



# **Public Workshop - February 24, 2011**

## **California Environmental Quality Act Significance Thresholds for Greenhouse Gases**

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# Purpose of Workshop

- What are the current CEQA requirements?
- How do greenhouse gases fit into those requirements?
- What is the District's current direction for development of significance thresholds?
- Develop thresholds through a public review process (CEQA Guidelines Section 15064.7)
- Seek input from interested parties

# **Santa Barbara APCD**

**Our mission is to protect the people and the environment of Santa Barbara County from the effects of air pollution.**

- We regulate “stationary sources” of air pollution within Santa Barbara County.**
- We do not regulate motor vehicles or “portable” equipment/operations.**
- We do not make land use decisions (this is done by the cities and SB County).**

# California Environmental Quality Act (CEQA)

- Purpose: public disclosure, inform decision makers, *provide for an analysis of alternatives to avoid impacts.*
- A CEQA determination is required for all “discretionary projects” in California.
- Level of review depends on the level of environmental impacts:
  1. Project is exempt – “Notice of Exemption”
  2. Project has potential for impacts but can be mitigated – “Negative Declaration/Mitigated Negative Declaration”
  3. Impacts are significant, and cannot be mitigated to a level that is less than significant – “Environmental Impact Report” (EIR).

# APCD's Implementation of CEQA

- APCD has multiple roles under CEQA:
  - Lead Agency (plans, rules, sometimes permits)
  - Responsible Agency
  - Concerned/Trustee Agency
- APCD Environmental Review Guidelines set our thresholds for air quality impacts only.
- CEQA lead agencies may choose to use these thresholds, or their own.
- Staff proposes to adopt stationary source thresholds for GHG's, as we have done for criteria pollutants.

# The Need For GHG Thresholds

CEQA Guidelines revisions (March, 2010) require GHG quantification, significance determination, and mitigation if necessary.

*Guidelines Section 15064.4, Determining the Significance of Impacts from Greenhouse Gases:*

*“(a) The determination of the significance...calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project...”*

*“(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts...:*

*(1) The extent to which the project may increase or reduce the greenhouse gas emissions as compared to the existing environmental setting;*

*(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*

*(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 greenhouse gas emissions...”*

# The Need For GHG Thresholds (continued)

CEQA Guidelines Section 15064.7, Thresholds of Significance:

*“(a) Each public agency is encouraged to develop and publish thresholds of significance of environmental effects...compliance with which means the effect normally will be determined to be less than significant.”*

*“(b) Thresholds of significance...must be adopted by ordinance, resolution, rule, or regulations, and developed through a public review process and be supported by substantial evidence.”*

*“(c) When adopting thresholds of significance, 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.”*

# How is significance determined for air quality impacts under CEQA?

- Air Districts typically apply emissions-based thresholds for criteria pollutants (ozone-forming pollutants - ROC, NO<sub>x</sub>).
- This allows for public disclosure and mitigation of impacts related to large, significant sources of air pollutants.
- Applying emissions-based thresholds allows for an analysis of alternatives to avoid potentially significant impacts (required by CEQA).

# Benefits of Adopting a GHG Threshold

- Individual jurisdictions are applying varying significance criteria, project by project. Need threshold for fairness, consistency.
- Uncertainty in permitting process (cost, project timelines).
- Potential for legal challenges to GHG analysis.

# Other District Approaches

- Bay Area AQMD: adopted a 10,000 metric tons (MT) CO<sub>2</sub>e/yr threshold for stationary sources and 1,100 MTCO<sub>2</sub>e/yr for land use (commercial/residential) projects.
- South Coast AQMD: adopted an interim threshold of 10,000 MTCO<sub>2</sub>e/yr for stationary sources. Have not adopted thresholds for commercial/residential yet.
- A large proportion of all California industrial sources now subject to a 10,000 MTCO<sub>2</sub>e/yr threshold.

# Datasets we developed and analyzed:

1. “Actual emissions” dataset for stationary combustion sources for 2007 (this parallels the SCAQMD dataset).
2. “Potential to emit” dataset for new permit applications received 2005 through June 2010 (stationary combustion sources).

# **GHG Threshold Analysis**

- **Hypothetical 10,000 MTCO<sub>2</sub>e/yr threshold**
- **Observed capture for two datasets:**
  - **Actual emissions for all stationary combustion sources (2007)**
  - **PTE for new permits issued 2005 through June 2010**

**First Dataset = Actual CO2e for 2007**  
**(permitted stationary combustion sources)**  
**10K MT/yr Threshold**

	Sources Above 10K	Sources Below 10K
# of Sources	<b>8</b>	<b>161</b>
% of Sources	<b>4.73%</b>	<b>95.27%</b>
Total MTCO2e Emissions	<b>621,146</b>	<b>107,297</b>
% of Total CO2e Emissions	<b>85.27%</b>	<b>14.73%</b>

**Second Dataset = PTE CO<sub>2</sub>e for Projects**  
**(permit applications processed from 2005  
through 6/2010)**  
**10K MTons/yr Threshold**

	Projects Above 10K	Projects Below 10K
# of Permits	6	84
% of Permits	6.7%	93.3%

**Second Dataset = PTE CO<sub>2</sub>e for Projects**  
**(permit applications processed from 2005  
through 6/2010)**  
**10K MTons/yr Threshold**

	Projects Above 10K	Projects Below 10K
<b># of Permits</b>	<b>6</b>	<b>84</b>
<b>MTCO<sub>2</sub>e/yr Captured</b>	<b>198,786</b>	<b>160,139</b>
<b>% MTCO<sub>2</sub>e/yr Captured</b>	<b>55.4%</b>	<b>44.6%</b>

# Projects Above Threshold

- Projects generally exceeding an individual or combined power rating of 20 MMBtu/hr or greater such as:
  - Production Flares
  - Steam Generators
  - Thermal Oxidizers
  - Furnaces
  - Boilers

# Mitigation Options

**GHG emission reductions must be quantifiable, verifiable, and not required by regulation. Prioritization scheme:**

- 1. Reduce GHGs onsite with efficiency improvements, etc.**
- 2. Emission reductions at other regulated facilities under the same ownership.**
- 3. Applicant may purchase emission reduction credits.**

# Observations

- **GHG thresholds address CEQA need and provide certainty, uniformity and legal defensibility.**
- **Other districts have adopted stationary source thresholds.**
- **CEQA Guidelines allow for consideration of other agencies' thresholds, and a large proportion of the state is subject to a 10,000 MTCO<sub>2</sub>e/yr threshold.**
- **Only 6 of 90 new projects (2005-June 2010) exceeded a hypothetical 10,000 MTCO<sub>2</sub>e/yr threshold.**
- **Projects exceeding the threshold may mitigate onsite, offsite, or obtain emission reduction credits.**

# Next Steps

- **Public workshop today**
- **Consider input from workshop and further develop substantial evidence to support thresholds**
- **Additional workshop if comments received result in substantive revisions to proposed approach**
- **Bring a draft proposal to District Community Advisory Council (CAC) in May**
- **Incorporate proposed thresholds into APCD Environmental Review Guidelines; propose for Board adoption sometime after May CAC meeting**