Stationary Source
Greenhouse Gas Emissions Threshold for CEQA

Board of Directors
Santa Barbara County
Air Pollution Control District

Molly Pearson
Planning & Grants Supervisor

April 16, 2015
Overview

• Project description and application
• Summary of the public process
• Threshold options
• Community Advisory Council and Next Steps
• Questions
Project Description

• Establish a stationary source greenhouse gas (GHG) threshold of significance to be used by the District when acting as a lead agency under the California Environmental Quality Act (CEQA)

• Incorporate threshold into the District’s Environmental Review Guidelines
Application

• Threshold would apply to new or modified stationary sources (e.g. oil and gas facilities, landfills, hospitals or universities, and a wide range of other types of facilities that have combustion devices)
• Threshold used when the District is the CEQA lead agency
• Other lead agencies are encouraged to use the District’s threshold
GHG Inventory

Threshold would apply to this sector

Total CO₂ Emissions in 2007 Inventory = 5.18 million metric tons CO₂
Public Involvement

• Thorough outreach and noticing
• Four public workshops: two in May 2014, one in December 2014, one in March 2015
• Stakeholder meetings open to the public
• Regular email updates on project activities
• Solicitation of verbal and written input
• Posting on our website of all written input and notes from workshops
Public Workshops

- May 6 and 8, 2014 – Santa Maria and Santa Barbara
  - Background
  - Early input – verbal and written

- December 3, 2014 – Santa Barbara
  - Presented input received from the public
  - Four potential options for consideration and discussion

- March 25, 2015 – Buellton
  - Presented two potential options
Staff Report

- Developed prior to March 25, 2015 joint public workshop/CAC meeting
- Widely noticed and posted online in advance
- Includes:
  - Background, public process, local/state/federal initiatives
  - Responses to comments and requests from the public
  - Two options for consideration, with substantial evidence to support both options
### Responses to Comments and Asks

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked for capture rate for 10,000 MT threshold, and what threshold would be at 95% capture</td>
<td>Developed Table 5-1 that explores bright line threshold levels based on various capture rates, including 95% capture</td>
</tr>
<tr>
<td>Asked for more information regarding the stationary source GHG inventory, source types</td>
<td>Developed Figure 5-1 and 5-2 that show # of sources in various emissions brackets</td>
</tr>
<tr>
<td>Asked for definition of BAU</td>
<td>Provided a definition and explanation of expectations of a BAU analysis in Section 6</td>
</tr>
<tr>
<td>Asked to show mitigation calculation for a 87,000 MT/yr project under performance-based measure threshold</td>
<td>Performance-based measure threshold option not moved forward so request no longer applicable</td>
</tr>
<tr>
<td>Asked for justification for using 2020 versus 2050 targets for the percent reduction required</td>
<td>Section 6 includes an explanation of why the 2020 reduction value is referenced at this point; commitment to revisit when post-2020 targets are adopted</td>
</tr>
</tbody>
</table>
## Responses to Comments and Asks

<table>
<thead>
<tr>
<th>Question</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Asked for more details on mitigation &amp; monitoring</td>
<td>Preparing a mitigation “white paper”</td>
</tr>
<tr>
<td>Asked to clarify position on acceptability of purchased, Cap-and-Trade compliance offsets</td>
<td>Discussion included in Section 6; yes, purchased offsets from projects done under a CARB-approval protocol are acceptable mitigation</td>
</tr>
<tr>
<td>Asked to clarify position on purchased vs. allocated allowances</td>
<td>Discussion included in Section 6; compliance obligations above and beyond what is freely allocated represent a GHG reduction</td>
</tr>
<tr>
<td>Threshold Level (MT CO2e)</td>
<td>Percentage of Emissions Captured</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero</td>
<td>100.0%</td>
</tr>
<tr>
<td>1,000</td>
<td>98.6%</td>
</tr>
<tr>
<td>5,000</td>
<td>89.1%</td>
</tr>
<tr>
<td>10,000</td>
<td>82.4%</td>
</tr>
<tr>
<td>25,000</td>
<td>74.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent Capture Rate</th>
<th>Emissions Level (MT CO2e)</th>
<th>Number of Sources Within Santa Barbara County</th>
<th>Total County-Wide Emissions Within Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Above Threshold</td>
<td>Below Threshold</td>
</tr>
<tr>
<td>80% Capture</td>
<td>16,315</td>
<td>8</td>
<td>410</td>
</tr>
<tr>
<td>85% Capture</td>
<td>7,422</td>
<td>17</td>
<td>401</td>
</tr>
<tr>
<td>90% Capture</td>
<td>3,974</td>
<td>25</td>
<td>393</td>
</tr>
<tr>
<td>95% Capture</td>
<td>1,754</td>
<td>44</td>
<td>374</td>
</tr>
<tr>
<td>98% Capture</td>
<td>1,149</td>
<td>65</td>
<td>353</td>
</tr>
<tr>
<td>100% Capture</td>
<td>Zero</td>
<td>418</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: All values are approximate
Typical Source Category by GHG Bracket:

**<1K MT CO2e:**
- Emergency Standby Generators
- Small Oil and Gas Extraction Facilities
- Additional Miscellaneous Small Sources

**1K-5K MT CO2e:**
- Mid-size Medical Facilities
- Federal Justice Facilities
- Oil and Gas Extraction Facilities
- Mineral Extraction/Processing Facilities
- Educational Facilities
- Miscellaneous Manufacturing Facilities
- Mid-size Hotels

**5K-10K MT CO2e:**
- Large Medical Facilities
- Oil and Gas Extraction/Refining Facilities
- Mineral Extraction/Processing Facilities
- Mid-size Educational Facilities
- Electronics Manufacturing Facilities
- Large Hotels

**> 10K MT CO2e:**
- Large Oil and Gas Extraction Facilities
- Large Landfills
- Large Mineral Extraction/Processing Facilities
- National Defense Facilities
- Large Educational Facilities

Santa Barbara County, CA
Number of Sources per GHG Bracket (2013)
Typical Source Category by GHG Bracket:

**<1K MT CO2e:**
- Emergency Standby Generators,
- Small Oil and Gas Extraction Facilities,
- Additional Miscellaneous Small Sources

**1K-5K MT CO2e:**
- Mid-size Medical Facilities,
- Federal Justice Facilities,
- Oil and Gas Extraction Facilities,
- Mineral Extraction/Processing Facilities,
- Educational Facilities,
- Miscellaneous Manufacturing Facilities,
- Mid-size Hotels

**5K-10K MT CO2e:**
- Large Medical Facilities,
- Oil and Gas Extraction/Refining Facilities,
- Mineral Extraction/Processing Facilities,
- Mid-size Educational Facilities,
- Electronics Manufacturing Facilities,
- Large Hotels

**> 10K MT CO2e:**
- Large Oil and Gas Extraction Facilities,
- Large Landfills,
- Large Mineral Extraction/Processing Facilities,
- National Defense Facilities,
- Large Educational Facilities

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Santa Barbara County, CA
Total Emissions (MT/yr) by Source GHG Bracket (2013)

- **12 Sources**
- **48 Sources**
- **11 Sources**
- **347 Sources**

Legend:
- <1K MT CO2e Sources
- 1K-5K MT CO2e Sources
- 5K-10K MT CO2e Sources
- >10K MT CO2e Sources
Zero Threshold

- Many commenters urged adoption of a zero threshold
- Consistent with the science of climate change
- Challenging to implement:
  - Even small sources subject to potentially costly environmental review
  - Administrative and financial burden on agencies and project proponents: mitigation funding, environmental review, mitigation monitoring & reporting
- Only achieves a small amount of additional reductions, but subjects many more small sources to substantial administrative requirements
Threshold Options

Bright Line 10,000 MT/yr

AB 32 Consistency
Bright Line 10,000 MT/yr Threshold

- Establishes a strictly numeric emissions threshold and requires mitigation to below 10,000 MT to make a finding of less than significant
- Capture rate of 82.4% on 2013 County GHG stationary source emissions
- Threshold set low enough to capture a substantial fraction of future emissions, while high enough to exclude small projects
- Applied in California and to date has not been challenged in the courts
AB 32 Consistency Threshold

- Utilizes a 10,000 MT/yr screening threshold and considers Cap-and-Trade as a Qualified Greenhouse Gas Reduction Plan
- Requires a 15.3% reduction from business-as-usual (BAU) emissions
- The “% reduction from BAU” method has been challenged (successfully and unsuccessfully) in the courts
- Commitment to update % reduction as the state adopts new reduction targets
Comparison of Mitigation Examples

Project subject to a Bright Line 10,000 MT/yr Threshold

Project subject to the Cap and Trade Program (under AB 32 Consistency Threshold Approach)
**Comparison of Mitigation Requirements (30 yr project life)**

<table>
<thead>
<tr>
<th>Project Scenario/Option</th>
<th>Stationary Source Emissions (Annual)</th>
<th>Threshold Level (Annual)</th>
<th>Purchased C&amp;T Allowances¹ (Project Lifetime)</th>
<th>Additional Mitigation Required (Project Lifetime)</th>
<th>Total Mitigation Required (C&amp;T Purchased Allowances¹ + Add'l. Project Lifetime)</th>
<th>Total Project Lifetime Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 32 Consistency (15.3% down from BAU) - Project 10K-25K</td>
<td>15,000</td>
<td>12,705</td>
<td>N/A</td>
<td>68,850</td>
<td>68,850</td>
<td>450,000</td>
</tr>
<tr>
<td>Bright Line (10,000 MT) - Project 10K-25K</td>
<td>15,000</td>
<td>10,000</td>
<td>N/A</td>
<td>150,000</td>
<td>150,000</td>
<td>450,000</td>
</tr>
<tr>
<td>AB 32 Consistency - Project Subject to Cap and Trade (C&amp;T)</td>
<td>40,000</td>
<td>Declining cap per C&amp;T regulation</td>
<td>171,400</td>
<td>0</td>
<td>171,400</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Bright Line (10,000 MT) - Project Subject to C&amp;T</td>
<td>40,000</td>
<td>10,000</td>
<td>171,400</td>
<td>728,600</td>
<td>900,000</td>
<td>1,200,000</td>
</tr>
</tbody>
</table>

¹ Purchased C&T Allowances are defined as the amount of additional allowances/offsets that are required by the Cap and Trade program, above and beyond those that are directly (freely) allocated to the covered entity as established in Section 95881, Allocation for Industry Assistance, of the Cap and Trade regulation.
Mitigation

Basic requirements:

• Relates directly to the impact, roughly proportional to the impact
• “Fair share” funding of a measure that addresses the cumulative impact
• Should not be deferred
• Done up-front or through a mitigation monitoring & reporting plan
• Offsets = real, quantifiable, surplus, enforceable, and permanent
Mitigation

Priority:
• onsite reductions first
• offsite within the region
• elsewhere in California
• elsewhere in the U.S.

Preparing a “Mitigation White Paper” with additional information on how to implement mitigation for different scenarios.
Community Advisory Council Consideration

• Presented to CAC on March 25, 2015, concurrent with public workshop presentation
• Received public comment at joint workshop/CAC meeting
• Discussion and deliberation amongst CAC members
• Majority of the CAC voted to recommend the AB 32 Consistency threshold to your Board (15 out of 22)
• Minority also forwarded a letter to your Board
• Board to consider threshold options and CAC recommendations on May 21, 2015:
  – Adopt a GHG threshold for projects when APCD is CEQA lead agency
  – Review and consider approval of other changes to Environmental Review Guidelines
Questions?

Thank you