance Threshold – To achieve the same policy objective of capturing 90 percent of GHG emissions from new development projects in the residential/commercial sectors and implement a "fair share" approach to reducing emission increases from each sector, SCAQMD staff discussed with the working group a proposal combining performance standards and screening thresholds. The performance standards primarily focus on energy efficiency measures beyond Title 24 and a screening level of 3,000 t/yr CO<sub>2</sub>e based on the relative GHG emissions contribution between residential/commercial sectors and stationary source (industrial) sectors. It was determined that additional analysis is needed to further define the performance standards and to coordinate with CARB staff's interim GHG proposal.

As of the date of this EIR (January 2019), the Stakeholder Working Group last met on September 28, 2010 to further refine the interim recommendations. The SCAQMD interim recommendations do not contain guidance specific to agricultural activities.

#### Bay Area Air Quality Management District (BAAQMD)

On May 2017, the BAAQMD's Board of Directors unanimously adopted the proposed CEQA thresholds of significance. BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant.

The BAAQMD's Thresholds of Significance for operational-related GHG emissions are:

- For land use development projects other than stationary sources, the threshold is: compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 t/yr CO<sub>2</sub>e; or 4.6 t CO<sub>2</sub>e/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.
- For stationary-source projects, the threshold is 10,000 t/yr CO<sub>2</sub>e. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.

If annual emissions of operational-related GHGs exceed these levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

The bright-line numeric threshold of 1,100 t/yr CO<sub>2</sub>e is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." This emissions rate is equivalent to a project size of approximately 56 single-family dwelling units, and approximately 59 percent of all future projects and 92 percent of all emissions from future projects through 2020 would exceed this level. For projects that are above this bright-line cutoff level, emissions from these projects would still be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 t/yr CO<sub>2</sub>e per service population or better for mixed-use projects. Projects with emissions above 1,100 t/yr CO<sub>2</sub>e would therefore still be less than significant if they achieved project efficiencies below these levels.

The BAAQMD does not have an adopted *Threshold of Significance* for construction-related GHG emissions. However, the Lead Agency should quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. The Lead Agency is encouraged to incorporate best management practices to reduce GHG emissions during construction, as feasible and applicable.

The BAAQMD CEQA thresholds of significance does not contain guidance specific to agricultural activities.

# Sacramento Metropolitan Air Quality Management District (SMAQMD)

In December 2009, the SMAQMD updated its CEQA Guide to Air Quality Assessment, which includes a chapter on greenhouse gas emissions. The greenhouse gas emissions chapter was revised most recently in May 2018. Generally, the SMAQMD believes that GHG emissions are best analyzed and mitigated at the program-level; however, until more program-level GHG analyses have been performed in Sacramento County, the SMAQMD offers the following guidance for addressing the GHG emissions associated with individual development projects:

- The SMAQMD recommended threshold for land development projects is 1,100 t/yr CO<sub>2</sub>e for both the construction and operational phase.
- The stationary source project recommended threshold is 1,100 t/yr CO2e for construction and 10,000 t/yr CO2e for operations.

The recommended thresholds were developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to GHG emissions reduction

goals of AB 32 and the Scoping Plan. The SMAQMD guidance does not contain any numeric thresholds or guidance specific to agricultural activities.

#### San Joaquin County Air Pollution Control District (SJVAPCD)

To assist Lead Agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific GHG on global climate change, the SJVAPCD adopted the following guidance on December 17, 2009: *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and the policy: *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* (SJVAPCD 2009). The guidance and policy rely on the use of performance based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual, is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

Projects complying with BPS would not require specific quantification of GHG emissions and would be determined to have a less than significant cumulative impact for GHG emissions. Projects not complying with Best Performance Standards would require quantification of GHG emissions and demonstration that GHG emissions have been reduced or mitigated by 29 percent, as targeted by CARB's AB 32 Scoping Plan. Furthermore, quantification of GHG emissions would be required for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates BPS. (SJVAPCD 2009)

Best performance standards for GHG emissions have not yet been developed for all sources of GHG emissions. Given that understanding and regulation of GHG emission sources and mitigations is evolving, the SJVAPCD staff expects the development of BPS to be an ongoing effort. Consistent with CEQA Guidelines Section 15064(h)(3), for projects implementing best performance standards, or their equivalent, the District would conclude that the project's incremental contribution to the cumulative impact on global climatic change is not cumulatively considerable. (SJVAPCD 2009)

The following bullet points illustrate the SJVAPCD's process for evaluating GHG significance. Project impact can be reduced by:

- Using any combination of District approved GHG Emission Reduction Measures to meet BPS
- Complying with an approved GHG plan or mitigation program
- Reducing GHG emissions by at least 29 percent.

The SJVAPCD has developed illustrative examples for potential BPS. At this stage, these illustrative BPS should not be considered District-approved standards, but rather provide an opportunity for public input into the development of BPS and ultimate development of final BPS. The illustrative

BPS now being proposed for livestock operations include that all operations shall utilize all three following control measures:

- All ruminant animal feed shall include at least six percent cottonseed, or, upon SJVAPCD approval, based on sufficient demonstration that use of cottonseed is not feasible, an equivalent substitute (estimated to generate a 12 percent reduction in methane emissions from this source);
- (2) Manure from animal housing areas for mature cows shall be removed and transferred into appropriate treatment facilities at least four times a day and at least once a day for all other animals (estimated to generate a 7.1 percent reduction in methane emissions from this source); and
- (3) Collected manure shall be treated anaerobically in digesters or covered lagoons, designed and operated per NRCS standards, with captured methane used for energy recovery in a method that displaces current or required fossil fuel use, such as, but not limited to, injection into natural gas pipeline, or powering mobile equipment. Taking the effect of the  $CO_2$  produced from the combustion of  $CH_4$  into account, an overall reduction of 63.5 percent of fugitive  $CH_4$  emissions can be achieved by the use of properly designed and controlled anaerobic treatment as a BPS. (SJVAPCD 2009)

Although permit requirements for many livestock farms took effect in 2004, the particular BPS proposed, with the exception of frequent manure removal from livestock housing areas, have never been implemented as mandatory permit requirements. Instead, many other control measures aimed at reducing VOC and  $PM_{10}$  emissions have been applied with greater emphasis. Until these BPS are finalized, the following conditions would be most applicable according to the SJVAPCD:

- In order to minimize Green House Gas emissions and optimize equipment efficiency, all equipment shall be operated in accordance with manufacturer specifications and approved design specifications.
- All ruminant animal feed shall include at least 6 percent cottonseed.
- Manure from animal housing areas shall be removed and transferred into appropriate treatment facilities at least four times a day for mature cows and at least once a day for all other animals. (SJVAPCD 2009)

The illustrative BPS now being proposed by the SJVAPCD for farming operations and the application of manure to cropland include that all operations shall utilize the following control measure:

(1) Manure shall be incorporated into soil within 24 hours after application. In a report entitled "Recommendations to the San Joaquin Valley Air Pollution Control Officer Regarding Best Available Control Technology for Dairies in the San Joaquin Valley", the Dairy Permitting Advisory Group (DPAG) concluded that VOC emissions could be reduced by 29 to 58 percent by the prompt incorporation of manure into soil after application to land. Based on this information, this BPS assumes a similar benefit as far as the reduction of CH<sub>4</sub> emissions is concerned. However due to the lack of data, the lower control efficiency of 29 percent of methane emissions from this source will be used.

The California Attorney General (AG) has expressed opposition to SJVAPCD strategy, claiming it leaves a number of unanswered questions, and the AG's office issued a letter dated November 4, 2009 stating that the proposed approach would "not withstand legal scrutiny and may result in significant lost opportunities for the Air District and local governments to require mitigation of GHG emissions." The AG noted several deficiencies, primarily that the SIVAPCD does not discuss a particular environmental objective that would be achieved by implementing the proposed thresholds, such as meeting a GHG emissions reduction trajectory consistent with that set forth in AB 32 and Executive Order S-03-05 within the Air District's jurisdiction. Also, the BPS are described as "illustrative" only, and it is not possible at this time to determine whether the BPS ultimately adopted will reduce GHG emissions in the San Joaquin Valley and, if so, by how much. Further, the threshold does not take into account the need for new development to be more GHG-efficient than existing development to achieve AB 32 goals, given that past and current sources of emissions, which are substantially less efficient than this average, will continue to exist and emit. The AG also points out that the SJVAPCD proposal appears to award emission reduction "points" for undertaking mitigation measures that are already required by local or state law and could offer an incentive to project proponents to artificially inflate the hypothetical project to show that the proposed project is, by comparison, GHG-efficient. Most importantly, the AG noted that according to the SIVAPCD guidance, any project employing certain, as of yet unidentified, mitigation measures would be considered to not result in a significant level of GHG emissions or a significant impact, regardless of the project's total GHG emissions, which could be very large.

Because of the uncertain direction of legal opinion, and because BPS for dairies and agricultural operations have not been adopted and are illustrative only, this EIR does not use project compliance with BPS as a threshold of significance.

#### Comparison of Non-Zero Significance Thresholds

In efforts to identify a numeric threshold that could be appropriate for this analysis, the table below summarizes thresholds discussed above.

Category	EPA	SCAQMD	BAAQMD	SJVAPCD	SMAQMD
Construction		30-yr amortization	None		1,100 t/yr CO2e
		applied to operational	recommended		
Stationary Sources	25,000 t/yr	10,000 t/yr CO2e	10,000 t/yr CO2e		10,000 t/yr
Operation	CO <sub>2</sub> e		· ·		CO <sub>2</sub> e
Land Use Projects		3,000 t/yr CO2e	1,100 t/yr CO2e		1,100 t/yr CO2e
		OR	OR		
		4.6 t CO2e/SP/yr	4.6 t CO2e/SP/yr		
Dairy/Agricultural	25,000 t/yr				
Project	CO <sub>2</sub> e				

While the EPA's Mandatory GHG Reporting Rule threshold of 25,000 t/yr CO<sub>2</sub>e represents a reporting threshold and not a threshold of significance specifically, it is estimated to capture approximately 85 percent of the U.S emissions of GHGs and capture all large sources of GHG emissions. This is very similar to the CARB and SCAQMD goal of emissions capture of 90 percent to meet AB 32 goals.

Except for EPA, no other agency has established any valid thresholds for agricultural or dairy uses at this time (January 2019). Because SJVAPCD BPS for dairies and agricultural operations have not been adopted and are illustrative only, application of BPS as a threshold is not possible at this time. The EPA's reporting threshold of 25,000 t/yr of CO<sub>2</sub>e represents a conservative value that would capture many large emitters of GHGs. However, the EPA's 25,000 t/yr CO<sub>2</sub>e is a permit threshold that represents emissions from the entire facility and not just the increment of increase. Therefore, a dual threshold is identified that uses 10,000 t/yr CO<sub>2</sub>e (used by both SCAQMD and BAAQMD for industrial stationary sources) as the maximum increment of increase and also 25,000 t/yr CO<sub>2</sub>e as a threshold for total facility emissions.

#### Identified EIR Threshold

In accordance with CEQA Guideline Section 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions, a lead agency should determine the amount of GHG emissions resulting from a project, which may be determined by either using a model or methodology to quantify GHG emissions or by relying on a qualitative analysis or performance based standards. Additionally, a lead agency may consider: (1) whether the project would increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project's emissions exceed a threshold of significance that the lead agency has determined applies to the project; or (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Merced County has not established significance criteria for GHG emissions. Many GHG emission reduction strategies have few or limited agricultural measures, making compliance with these strategies as a threshold an illogical choice. In efforts to capture both large increases in GHG emissions and large emitters of GHGs, and in consideration of the foregoing, for the purposes of this EIR, the project's contribution to GHG emissions would be considered significant if either of the following apply:

- The increment of increase of the project's GHG emissions would be greater than 10,000 t/yr of  $CO_2e$ .
- The increment of increase of the project's GHG emissions would be less than 10,000 t/yr of CO<sub>2</sub>e, but the total project facility's GHG emissions (existing plus project increment) would be greater than 25,000 t/yr of CO<sub>2</sub>e.

This numeric threshold would only be applicable to dairies, and would not apply to industrial, commercial, residential, or other development types.

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