Eastern Kern Air Pollution Control District Policy

Addendum to CEQA Guidelines Addressing GHG Emission Impacts For Stationary Source Projects When Serving As Lead CEQA Agency

Board Adopted
March 8, 2012

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Table of Contents

I. PURPOSE

This Policy establishes and details the process of evaluating new or modified stationary source Greenhouse Gas (GHG) emissions impacts on global climate change (climate change) for purposes of the California Environmental Quality Act (CEQA). This Policy is to be used when the Eastern Kern Air Pollution Control District (EKAPCD) has discretionary approval authority over new stationary source projects and serves as lead CEQA review agency when determining GHG emissions significance.

Project-Specific CEQA significance for GHG Emissions will be assessed as follows:

A. If project is exempt from CEQA due to either a statutory or categorical exemption, no further analysis under CEQA is required.

B. Project-Specific GHG Emissions must be quantified if the project is not exempt from CEQA.

C. Project is considered to have a less than significant impact on GHG emissions if it meets one of the following conditions:

1. Project-Specific GHG emissions are less than 25,000 tons per year (tpy);

2. Project demonstrates to EKAPCD that it is in compliance with state GHG reduction plan such as AB 32or future federal GHG reduction plan if it is more stringent than state plan;

3. Project GHG emissions will be mitigated to a less than significant impact if GHGs can be reduced by at least 20% below Business-As-Usual (BAU) through implementation of one or more of the following strategies:

(a) Compliance with a Best Performance Standard (BPS) as set forth in Section VI of this Policy;

(b) Compliance with GHG Offset as detailed in Section VI of this Policy;

(c) Compliance with an Alternative GHG Reduction Strategy as discussed in Section VII of this Policy.

D. If none of the above is met the project will be deemed significant and an Environmental Impact Report (EIR) will be required.

II. BACKGROUND

A. State GHG Reduction Program

California is the twelfth largest emitter of GHGs in the world and second largest emitter in the United States. In recognizing the need to reduce California's GHGs, Assembly

Speaker Fabian Nunez, and Assembly Member Fran Pavley introduced Assembly Bill 32, California Global Warming Solutions Act of 2006 (AB 32) to the State Legislature in early 2006. The legislation clearly designates the California Air Resources Board (ARB) as the leading agency for developing a plan to address GHG emissions in California. Governor Schwarzenegger signed AB 32 into law on September 27, 2006.

AB 32 states that climate change poses a threat to California's economy, public health, natural resources, and environment, and states the necessity of federal and international action to effectively combat global warming. AB 32 is the first law to limit GHG emissions at the state level and is considered to be the most comprehensive, economy-wide climate change policy in the nation by committing to lower California's GHG emission levels to 11% below business as usual to 1990 levels by 2020, 25% below 1990 levels by 2025, and 80% below 1990 levels by 2050.

As the designated lead state agency responsible for establishing and implementing all aspects of AB 32, ARB has development a Scoping Plan designed to achieve the statutory GHG reduction goals. In December 2008, ARB released a Scoping Plan that recommended a mix of GHG emission reduction strategies designed to meet the targets established in AB 32 that included compliance requirements, a market-based cap-and-trade program, and other GHG reduction incentives. The 2008 Scoping Plan was challenged under CEQA and in August 2011 ARB approved a Supplement to the AB 32 Scoping Plan that updated emission projections in light of the economic downturn. The updated projections in the 2011 Scoping Plan estimates 2020 BAU GHG emissions of 506 million metric tons (MMT) of CO2 equivalents (CO2e). This would require a reduction of 80 MMT of CO2e, which equates to a 16% statewide reduction (20% reductions from Industrial Sources) in order to meet the 1990 GHG levels by 2020. The original 2008 Scoping Plan estimated that 2020 BAU GHG emissions would be 596 MMT of CO2e, and projected that 174 MMT of CO2e (27.3% state-wide) reductions were required in order to meet 1990 levels by 2020

The Scoping Plan relies in part on the Cap-and-Trade Program (Program) in order to meet the GHG reduction targets. The first phase of the Program will be initiated on January 1, 2013 and will include 600 facilities, which produce 85% of the GHG emissions throughout California's economy. The Program requires listed sources to reduce GHGs in accordance with emission levels established for each facility. Under the Program GHGs will be represented and traded by allowances with each allowance representing one ton of CO2e. Each year allowances in the program will be reduced until the 1990 emission levels are reached in 2020.

On December 22, 2011, ARB adopted the allowance allocation requirements for the Cap-and-Trade Program. Allowances are calculated based upon the type of industry, the fuel efficiency standard set for the industry and the actual GHG emissions in the base year. The rule includes a chart of the annual GHG allowances beginning in 2013 and ending in 2020 when the 1990 BAU levels must be met. The allowance budget decreases for the first two years (2013 and 2014), dramatically increases with the second phase in 2015 when additional GHG sources are required to enter the Program and then decreases steadily by slightly over 12 million tons per year to meet the 2020 target.

B. Federal GHG Reduction Program

There is currently no federal GHG reduction program. If a federal program is adopted in the future that is more stringent than the state GHG reduction program then EKAPCD will revise this policy to include it.

C. GHG CEQA Review

Lead agencies are required to establish specific procedures for administering its responsibilities under CEQA. These requirements include orderly project evaluation and preparation of environmental documents. On April 13, 2009, the Governor's Office of Planning and Research sent proposed amendments of the CEQA Guidelines to the Secretary of the Resources Agency for promulgation. The amendments require lead agencies to determine new stationary source project GHG emissions significance on climate change.

EKAPCD staff anticipates that most projects within its jurisdiction will be subject to CEQA review for GHG emission impacts by other lead agencies and only a few projects each year will be subject to review by EKAPCD acting as lead agency. These projects are anticipated to be large industrial projects or modifications to existing industrial projects that do not require conditional use permits from a land-use agency or a permit from the California Energy Commission. Smaller industrial projects that EKAPCD serves as lead CEQA review agency would be below the significance threshold for GHGs.

EKAPCD staff has reviewed various methods of addressing GHG emissions through the CEQA process and recommends EKAPCD should follow an approach compatible with San Joaquin Valley Air Pollution Control District (SJVAPCD)'s approach. Due to geography Kern County is divided into two air districts. EKAPCD has the Eastern portion and the western portion is included in the SJVAPCD. By following a CEQA GHG review process similar to SJVAPCD's, EKAPCD will maintain substantial consistency throughout Kern County.

D. SJVAPCD GHG CEQA Policy

SJVAPCD's Governing Board adopted a Climate Change Action Plan (CCAP) that directed their APCO to develop guidance to assist SJVAPCD staff, valley businesses, land–use agencies, and other permitting agencies in addressing GHG emissions as part of the CEQA process. SJVAPCD prepared a staff report titled, *Addressing Greenhouse Gas Emissions under the California Environmental Quality Act* to support their CEQA GHG policy. The staff report provides a summary of background information on climate change, the current regulatory environment surrounding GHG emissions, and the various concepts in addressing the potential impacts of climate change. The report also evaluates different approaches for estimating impacts and summarizes potential GHG emission reduction measures.

This policy incorporates SJVAPCD's staff report, *Addressing Greenhouse Gas Emissions under the California Environmental Quality Act* by reference as an additional support document for EKAPCD's CEQA GHG review approach and methodology for approved BPS as detailed in Appendix B of this Policy.

III. DETERMINING PROJECT SIGNIFICANCE

CEQA encourages lead agencies to develop and publish thresholds of significance for use in determining the significance of environmental impacts. EKAPCD proposes the following process for determining individual and cumulative significance of project specific GHG emissions on climate change when issuing permits for new stationary source projects:

A. Project subject to a CEQA statutory exemption or subject to a CEQA categorical exemption that does not otherwise have significant individual and cumulative effects on GHG emissions would not require further CEQA review.

B. Project that is not exempt from CEQA would require quantification of Project-Specific GHG Emissions to determine annual GHG emissions.

C. Project that emits less than 25,000 tons per year (tpy) of GHGs would be determined to have a less than significant individual or cumulatively considerable impact on GHG emissions and would not require further CEQA review.

   EKAPCD believes a 25,000 tpy threshold is appropriate for determining that a project will have no significant or cumulatively considerable impact because:

   1. 25,000 tpy is the EKAPCD GHG reporting requirement as stated in Section VI.B of EKAPCD Rule 201.3, Federally Enforceable Limits on Potential to Emit. ARB and EPA have determined that a 25,000 metric ton per year (mtpy) threshold is appropriate for GHG reporting because it would encompasses facilities whose GHG emissions may be subject to regulation. (See 74 Fed. Reg. 56260, 56273 (Oct. 30, 2009)); and

   2. 25,000 tpy is less than the threshold ARB uses for industrial source applicability as the first phase of the AB 32 Cap-and Trade Program and is therefore slightly more stringent than the Cap-and-Trade Program. (See ARB, Cap-and-Trade Instructional Guidance, Cap-and-Trade regulation Applicability Guidance (Jan. 2012)).

D. Project with Project-Specific GHG Emissions equal to or greater than 25,000 tpy will be assessed for CEQA significance as follows:

   1. Project subject to a state or federal GHG emission reduction plan or program that can demonstrate to EKAPCD that the project will be in compliance with such plan or program would be determined less than significant. State or federal GHG reduction plans or programs must be specified in law. For example, if a project

will be covered by the Cap-and-Trade Program, which is designed to require reductions in GHG emissions consistent with the statutory goals set forth in AB 32, the project would be in compliance with a state GHG emission reduction program and under this Policy the project would be determined to have a less than significant or cumulatively considerable impact on GHG emissions. The APCO will consider each project's compliance with state or federal GHG reduction plans or programs on a project-by-project basis.

2. Project that implements one or more of the following strategies that achieve at least a combined 20% reduction in GHG emissions compared to BAU will be determined to be less than significant:

   (a) BPS as set forth in Section VI of this Policy;

   (b) Offsets as defined in Section III of this Policy;

   (c) Alternative GHG Reduction Strategies as defined in Section III and discussed in Section VII of this Policy.

   EKAPCD believes that a 20% reduction in GHGs compared to BAU is appropriate because it reflects the Industrial Sector target listed in the Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document released August 19, 2011 and is more conservative than the 16% overall reduction set forth in the Scoping Plan.

E. Project that is not exempt from CEQA, not subject to an adopted state or federal GHG reduction plan, or cannot demonstrate that Project-Specific GHG Emissions will be reduced at least 20% below BAU will require preparation of an EIR.

IV. ESTABLISHING BAU AND BASELINE

In executing its legislative mandate to establish emission reduction targets which would achieve 1990 GHG emission levels by the year 2020, ARB used its emission inventory to establish a three-year average for GHG emissions occurring by sector during the baseline period of 2002-2004. This three-year average baseline emissions inventory was projected to the year 2020 using assumptions about potential growth, and assuming no change in the existing business practices. ARB has determined that a 20% reduction from the Industrial Sector's BAU is necessary in order to achieve 1990 GHG emissions level by 2020.

BAU as established by ARB is a projected emissions inventory and does not represent actual business or operational practices generating GHG emissions. To translate BAU into an emissions generating activity, EKAPCD staff will establish emission factors per unit of activity for each class and category using the Baseline as defined in Appendix A of this policy.

Example: an emissions factor for a combustion process could be expressed as pounds of GHG emissions generated per cubic feet of gas consumed or pounds of GHG emissions generated per unit of production.

GHG emission reductions would be determined by establishing a GHG emissions factor per unit of activity for the proposed project and comparing it to the emissions factor established for the baseline period.

The percent reduction in GHG emissions would be calculated using the following methodology:

$$\% \text{ Reduction in GHGs} = \frac{\text{(Baseline GHG factor) - (Proposed project GHG factor)}}{\text{Baseline GHG factor}} \times 100\%$$

V. ESTABLISHING BPS

Use of BPS streamlines the significance determination process by pre-quantifying the emission reductions that would be achieved by a specific GHG emission reduction measure and pre-approving the use of such a measure to reduce project-related GHG emissions. Establishing BPS also streamlines the CEQA review process by providing EKAPCD staff, project proponents, and the public with clear guidance on how to reduce GHG emission impacts. Thus, if a project proponent incorporates GHG reduction measures during the initial project design phase that reduces Project-Specific GHG emissions by at least 20% the project would be considered mitigated to less than significant.

A. Process for Establishing BPS

BPS will be the most effective Achieved-in-Practice means of reducing or limiting GHG emissions from a GHG emissions source. EKAPCD will develop and approve BPS for specific classes and categories of stationary sources for use within the District, or adopt a BPS that has been developed, approved and implemented by another air district, ARB, or CAPCOA. To ensure a BPS reflects the most current available technology periodic reviews will be conducted and approved BPS will be revised as necessary. Revisions to BPS only apply to future projects and do not apply retroactively to projects already permitted or approved.

B. Process Steps for BPS Developed by EKAPCD

EKAPCD will implement the following process for developing a BPS:

1. Establish Baseline GHG emissions factor per unit of activity for the proposed equipment or operation identified within a specific class and category.

2. For the specific equipment or operation being proposed within a specific class and category, list all technologically feasible GHG emissions reduction measures, including equipment selection, design elements and best management practices, that

do not result in an increase in criteria pollutant emissions compared to the proposed equipment or operation.

3. For all technologically feasible GHG emission reduction measures identified in Step 2, identify all GHG reduction measures determined to be Achieved-in-Practice. In determining Achieved-in-Practice, consider the extent to which grants or other financial subsidies influence economic feasibility.

4. For each Achieved-in-Practice GHG emission reduction measure identified in Step 3:

   (a) Quantify the potential GHG emission reduction, as compared to the Baseline GHG emissions factor per unit of activity; and

   (b) Express the potential GHG emission reduction as a percent of Baseline GHG emissions factor per unit of activity.

5. Rank all Achieved-in-Practice GHG emission reduction measures by order of percent GHG emissions reduction.

6. Deem the Achieved-in-Practice GHG emissions reduction measure(s) with the highest percent reduction in GHG emissions as the EKAPCD approved BPS for the respective class and category of equipment or operation being proposed.

7. Public notice for proposed BPS will be provided through a workshop notice posted on the EKAPCD website and hard copies mailed to stakeholders and other interested parties no less than 3 weeks before the workshop. If the BPS affects a large number of sources or significant public participation is anticipated an official public notice will be released at least 30 days prior to the workshop. An electronic copy of proposed BPS will be made available on the EKAPCD's website and hard copy will be made available in the EKAPCD's administrative office prior to the workshop.

8. Hold a public workshop to present proposed BPS to stakeholders and other interested parties.

9. Provide 30-day question, comment, and suggestion period on proposed BPS.

10. The final draft of a proposed BPS will be presented to EKAPCD's Governing Board for adoption. Once the Board adopts the BPS it will become part of the EKAPCD's GHG CEQA policy.

C. Process Steps for Incorporating BPS by Reference

BPS located in Appendix B have been developed, approved, and implemented by SJVAPCD and are adopted by reference into this Policy. Any other or future SJVAPCD BPS must be approved by the APCO prior to being implemented in EKAPCD. Furthermore, the APCO may adopt a BPS by reference for specific equipment or operation that has been developed, approved, and implemented by another air district, CAPCOA, ARB, or EPA. In such cases EKAPCD staff will review and evaluate the

BPS. The APCO must approve the BPS prior to its use within the District. A BPS that is adopted by reference is not required to undergo the public review process.
BPS must demonstrate that it achieves quantifiable GHG emission reductions in order to be approved for use within the District. EKAPCD may rely on the findings of a BPS developed, approved, or implemented by another agency, including but not limited to, GHG emissions quantification or percent of GHG reductions achieved by the BPS.

VI. COMPLIANCE WITH GHG OFFSET

Project proponents may propose a reduction or removal of GHG emissions occurring elsewhere to compensate for, or offset an increase in GHG emissions resulting from the project. Individual projects can be developed to achieve the reduction of emissions from activities not otherwise regulated, covered under an emissions cap, or resulting from government incentives. Any offset must be real, permanent, quantifiable, verifiable, enforceable, and subject to APCO approval.

VII. ALTERNATE STRATEGY FOR REDUCTIONS

Implementation of strategies to achieve AB 32 emission reduction targets is anticipated to drive technology development, potentially obsolescing or improving established standards over time.

Project proponents may propose other technologies, equipment designs, or operational/maintenance practices in lieu of an adopted BPS or if no BPS is available. An alternative GHG reduction strategy must demonstrate that Project-Specific GHG Emissions would be reduced or mitigated by at least 20% compared to BAU. The APCO will evaluate and approve the proposed alternative GHG emission reduction strategy if it is found to be appropriate for the project.

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APPENDIX A
DEFINITIONS

A. Achieved-in-Practice: Any equipment, technology, practice or operation available in the United States that has been installed and operated or used at stationary source site for a reasonable period of time sufficient to demonstrate that the equipment, technology, practice or operation is reliable when operated in a manner that is typical for the process. In determining whether equipment, technology, practice or operation is Achieved-in-Practice, the EKAPCD will consider the extent to which grants, incentives or other financial subsidies influence the economic feasibility of its use.

B. Alternate Strategies for Reductions: Technologies, equipment designs, or operation/maintenance practices proposed by a project sponsor in lieu of an adopted BPS if no BPS is available, where the project sponsor can demonstrate that Project-Specific GHG Emissions would be reduced by at least 20% compared to BAU.

C. APCO: Air Pollution Control Officer, or his designee.

D. Approved Alternate Technology: Any EKAPCD approved, Non-Achieved-in-Practice GHG emissions reduction measure equal to or exceeding the GHG emission reduction percentage for a specific BPS.

E. Baseline: Three year average (2002-2004) of GHG emissions for a type of equipment or operation within an identified class and category, expressed as annual GHG emissions per unit. The percent reduction in GHG emissions is calculated using the following methodology:

$$\% \text{ Reduction in GHGs} = \frac{\text{(2002-2004 baseline GHG factor) - (Proposed project GHG factor)}}{\text{2002-2004 baseline GHG factor}} \times 100\%$$

F. Best Performance Standard (BPS): For a specific Class and Category, the most effective, EKAPCD approved, and Achieved-In-Practice means of reducing or limiting GHG emissions from a GHG emissions source, which is also economically feasible per the definition of Achieved-in-Practice. BPS includes equipment type, equipment design, and operational and maintenance practices for the identified service, operation, or emissions unit class and category.

G. Business-As-Usual (BAU): Emissions for a type of equipment or operation within an identified class and category projected for the year 2020, assuming no change in GHG emissions per unit of activity as established for the baseline period.

H. Category: EKAPCD approved subdivision within a “class” as identified by unique operational or technical aspects.

I. Class: Broadest EKAPCD approved division of stationary GHG sources based on fundamental type of equipment or industrial classification of the source operation.

J. GHG Offset: Reduction, removal, or avoidance of GHG emissions that is used to compensate for GHG emissions that occur elsewhere, subject to approval of APCO.

K. Metric Ton per Year (mtpy): Tonne = 2,204.6 pounds (1000 kg).

L. Project-Specific GHG Emissions: Emissions resulting from a specific operation or process, e.g. fuel combustion emissions from a boiler. Project-Specific GHG Emissions will be quantified in accordance with established Clean Air Act permit requirements or through methodology approved by the APCO on a project-specific basis.

M. Ton Per Year (tpy): United States short ton = 2000 lb (907.2 kg).

APPENDIX B
ADOPTED BEST PERFORMANCE STANDARDS

This appendix contains a list of Best Performance Standards (BPS) approved for use with in the Eastern Kern Air Pollution Control District (EKAPCD).

The following list of BPS is adopted by reference from the San Joaquin Valley Air Pollution Control District:

- Fossil Fuel-Fired Boilers, Steam Generators & Process Heaters With Firing Capacity > 5 MMBtu/hour (HHV): (SJVAPCD Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under The California Environmental Quality Act, December 17, 2009);

- Non-Emergency Onsite Electric Power Generation with Fossil Fuel Combustion > 5 MMBtu/hour Or With Fossil Fuel-Fired Mechanical Driver > 50 bhp: (SJVAPCD Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under The California Environmental Quality Act, December 17, 2009);

- Non-Emergency Mechanical Equipment Driver (requirement in lieu of reciprocating IC engines > 50 hp and combustion turbines > 3 MMBtu/hour excluding combustion turbines in cogeneration service): (SJVAPCD Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under The California Environmental Quality Act, December 17, 2009);

- Cogeneration – Topping Cycle Plants (not including Combined Cycle units): (SJVAPCD BPS, Effective November 1, 2011);

- Landfill Operations: (SJVAPCD Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under The California Environmental Quality Act, December 17, 2009);

- Direct-Fired Combustion Heat Transfer Equipment (Dryers, Kilns, etc): (SJVAPCD Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under The California Environmental Quality Act, December 17, 2009).