Board Agenda Item

TO: Air Pollution Control District Board
FROM: Aeron Arlin Genet, Air Pollution Control Officer
CONTACT: Molly Pearson, Planning and Grants Supervisor (961-8838)
SUBJECT: Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule

RECOMMENDATION:

Approve the attached resolution which contains the following action items:

1. Revise the 2016 Ozone Plan control measure implementation schedule as follows:
   a. Amend the implementation schedule from 2017 to 2018 for 3 NOx control measures for boilers, water heaters and process heaters (Rules 342, 360, and 361); and
   b. Move to contingency 3 ROC control measures regarding solvent cleaning, surface coating of wood products, and graphic arts products (Rules 321, 351, and 354).

2. Adopt the California Environmental Quality Act Findings that include a determination that an Addendum has been prepared pursuant to CEQA and the Addendum together with the Final Environmental Impact Report for the 2010 Clean Air Plan has been reviewed and considered by the Board prior to approval of this project; and

3. Authorize the Control Officer to transmit the revised 2016 Ozone Plan control measure implementation schedule to the California Air Resources Board.
DISCUSSION:

Over the last several years Santa Barbara County’s air quality, and specifically measured ozone levels, have improved to the point where our designation for the state ozone standard has shifted from nonattainment to nonattainment-transitional. Your Board was briefed on this topic when the 2016 Ozone Plan was adopted in October 2016, and also in March of this year. The state finalized the District’s nonattainment-transitional designation in April 2017.

The 2016 Ozone Plan includes six stationary source control measures that were considered to be feasible and cost-effective, and are scheduled to be implemented during the 3-year plan cycle. Three of these control measures involve reducing nitrogen oxides (NOx) emissions from combustion devices; three of them involve reducing reactive organic compounds (ROC) emissions from solvent and graphic arts sources. As part of the 2016 Ozone Plan update, two of the NOx measures were revised to no longer require equipment retrofits. Instead, the measures only apply to new installations or modifications; this made the measures much more cost-effective.

The California Clean Air Act requires nonattainment Districts to adopt all feasible measures following an expeditious rule adoption schedule. Because our ozone designation has shifted to nonattainment-transitional, we are required by law to reevaluate the stationary source control measure implementation schedule, and determine whether all of the measures identified in the 2016 Ozone Plan are necessary, given this shift to nonattainment-transitional. If some of the measures are deemed no longer necessary, they may be delayed or shifted to a contingency status until the next triennial plan update. State law requires that this analysis be reviewed and approved by your Board.

Community Advisory Council Process
District staff prepared a report on this topic that included a discussion of the air quality planning process, the shift in designation to nonattainment-transitional, a review of air quality data, emission inventory and projections, and discussion of other measures being done by state and federal agencies. This report was provided to the District’s Community Advisory Council (CAC) members in January 2017. The report included three potential options for revising the control measure implementation schedule, as well as a staff recommendation. The staff recommendation was to proceed with implementing the three NOx measures, and to shift the ROC measures to contingency status until the next triennial plan update. The CAC reviewed and discussed the report in February 2017, considered the three options presented in the report, and eventually voted to recommend that the District Board revise the control measure implementation schedule following the staff recommendation.

Board Process and Additional Analysis
As mentioned above, the District Board was briefed on this issue in March 2017, and Board members and the public discussed a variety of questions and concerns. At that time, the state had not yet finalized the change in designation. In April 2017, the state finalized the change in designation. Since the March Board meeting, District staff has taken the information that was in the report presented to the CAC, and has prepared a report titled, “Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule” to
support the Board action today. The report is provided as Attachment B to the resolution, and it includes additional clarification of items that came up at the March Board meeting. The report also includes preliminary information on the costs and benefits of implementing the control measures in the recommended revised schedule; a complete cost-benefit analysis will be provided when the control measures are implemented by a Board action.

After reviewing this topic further with California Air Resources Board (CARB) staff, District staff also conducted a study to examine whether ozone formation in Santa Barbara County tends to be limited by the amount of NOx in the air. The study is titled, “The Weekend Effect: Is Santa Barbara County NOx-limited?”, and it is included as an attachment to the nonattainment-transitional report (Attachment B to the Board resolution). In the “weekend effect” study, District staff looked at historical NOx and ozone levels, and evaluated whether both NOx and ozone levels decreased over the weekend, indicating that ozone formation in our area is NOx-limited. The study indicates that in the areas with the highest ozone readings, ozone formation tends to be limited by the amount of NOx in the air. This study further supports the idea that in order to achieve attainment and to maintain the state ozone standard, at this point in time, reducing the amount of NOx in the air will be more important than additional ROC reductions.

**Conclusion and Recommendations**
The resolution and supporting documents that are presented to your Board today are the culmination of several months of staff and Community Advisory Council work to address this change in designation. The staff recommendation is an interim strategy and does not change the District’s overall strategy of implementing all feasible measures to attain and maintain the state ozone standard. We believe that through this process, we have developed a sound strategy to ensure that air quality is continually improved, public health is protected, and legislative mandates are met.

The nonattainment-transitional report that is included as Attachment B to the resolution was prepared to meet the mandates of the California Clean Air Act. When the proposed control measures from the 2016 Ozone Plan are implemented as laid out in the proposed revised schedule, a cost-benefit analysis of the measures will be completed as part of the rule adoption Board package.

**ATTACHMENTS:**

1) District Board Resolution for the Revised Schedule for Implementing the 2016 Ozone Plan Stationary Source Control Measures, which includes the following:
   - Revised 2016 Ozone Plan Control Measure Implementation Schedule
   - Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule
   - Addendum to the 2010 Clean Air Plan EIR
   - Final EIR for the 2010 Clean Air Plan¹
   - California Environmental Quality Act Findings

¹ Due to its length, the 2010 Clean Air Plan EIR is included as a CD rather than as a paper version.
RESOLUTION OF THE BOARD OF DIRECTORS OF

THE SANTA BARBARA COUNTY

AIR POLLUTION CONTROL DISTRICT

IN THE MATTER OF A REVISED SCHEDULE FOR IMPLEMENTING THE 2016 OZONE PLAN STATIONARY SOURCE CONTROL MEASURES

APCD RESOLUTION NO. _______

RECITALS

WHEREAS, when the 2016 Ozone Plan was adopted by the Santa Barbara County Air Pollution Control District ("District") Board in October 2016, the District was designated as a nonattainment area for the state ozone standard; and

WHEREAS, the 2016 Ozone Plan identified that the District’s attainment status for the state ozone standard may change from nonattainment to nonattainment-transitional, pursuant to California Health & Safety Code Section 40925.5(a) and California Code of Regulations Title 17, Section 70303.5(b); and

WHEREAS, based on ambient air concentrations measured by the District and reported to the California Air Resources Board, the state ozone standard was not exceeded more than three times at any one monitoring location within the District during 2015 and 2016; and

WHEREAS, in accordance with the requirements of Health and Safety Code section 40925.5(a) and California Code of Regulations Title 17, Section 70303.5(b), the District’s designation has changed to nonattainment-transitional; and

WHEREAS, in accordance with the requirements of Health and Safety Code section 40925.5(b), the District staff have reviewed the 2016 Ozone Plan and have recommended whether the stationary source control measures scheduled for adoption or implementation within the next three years by the District are needed to accomplish expeditious attainment or to maintain the state standard following the projected attainment date. Information and analysis to support this recommendation are included in Attachment B to this resolution; and
WHEREAS, in accordance with the requirements of Health and Safety Code section 40925.5(c), the District staff have recommended that three of the stationary source reactive organic compound control measures scheduled for adoption or implementation within the next three years are no longer necessary to accomplish expeditious attainment or to maintain the state standard, and the District staff have recommended that measures regarding solvent cleaning, surface coating of wood products, and graphic arts products (Rules 321, 351, and 354) be shifted to the contingency category. A recommended revised schedule for implementing the 2016 Ozone Plan Stationary Source Control Measures is included as Attachment A to this resolution; and

WHEREAS, there is good cause to amend the 2016 Ozone Plan to change the implementation date from 2017 to 2018 for three oxides of nitrogen control measures for boilers, water heaters and process heaters (Rules 342, 360, and 361); and

WHEREAS, pursuant to the California Environmental Quality Act, the District has prepared an Addendum to the Environmental Impact Report for the 2010 Clean Air Plan (State Clearing House No. 2010071014) to address any potential adverse environmental impacts associated with the revised schedule for implementing the 2016 Ozone Plan stationary source control measures; and

WHEREAS, on February 8, 2017, the Community Advisory Council met and considered the proposed revised schedule for implementing the 2016 Ozone Plan stationary source control measures and recommended that this Board approve the revised schedule as recommended by District staff.

NOW, THEREFORE, IT IS HEREBY RESOLVED, as follows:

1. In accordance with Health and Safety Code section 40925.5(c), the Board hereby determines that three reactive organic compound stationary source control measures scheduled for adoption or implementation within the next three years are no longer necessary to accomplish expeditious attainment or to maintain the state standard, and the Board shifts the measures regarding solvent cleaning, surface coating of wood products,
and graphic arts products (Rules 321, 351, and 354) to the contingency category. A revised schedule and list of new contingency measures for implementing the 2016 Ozone Plan Stationary Source Control Measures is included as Attachment A to this resolution.

2. The Board hereby amends the 2016 Ozone Plan to change the implementation date from 2017 to 2018 for three oxides of nitrogen control measures for boilers, water heaters and process heaters (Rules 342, 360, and 361).

3. The California Environmental Quality Act findings, as set forth in Attachment E, are hereby adopted as findings of this Board pursuant to the California Environmental Quality Act and the California Environmental Quality Act Guidelines.

4. The Board authorizes the Control Officer to transmit the revised schedule for implementing the 2016 Ozone Plan stationary source control measures included as Attachment A to this resolution to the California Air Resources Board and to take such other necessary and proper steps in order to obtain the California Air Resources Board approval of the revised schedule.
PASSED, APPROVED AND ADOPTED by the Air Pollution Control District Board of the Santa Barbara County, State of California, this ___ day of __________, ____ , by the following vote:

Ayes:

Noes:

Abstain:

Absent:

ATTEST:

AERON ARLIN GENET
Clerk of the Board

By __________________________
Deputy

SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT

By __________________________
Chair

Date __________________________

APPROVED AS TO FORM:

MICHAEL C. GHIZZONI
Santa Barbara County Counsel

By __________________________
Deputy
Resolution in the Matter of
Revising the Schedule for Implementing the
2016 Ozone Plan Stationary Source Control Measures

ATTACHMENT #A

Revised 2016 Ozone Plan
Control Measure Implementation Schedule
<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
<th>2016 Plan Adoption Schedule</th>
<th>2016 Plan Cost-Effectiveness ($/Ton)</th>
<th>2016 Plan Emission Reductions, Tons/Day (Tons/Year)</th>
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</thead>
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<tr>
<td>360</td>
<td><strong>Boilers, Water Heaters, and Process Heaters (0.075 - 2 MMBtu/hr)</strong></td>
<td>2018</td>
<td>$2,800 to $11,300</td>
<td>- 0.05 (19.8)</td>
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<td></td>
<td>Revisions to reduce the NOx limits to 20 ppmv at 3% oxygen for newly</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>installed natural gas fired units.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>361</td>
<td><strong>Boilers, Steam Generators, and Process Heaters (2 - 5 MMBtu/hr)</strong></td>
<td>2018</td>
<td>$13,100 to $17,300</td>
<td>- 0.03 (10.42)</td>
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<td>Revisions to reduce the NOx limits to 9 or 12 ppmv at 3% oxygen for newly</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>installed natural gas fired units.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher limits for other fuels.</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>342</td>
<td><strong>Boilers, Steam Generators, and Process Heaters (5+ MMBtu/hr)</strong></td>
<td>2018</td>
<td>$8,700 to $21,000</td>
<td>- 0.02 (6.36)</td>
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<td>Revisions to reduce the NOx limits to 9 or 15 ppmv at 3% oxygen for newly</td>
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<td>installed natural gas fired units.</td>
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</tr>
<tr>
<td></td>
<td>Higher limits for other fuels.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>321</td>
<td><strong>Solvent Cleaning Machines and Solvent Cleaning</strong></td>
<td>Contingency Measure</td>
<td>$0 to $1,000</td>
<td>- -</td>
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<tr>
<td></td>
<td>Revisions to lower the general cleaning ROC limit from 50 grams per liter to</td>
<td></td>
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<tr>
<td></td>
<td>25 g/L.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>351</td>
<td><strong>Surface Coating of Wood Products</strong></td>
<td>Contingency Measure</td>
<td>$1,000 to $2,000</td>
<td>- -</td>
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<tr>
<td></td>
<td>Revisions to include solvent cleaning provisions at 25 g/L.</td>
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<td></td>
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</tr>
<tr>
<td>354</td>
<td><strong>Graphic Arts</strong></td>
<td>Contingency Measure</td>
<td>$1,000 to $3,100</td>
<td>- -</td>
</tr>
<tr>
<td></td>
<td>Revisions to include solvent cleaning provisions at 25 – 100 g/L and</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>additional requirements for Rotogravure, Flexographic, Lithographic,</td>
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<tr>
<td></td>
<td>Letterpress, and Screen Printing operations. Existing facilities would have</td>
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<td></td>
<td>to be permitted to enforce the rule.</td>
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**Totals:** - 0.10 (36.58)
Resolution in the Matter of
Revising the Schedule for Implementing the
2016 Ozone Plan Stationary Source Control Measures

ATTACHMENT #B

Nonattainment-Transitional Designation:
Changes to the 2016 Ozone Plan
Control Measure Implementation Schedule
Nonattainment-Transitional Designation:
Changes to the 2016 Ozone Plan Control Measure Implementation Schedule

August 2017 Report to the District Board of Directors

Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A, Santa Barbara, CA 93110
805-961-8800 • www.ourair.org

Aeron Arlin Genet
Air Pollution Control Officer
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1 - INTRODUCTION AND REGULATORY FRAMEWORK

Addressing the Change in Designation to Nonattainment-Transitional

Santa Barbara County’s designation for ozone under the California Clean Air Act recently changed from nonattainment to nonattainment-transitional. As a result, the District is required to examine the stationary source control measures in the 2016 Ozone Plan and determine whether changes in the control measure implementation schedule are necessary. The following actions are recommended as an interim strategy, in order to comply with this requirement:

1. Delay implementation of the NOx control measures until 2018;
2. Shift the ROC control measures to contingency measures; and,
3. Receive and file a preliminary cost-benefit analysis of the NOx control measures; a complete cost-benefit analysis of the NOx control measures will be included with the Board action to implement the measures.

Action item 2 identified above is based on analysis and evidence presented in this report that shows there is some benefit to concentrating on NOx reductions instead of ROC reductions. This is not being proposed for adoption as the District’s attainment and maintenance strategy, but rather is an interim measure that will be comprehensively assessed as part of the next triennial plan update in 2019. This report provides information and reasoning to support the actions that are recommended above.

Development and Adoption of the 2016 Ozone Plan

The 2016 Ozone Plan (2016 Plan) was developed in 2016, and was reviewed by the District Community Advisory Council (CAC) at three separate meetings prior to being recommended for Board adoption in August, 2016. It was adopted by the District’s Board of Directors in October, 2016. It is the eighth triennial update to the initial state Air Quality Attainment Plan that was originally adopted by the District Board in 1991 (other updates were done in 1994, 1998, 2001, 2004, 2007, 2010, and 2013). Based on the region’s nonattainment status for ozone, each of the Santa Barbara County plan updates have included an “every feasible measure” strategy to ensure continued progress toward attainment of the state ozone standards.1

Since 1992, the Santa Barbara County Air Pollution Control Board has adopted or amended rules implementing more than 25 control measures aimed at reducing emissions from stationary sources. These measures have substantially reduced ozone precursor pollutants (nitrogen oxides,

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1 As with many California air districts and pursuant to California Health and Safety Code Section 40914 (b), the District employs an alternative emission reduction strategy that employs “every feasible measure” and follows an “expeditious adoption schedule”.

Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule
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or NOx, and reactive organic compounds, or ROCs). This strategy has successfully improved the County’s air quality and greatly reduced public exposure to ozone pollution. We now meet the state 1-hour ozone standard. While we have yet to attain the state 8-hour ozone standard, we are getting closer. In order to be designated attainment, air quality measurements must show that both the 1-hour and the 8-hour standards are not violated for three consecutive years.

The 2016 Plan addresses the state ozone standard only, and does not address the federal ozone standard. The District’s 2001 Plan serves as the maintenance plan for the federal ozone standard. Table 1-1 provides a summary of the state and federal ambient air quality standards for ozone, their effective dates, and the attainment status for Santa Barbara County.

**Table 1-1: State and Federal Ozone Standards**

<table>
<thead>
<tr>
<th>Ambient Air Quality Standard</th>
<th>Concentration</th>
<th>Year Adopted</th>
<th>Status for Santa Barbara County</th>
</tr>
</thead>
<tbody>
<tr>
<td>State 1-Hour</td>
<td>0.09 ppm</td>
<td>1988</td>
<td>Nonattainment - Transitional</td>
</tr>
<tr>
<td>State 8-Hour</td>
<td>0.070 ppm</td>
<td>2005</td>
<td></td>
</tr>
<tr>
<td>Federal 8-Hour (old)</td>
<td>0.075 ppm</td>
<td>2008</td>
<td>Attainment</td>
</tr>
<tr>
<td>Federal 8-Hour (new)</td>
<td>0.070 ppm</td>
<td>2015</td>
<td>Undetermined²</td>
</tr>
</tbody>
</table>

**Nonattainment-Transitional Designation and California Clean Air Act Requirements**

When the 2016 Plan was adopted, the District was still designated as a nonattainment area for the state ozone standard. However, the District was aware that this designation might soon change to be nonattainment-transitional. The Board adoption included a commitment to review the 2016 Ozone Plan if the District’s designation were to change to nonattainment-transitional, and determine whether the control measures scheduled for adoption or implementation within the next three years are needed.

The designation of nonattainment-transitional is described in The California Clean Air Act, as codified in California Health & Safety Code (HSC) Section 40925.5. The full text of HSC Section 40925.5 is included in Attachment 1 to this report. An air district is designated nonattainment-transitional if, during a single calendar year, the state standard is not exceeded more than three times at any one monitoring location within the District. After the 2016 Plan was adopted, air quality data for the 2016 ozone season was collected and transmitted to the California Air Resources Board. The data indicated that the District’s attainment designation is now

² U.S. EPA has not finalized designations for the 2015 federal 8-hour ozone. The Air Resources Board has recommended to EPA that Santa Barbara County be designated attainment.
nonattainment-transitional. The change in designation was filed with the State in April 2017; the filing is included as Attachment 2 to this report.³

**What does a designation of nonattainment-transitional mean, in terms of air quality planning and control measure implementation?**

This change to a nonattainment-transitional designation means that, prior to implementing new control measures, the District must review the plan and determine whether the stationary source control measures scheduled for adoption or implementation within the next three years are needed to accomplish expeditious attainment of the state ozone standard. The District may modify the control measure schedule if it determines that modifications will not slow progress toward achieving or maintaining the state ozone standard.

Pursuant to HSC Section 40925.5(g), actions by the District to modify the 2016 Plan control measure implementation schedule “shall be reviewed by the district in connection with its next review and revision of its attainment plan pursuant to Section 40925.” Hence, when the District begins development of the next triennial plan update, beginning in late 2018, any actions to delay or shift control measures to contingency will be reevaluated.

Should the District choose to implement any of the control measures in the 2016 Plan during the 3-year implementation period, Section 40930 of the HSC requires additional analysis and consideration prior to adopting new control measures. The entirety of HSC Sections 40925.5 and 40930 are included in Attachment 1, for reference.

The most critical language in HSC Section 40930 is from item (b), which requires that the district shall not adopt any new or more stringent control measure until after preparation, and approval by the district board, of an analysis that does all of the following...

- **Assesses the costs and benefits of all additional district, state, and federal regulatory actions that would be necessary to achieve attainment of the applicable state ambient air quality standard, taking into account only the additional costs and benefits attributable to achieving the state standard for the remaining three or fewer days each year.**

This report was prepared to evaluate the rule implementation schedule and provide a preliminary analysis of the costs and benefits of implementing the NOx control measures. When the NOx control measures are adopted by the District Board, a final cost-benefit analysis as required by HSC Section 40930 will be completed as part of the rule adoption package.

³ California’s Office of Administrative Law submitted this non-substantive regulatory change with the California Secretary of State and it was officially filed on April 17, 2017, see [www.arb.ca.gov/desig/changes/2016sec100.pdf](http://www.arb.ca.gov/desig/changes/2016sec100.pdf).
Section 2 of this report provides more detailed information on air quality, emission inventory, and control measures. Section 3 provides a description of, and the reasoning for, the recommended revisions to the 2016 Plan’s control measure implementation schedule. Section 4 includes a summary of how the information in this document satisfies the requirements of HSC Sections 40925.5, and also discusses the preliminary analysis of the costs and benefits associated with implementing the NOx control measures.
Ozone Concentrations in Santa Barbara County

The 2016 Plan includes a comprehensive review of air quality data and trends for Santa Barbara County.

Ozone pollution is not emitted directly into the atmosphere. It is formed through a series of complex chemical reactions involving the precursor pollutants ROC and NOx in the presence of sunlight. It is considered a “regional” pollutant because the locations where ozone levels are highest are not necessarily the locations where the precursor pollutants are emitted. Ozone levels tend to increase throughout the day as the amount of solar radiation increases. Meteorological conditions such as temperature inversions and stagnant air can lead to a buildup of pollutants and high ozone levels. Topography can also play a role in trapping air masses.

Ozone is measured at twelve locations throughout Santa Barbara County (see Figure 2-1 below). At each of the monitoring locations, a continuous air sample is pulled into an ozone analyzer and instantaneous readings from the analyzer are stored and averaged on an hourly basis. The hourly readings are displayed on the District’s website and are also sent to the California Air Resources Board and the Environmental Protection Agency for display on their respective web-based data display tools. The hourly averages are used to generate 8-hour averages, for comparison to the state and federal 8-hour ambient air quality standards.

Figure 2-1 below demonstrates the long-term downward trend in ozone levels at all of the monitoring sites in Santa Barbara County, from 1990 to 2016. In 2015, the public was exposed to ozone concentrations exceeding the 8-hour standard on two days. In 2016, three 8-hour exceedance days occurred. Because no individual station had more than three exceedance days, the District’s designation changed from nonattainment to nonattainment-transitional.

4 2016 ozone data are preliminary and subject to review and approval by the California Air Resources Board.
While there has been an overall downward trend, there are still several monitoring stations that measure ozone levels close to or above the state 8-hour standard, in both the southern and the northern portions of the county. Table 2-1 shows the number of ozone exceedance days per year at each monitoring station.
Table 2-1: Santa Barbara County Exceedance Days and Locations, 2007-2016

<table>
<thead>
<tr>
<th></th>
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<td>Las Flores Canyon</td>
<td>11</td>
<td>3</td>
<td>7</td>
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<td>Paradise Road</td>
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</tr>
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<td>2</td>
<td>3</td>
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<td>0</td>
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<tr>
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<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
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<tr>
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</tr>
<tr>
<td>Santa Maria</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Exceedance Days</strong></td>
<td><strong>19</strong></td>
<td><strong>12</strong></td>
<td><strong>10</strong></td>
<td><strong>7</strong></td>
<td><strong>3</strong></td>
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<td><strong>3</strong></td>
<td><strong>10</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

*Total Exceedance Days* indicates the number of days within a year where an exceedance was measured by at least one monitoring station in Santa Barbara County.

Emission Inventory for Ozone Precursor Pollutants

Each triennial update to our ozone plan includes an inventory of the ozone precursor pollutants NOx and ROC. Table 2-2 includes the emission inventory for the 2016 Plan base year (2012), and forecast years 2025 and 2035. This inventory includes sources that are within our air district’s regulatory control (stationary sources), as well as sources that are generally outside of our local control (area-wide sources and mobile sources). Data for the 2016 Plan emission inventory was compiled by both the air district (for regulated stationary sources as well as some area-wide sources) and the California Air Resources Board (ARB, for some area-wide sources and mobile sources). In order to ascertain the “growth” in emissions over time, growth profiles were developed and were applied to the 2012 base year data to project future year emissions. Also, in order to adjust for the emission reductions that are expected to occur as existing regulations are implemented over time, control profiles were developed and were applied to the base year data to project future year emission decreases. These control profiles do not estimate emission reductions from any new regulations which may be adopted between now and 2035.


Upon closer examination of Table 2-2, the following generalizations can be made about the emission forecasts, and where and why the largest amount of emission reductions are anticipated to occur:

- Stationary source NOx emissions are estimated to remain fairly stable, despite anticipated growth in some industrial sectors. Stationary source ROC emissions are expected to increase slightly due to additional solvent and coating use from expanding businesses. For the Santa Barbara County oil and gas production sector, a growth factor of 1.0 was used. This growth factor is discussed further in the 2016 Plan.
- Area-wide source emissions are anticipated to remain fairly stable; the statewide consumer product regulations will reduce ROC emissions, and population growth will increase ROC emissions. NOx emissions will be reduced slightly over time by phasing in newer, cleaner combustion equipment at residential sources (per District Rule 352, amended in 2011).
- On-road vehicle measures, including better emission controls, greater fuel efficiency, and increasing use of zero emission vehicles, are expected to greatly reduce both NOx and ROC emissions. A certain amount of turnover in the vehicle fleet is assumed, and is critical to accommodate the newer, cleaner vehicles required by California’s Zero Emission Vehicle (ZEV) Regulation and Truck and Bus Regulation.
- Other mobile equipment emissions of both NOx and ROC are expected to decline as a result of the Air Resources Board’s in-use regulation of off-road equipment, which includes construction and other mobile equipment.
- Marine shipping emissions, although they occur offshore of Santa Barbara county, are a very large component of the NOx emission inventory and can potentially move onshore and affect local ozone concentrations. NOx emissions are anticipated to decrease as federal and international requirements for cleaner burning engines cause the vessel fleet to become cleaner. However, there is a long lag time for the fleet to turn over. ROC emissions are expected to increase due to an increase in vessel activity and fuel consumption.

5 Includes emissions occurring both onshore and in the Outer Continental Shelf (OCS).
6 Marine Shipping emissions have been broken-out of the Other Mobile category in this table.
By applying both the growth profiles and the control profiles described above to the inventory data to estimate future year emissions, and using the best available emission estimates for mobile sources provided by ARB in consultation with EPA, this inventory reflects all of the changes in emissions that are anticipated due to the continued implementation of adopted control measures.

However, HSC Section 40925.5 requires that, when determining whether the stationary source control measures scheduled for adoption or implementation within the next three years are needed to accomplish expeditious attainment, the following factors should be considered:

- Effect of adopted and proposed motor vehicle controls
- Effect of adopted and proposed area source controls
- Turnover of the vehicle fleet
- Impact of measures previously adopted by the district which are in the process of being implemented
- Impact of measures previously adopted by the state board which are in the process of being implemented
- Impact of measures previously adopted by the EPA which are in the process of being implemented
- Other significant factors that influence emission trends

As indicated in bold above, HSC Section 40925.5 also requires consideration of proposed motor vehicle and area source controls. There are a wide variety of State proposals (both regulatory and voluntary/incentive-based) that would further reduce mobile and area source emissions of ozone precursors. For example, they may involve providing infrastructure for zero emission vehicles, reducing “vehicle miles traveled” (VMT), reducing greenhouse gas emissions at residential, commercial, industrial, municipal and agricultural sources, improving energy efficiency, or increasing the use of renewable energy. Specific examples of such proposals or voluntary measures (subject to funding availability) are:

- The Air Resources Board has drafted a 2017 Climate Change Scoping Plan Update that lays out a number of proposals to further reduce greenhouse gases across many sectors (including area sources) statewide. In many instances, these efforts may lead to reductions in NOx and/or ROC emissions from both mobile and area sources.

- Voluntary vehicle retirement programs, such as the District’s Old Car Buy Back Program, and other incentive programs such as California’s Clean Vehicle Rebate Program and Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), can help to accelerate fleet turnover so that cleaner cars, trucks and buses come into use.

These proposed measures were not specifically quantified in the 2016 Plan emission inventory and future year projections. But, if they are implemented, they can be expected to further reduce NOx and ROC emissions. However, there is no guarantee that these measures will be
implemented, and to what extent they will yield ozone precursor co-benefits. At this point they are either proposals or voluntary programs that are subject to funding availability, and are not legislative or regulatory mandates.

Stationary Source Control Measures Included in the 2016 Ozone Plan

The 2016 Plan included six different stationary source control measures that were considered feasible and cost-effective to implement during the 3-year plan period, 2017 to 2019. These stationary source control measures focus on achieving both NOx reductions and ROC reductions by promoting the use of ultra-low NOx burners and low-ROC solvents. To ensure that the District proposed every feasible measure for Santa Barbara County, staff performed the following analysis when creating the 2016 Ozone Plan Implementation schedule:

1) Compared the District’s rules to rules currently adopted by other California air districts;
2) Reviewed new staff reports and guidance documents on any recent or upcoming revisions to other air district, ARB, and EPA rules; and
3) Considered the magnitude of the emissions reductions as well as the cost-effectiveness of the measures.

The implementation schedule was developed with these criteria in mind, and target adoption dates were set for each measure. All of the measures were found to have a cost-effectiveness similar to those measures previously adopted by Santa Barbara County Air Pollution Control District. They would establish emission limits and performance standards consistent with rules already adopted and implemented by other air districts. The 2016 Ozone Plan implementation schedule, the associated cost-effectiveness of each measure, estimated number of facilities/units affected by the measures, and the emission reductions estimated to be achieved are included in Section 3 of this report.

Implementation of the 2016 Plan control measures will be accomplished through the District’s rule development/rule revision process. This process involves a public workshop, outreach to the regulated community and interested parties, Community Advisory Council (CAC) review, and final review and approval by the District Board. Because the District is now officially designated nonattainment-transitional, the District Board must “determine whether the stationary source control measures scheduled for adoption or implementation in the next 3 years are needed to accomplish expeditious attainment or to maintain the state standard following the projected attainment date.” (HSC 40925.5(a)).

Following is a more in-depth discussion of the process and reasoning for the stationary source control measures that were included in the 2016 Ozone Plan.
Impact, Cost-Effectiveness, and Feasibility of Measures

NOx Measures: The NOx control measures identified as “further study” in the 2013 Clean Air Plan (updates to Rules 342 and 361) were revised as part of the 2016 Ozone Plan process so that they would not require retrofits. In the 2013 Plan, the updates to Rules 342 and 361 were found to not be cost effective and were listed as further study measures, rather than measures proposed for adoption. The 2016 reevaluation looked at regulations and air pollution control guidance from other air districts, the California Air Resources Board, and the U.S. EPA, and determined whether there was any new information or technology that would necessitate a change to the control measures. New information related to equipment or installation costs was considered. In addition, the current Santa Barbara County inventory of permitted and permit-exempt equipment, and their usage amounts, were examined. Staff compiled updated information on equipment and installation costs, and made reasonable assumptions for the operational life of the units, ongoing maintenance, testing and material costs, and the units’ average operational load.

After examining this information more carefully, staff determined that the proposed amendments to Rules 342 and 361 are cost-effective if they apply to new units or replacements of existing units. Staff determined that by eliminating the retrofit requirement (i.e., not requiring operators of existing units to replace the burners by a specific date), especially for the larger, low-usage units, the control measures become cost-effective. The operators would only become subject to the lower emission limits when they are installing or replacing equipment anyway as part of their normal operations. Rule 360, the other NOx control measure, was already set up as a point-of-sale rule so the additional NOx controls proposed in the measure would only apply when a unit is installed. Thus, the cost-effectiveness values for the NOx control measures in 2016 Ozone Plan improved significantly from those in the 2013 Clean Air Plan and all three measures were proposed for adoption. All of the measures would set emission limits that are consistent with measures already adopted and implemented by other Districts, so all of the measures are feasible.

In summary, the NOx control measures that had previously required retrofit of existing combustion equipment were tailored instead to only apply to new or replacement equipment. All businesses with combustion units rated at 2 MMBtu/hr or greater and some businesses with smaller combustion units are already required to have a District permit. So, implementing the NOx control measures and tracking compliance with them will not involve unpermitted sources being required to obtain a District permit for the first time. Table 2-3 below provides the cost-effectiveness values for all six of the stationary source control measures from the 2016 Plan. These values are also included in Tables 3-1 and 3-2 of this report, along with the adopted and proposed revisions to the control measure implementation schedule in the 2016 Plan.

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7 Values are from the 2016 Ozone Plan, Table 4-2.
**ROC Measures:** Similar to the NOx measures, the ROC control measures from the 2013 Clean Air Plan were also reevaluated as part of the 2016 Plan process to assess whether they are cost effective and feasible. The ROC control measures would require various industries to use solvents with an ROC content of 25 grams/liter (g/L), or less, and also low-ROC inks and fountain solutions in graphic arts operations. All of the measures would set emission limits that are consistent with measures already adopted and implemented by other Districts, so all of the measures are considered to be feasible.

One of the unique challenges of the ROC measures is that graphic arts businesses in Santa Barbara County that would have to comply with Rule 354, Graphic Arts, are not currently subject to District permit requirements. Implementing the Rule 354 control measure may require some portion of the graphic arts businesses in the county to obtain permits for the first time so that their material usage amounts can be tracked. Since some of these are small businesses, this may result in administrative challenges and costs for both the businesses and the District.

The District does not currently have recent emission information from these graphic arts operations, such as the amounts and types of ROC materials used, because these operations are not required to submit material usage amounts to the District. The data that was used to compile the ROC emission reduction estimates are based on studies and surveys of industry operations that were conducted by larger air districts as part of their rulemaking process. Since that time, there have been several changes to these industries and their business models that affect the emission reduction estimates, such as:

- More low-ROC products are available and in-use in the industry now, because large regions in California already require their use;
- Some businesses have voluntarily opted to use less harmful, or less polluting, products; and,
- Due to changes in technology and work practices, many businesses have moved to paperless systems for products, marketing and outreach purposes.

With these industry changes in mind, the actual ROC reductions achieved with the Rule 354, Graphic Arts measure may be much less than the estimates in the plan. During the rule development process for this control measure, the emission reductions from this business sector would need to be updated to further reaffirm the cost-effectiveness and feasibility of the control measure.
TABLE 2-3: CONTROL MEASURE COST-EFFECTIVENESS

<table>
<thead>
<tr>
<th>2016 Ozone Plan Stationary Source Control Measures</th>
<th>Cost-Effectiveness ($/Ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx reductions</td>
<td>$2,800 to $11,300</td>
</tr>
<tr>
<td>Revised Rule 360 - Boilers, Water Heaters, and Process Heaters (0.075 - 2 MMBtu/hr)</td>
<td></td>
</tr>
<tr>
<td>NOx reductions</td>
<td>$13,100 to $17,300</td>
</tr>
<tr>
<td>Revised Rule 361 - Boilers, Steam Generators, and Process Heaters (2 - 5 MMBtu/hr)</td>
<td></td>
</tr>
<tr>
<td>NOx reductions</td>
<td>$8,700 to $21,000</td>
</tr>
<tr>
<td>Revised Rule 342 - Boilers, Steam Generators, and Process Heaters (5+ MMBtu/hr)</td>
<td></td>
</tr>
<tr>
<td>ROC reductions</td>
<td>$0 to $1,000</td>
</tr>
<tr>
<td>Revised Rule 321 - Solvent Cleaning Machines and Solvent Cleaning</td>
<td></td>
</tr>
<tr>
<td>ROC reductions</td>
<td>$1,000 to $2,000</td>
</tr>
<tr>
<td>Revised Rule 351 - Surface Coating of Wood Products</td>
<td></td>
</tr>
<tr>
<td>ROC reductions</td>
<td>$1,000 to $3,100</td>
</tr>
<tr>
<td>Revised Rule 354 - Graphic Arts</td>
<td></td>
</tr>
</tbody>
</table>

Together, the NOx control measures in the 2016 Plan are estimated to decrease NOx emissions by about 0.1 tons per day, which is about 2% of the stationary source inventory. The ROC control measures in the 2016 Plan are estimated to decrease ROC emissions by about 0.29 tons per day, which is about 2.5% of the stationary source inventory. The anticipated emission reductions for each of the control measures are included in Tables 3-1 and 3-2, in Section 3 of this report.

All of the control measures in the 2016 Plan were found to be feasible and cost-effective based on available information. The cost-effectiveness estimates in the 2016 Plan were calculated based on the incremental (additional) costs to implement the control measures, above and beyond the cost to comply with existing requirements. This is consistent with the requirements of HSC Section 40930(b)(1), which requires that the District, prior to adopting any new control measures, “assess the costs and benefits of all additional district, state, and federal regulatory actions that would be necessary to achieve attainment of the applicable state ambient air quality standard, taking into account only the additional costs and benefits attributable to achieving the state standard for the remaining three or fewer days each year.” Therefore, the cost-effectiveness assessment in the 2016 Plan is consistent with the cost-effectiveness methodology described in HSC Section 40930(b)(1). The cost-effectiveness of each control measure will be more precisely determined and analyzed as part of the rule adoption that implements that control measure, and the findings required by HSC 40930 will be included in the rule adoption package.
It should also be noted that the goal of implementing these control measures is to not only achieve **attainment** of the state ozone standard, but to also **maintain** the standard. If one of the District’s monitoring stations measures more than three exceedances of the 8-hour standard, the designation would shift back to nonattainment, which may then require additional or stricter control measures for stationary sources.

**Additional NOx Reductions Needed**

As mentioned previously, ozone pollution occurs in the presence of precursor pollutants ROC and NOx, as well as heat and sunlight. Other physical conditions can also increase the likelihood of ozone formation – such as wind patterns, topography, and the presence of temperature inversions or other factors that increase stagnation or reduce atmospheric mixing. With all of these complex factors involved, every air basin in California is challenged with their own unique issues to reduce the number of high ozone exceedance days.

The air quality improvements that have been achieved in Santa Barbara County and throughout California are the direct result of many different strategies that have been implemented over the last several decades. These strategies have involved a variety of industries and technologies, to reduce both NOx and ROC emissions. Controlling emissions of both NOx and ROC will continue to be very important to improving and maintaining air quality in Santa Barbara County. Santa Barbara County’s attainment plans have historically involved a strategic approach to reducing both ROC and NOx emissions by implementing all feasible and cost-effective control measures. All of the stationary source measures that have been implemented continue to remain in force, and will continue to limit ROC and NOx emissions at stationary sources to meet our clean air goals and mandates.

When developing an emission reduction strategy, the relative amount of ROC emissions compared to NOx emissions is an important consideration. The relationship between NOx and ROC emission levels and resulting ozone concentrations is driven by complex nonlinear photochemistry, and can result in regimes (air basins) that are either NOx-sensitive or ROC-sensitive. In regions with relatively low NOx concentrations and higher ROC concentrations, ozone is found to decrease with decreasing NOx, and changes little in response to decreasing ROC. This is considered a NOx-sensitive, or NOx-limited, regime. Whereas in a ROC-sensitive, or ROC-limited, regime, ozone levels decrease with decreasing ROC, and ozone may even increase by decreasing NOx emissions.

At this point in time, some air districts have predicted through photochemical modeling studies that additional NOx emission reductions will be even more critical than additional ROC reductions at reducing ozone formation within their regions. California’s recent State

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8 Silman, Dr. Sanford, *Overview: Tropospheric Ozone, Smog and Ozone-NOx-VOC Sensitivity*, [www-personal.umich.edu/~sillman/Sillman-weeithbOZONE.pdf](http://www-personal.umich.edu/~sillman/Sillman-weeithbOZONE.pdf)
Implementation Plan (SIP) submittal to the federal Environmental Protection Agency (EPA), for the federal 8-hour ozone standard, relies heavily on NOx reductions from mobile sources to eventually achieve compliance with that standard. Some of the air districts in California with the most elevated and persistent ozone pollution, such as the South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District, are required to prepare comprehensive studies, conduct photochemical modeling, and commit to adopting stringent control measures as part of their air quality planning efforts. In the process of preparing their air quality plans, these districts have discovered through photochemical modeling that additional NOx emission reductions are more critically needed (as opposed to additional ROC emission reductions) to reduce ozone levels and attain the ozone air quality standards. The following is a summary of some of those efforts.

**The South Coast Air Quality Management District**, which experienced 108 days above the state 8-hour ozone standard in 2016, has used the Community Multiscale Air Quality (CMAQ) state-of-the-science photochemical model and has found that for some areas, NOx reductions alone will achieve the necessary reductions in ozone levels. However, in other areas, a combination of both ROC and NOx reductions will achieve the necessary reductions in ozone levels. Based on their analysis, they have concluded that a NOx-reductions-only approach can lead to attainment (of the federal ozone standard) and would involve the fewest amount of tons reduced. However, such an approach may lead to elevated ozone levels in some areas during the interim years leading up to attainment. An ROC-reductions-only approach was not able to achieve attainment; furthermore, in order to reduce ROC emissions in this scenario, many of the ROC-emitting sectors would need to reformulate products and would take many years to achieve widespread use. A combined approach was found to require more tons reduced overall, but also provided co-benefits in terms of particulate matter, toxic air contaminants, and greenhouse gas emission reductions. Ultimately, the recommended approach for their most recent air quality planning effort is to focus on NOx-heavy controls, with strategic and tiered VOC reductions.

**The San Joaquin Valley Air Pollution Control District**, which experienced 91 days above the 8-hour standard in 2016, also used the CMAQ model and studies to examine whether their air basin was NOx-limited or ROC-limited. The conclusion summarized in their 2016 Ozone Plan is that most of the air basin is already or will soon be in a NOx-limited situation, mainly due to the overwhelming amount of ROC emissions from biogenic sources in the valley. A UC Berkeley study also corroborated this finding and

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concluded that “NOx controls will be immediately and incrementally more effective than corresponding ROC controls in lowering the Valley’s ozone levels.”\textsuperscript{11}

\textbf{NOx-limited Regimes in Santa Barbara County}

As stated previously, the Santa Barbara County Air Pollution Control District, as part of the South Central Coast Air Basin, is currently in attainment of the federal ozone air quality standard, and is not required to conduct photochemical modeling to ascertain the estimated amounts of ROC and NOx reductions required to reduce ozone concentrations to achieve attainment of the air quality standards. Photochemical modeling is a data-intensive effort that involves analysis by individuals with very specialized expertise. The process is generally time-consuming and costly, and may take numerous iterations to meet an air quality agency’s planning objectives. When modeling is done, the model performance should be evaluated through comparison with measured air quality data. The largest air districts in California either have District staff, use contractors, or work with CARB staff to meet the air quality modeling requirements associated with the federal air quality standards.

Since a photochemical modeling effort for this region is neither required nor is it within the District’s current staff expertise, the District looked for alternative methods to identify whether our region is NOx-limited or ROC-limited. The District contacted CARB staff in both the Air Quality Planning and the Modelling & Meteorology Sections and requested guidance on how to investigate this issue further. CARB staff provided technical guidance to help District staff analyze our ambient air quality data to determine whether a “weekend effect” occurs in Santa Barbara County. The weekend effect is a well-known phenomenon in some major urbanized areas. The occurrence of the weekend effect is an indicator of whether a region’s ozone concentrations are NOx-limited or ROC-limited. The weekend effect occurs when levels of NOx are substantially lower on weekends than on weekdays, but the measured levels of ozone are higher on weekends. The prevalence of a weekend effect suggests that the region is ROC-limited; whereas a reverse weekend effect would suggest that the region is NOx-limited.

Numerous studies on the weekend effect have been conducted in other areas of California (e.g., the South Coast and San Joaquin Valley Air Basins), and have correlated well with the photochemical modeling for those regions in terms of what areas of the basin are NOx-limited vs. ROC-limited.\textsuperscript{12}

District staff evaluated what happens to NOx levels and ozone levels on weekdays versus weekends, and summarized the results in a paper titled, “The Weekend Effect: Is Santa Barbara County NOx-limited?”, included as Attachment 3 to this report. As stated in the weekend effect


study, the ozone formation within our air basin, and especially near the air quality monitors with the highest recorded ozone concentrations, tends to be NOx-limited. This means that additional NOx reductions will be a more effective way of lowering ozone concentrations in those areas with the highest recorded ozone concentrations.

Our existing emissions control program has already substantially reduced the amounts of both NOx and ROC emitted in the County. Additional reductions from existing regulations are expected, and these reductions need to be maintained. **Controlling ROC emissions has been and will continue to be an important factor in attaining and maintaining ozone air quality standards and protecting public health.** However, based on the extensive research on atmospheric chemistry and the conclusions of studies done by other California air districts, as well as the information compiled in the weekend effect analysis in Attachment 3, we believe that at this point in time, additional NOx reductions are needed to attain and maintain the state ozone standard.
3 – REVISING THE CONTROL MEASURE IMPLEMENTATION SCHEDULE

Because the District’s ozone designation has changed to nonattainment-transitional, the District evaluated whether all of the control measures in the 2016 Ozone Plan were still necessary to achieve and maintain the state ozone standard. Pursuant to H&S Code Section 40925.5(c), if a nonattainment-transitional district determines that one or more of the stationary source control measures scheduled for adoption or implementation within the next three years are no longer necessary to accomplish expeditious attainment or to maintain the state standard, the district shall shift those measures to the contingency category. And, pursuant to Section 40925.5(d), if a nonattainment-transitional district determines that delaying one or more stationary source control measures will not retard the achievement of the state ozone standard, it may delay that measure.

District staff considered a range of options to meet these requirements and provided a report to the District’s Community Advisory Council (CAC) that identified three options for consideration, along with a staff-recommended option. The CAC was provided materials for review in January 2017, and met on February 8, 2017 to review, discuss, and make recommendations. The following three options were considered:

1. Retain the control measure implementation schedule in the adopted 2016 Ozone Plan.
2. Revise the control measure implementation schedule to include only the NOx control measures, as scheduled in the Plan. Move the ROC control measures to a contingency measure status (staff-recommended option).
3. Revise the control measure implementation schedule to delay all measures by shifting them to a contingency status, and reconsider the need for additional control measures during the next triennial plan update.

The CAC discussed and considered the three options on February 8, 2017 at a public meeting. After deliberation, the CAC recommended to proceed with the second option. The original control measure implementation schedule, as included in the 2016 Ozone Plan, is shown in Table 3-1. The original table (Table 4-2 in the 2016 Plan) has been modified to include the number of units expected to be affected by the rule. Table 3-2 depicts a revised control measure implementation schedule, with the NOx measures remaining the same and the ROC measures moving to contingency status. Should the Board decide to change the schedule as recommended, this revised schedule would replace the schedule included in Table 4-2 of the 2016 Plan. Because this analysis is being finalized in August, District staff can continue rule development for the NOx measures throughout 2017, however Board consideration of these
rules cannot be feasibly scheduled by the end of 2017. Therefore the control measure adoption schedule for these measures has been changed from 2017 to 2018.\textsuperscript{13}

\textsuperscript{13} The District’s typical rule development/revision process involves 30-day noticing for a public workshop, a CAC meeting, outside agency review (CARB and/or EPA), District Counsel review, and a District Board approval, which is expected to take a minimum of four months, and can take 6 months or more.
<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
<th>2016 Plan Adoption Schedule</th>
<th>2016 Plan Cost-Effectiveness ($/Ton)</th>
<th>Estimated Number of Units Affected(^\text{15})</th>
<th>2016 Plan Emission Reductions, Tons/Day (Tons/Year)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ROC</td>
<td>NO\textsubscript{x}</td>
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<tr>
<td>360</td>
<td>Boilers, Water Heaters, and Process Heaters (0.075 - 2 MMBtu/hr)</td>
<td>2017</td>
<td>$2,800 to $11,300</td>
<td>1,770</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Revisions to reduce the NO\textsubscript{x} limits to 20 ppmv at 3% oxygen for newly installed natural gas fired units.</td>
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<tr>
<td>361</td>
<td>Boilers, Steam Generators, and Process Heaters (2 - 5 MMBtu/hr)</td>
<td>2017</td>
<td>$13,100 to $17,300</td>
<td>160</td>
<td>-</td>
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<tr>
<td></td>
<td>Revisions to reduce the NO\textsubscript{x} limits to 9 or 12 ppmv at 3% oxygen for newly installed natural gas fired units. Higher limits for other fuels.</td>
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<tr>
<td>342</td>
<td>Boilers, Steam Generators, and Process Heaters (5+ MMBtu/hr)</td>
<td>2017</td>
<td>$8,700 to $21,000</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Revisions to reduce the NO\textsubscript{x} limits to 9 or 15 ppmv at 3% oxygen for newly installed natural gas fired units. Higher limits for other fuels.</td>
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<td></td>
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<tr>
<td>321</td>
<td>Solvent Cleaning Machines and Solvent Cleaning</td>
<td>2018</td>
<td>$0 to $1,000</td>
<td>150</td>
<td>0.02 (6.35)</td>
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<tr>
<td></td>
<td>Revisions to lower the general cleaning ROC limit from 50 grams per liter to 25 g/L.</td>
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</tr>
<tr>
<td>351</td>
<td>Surface Coating of Wood Products</td>
<td>2018</td>
<td>$1,000 to $2,000</td>
<td>4</td>
<td>0.001 (0.42)</td>
</tr>
<tr>
<td></td>
<td>Revisions to include solvent cleaning provisions at 25 g/L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>354</td>
<td>Graphic Arts</td>
<td>2019</td>
<td>$1,000 to $3,100</td>
<td>75</td>
<td>0.27 (98.21)</td>
</tr>
<tr>
<td></td>
<td>Revisions to include solvent cleaning provisions at 25 – 100 g/L and additional requirements for Rotogravure, Flexographic, Lithographic, Letterpress, and Screen Printing operations. Existing facilities may have to be permitted to increase the enforceability of the rule.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Totals: \[0.29 \text{ (104.98)} \quad 0.10 \text{ (36.58)}\]

\(^{14}\) Information is from Table 4-2 of the 2016 Ozone Plan; information on the estimated number of units affected has been added to this table.

\(^{15}\) The boiler rules are listed in terms of “units affected.” The solvent rules are listed in terms of “facilities affected.”
### Table 3-2: Revised Implementation Schedule, NOx Control Measures Only

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
<th>2016 Plan Adoption Schedule</th>
<th>2016 Plan Cost-Effectiveness ($/Ton)</th>
<th>Estimated Number of Units Affected</th>
<th>2016 Plan Emission Reductions, Tons/Day (Tons/Year)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ROC</td>
<td>NOx</td>
<td></td>
</tr>
<tr>
<td>360</td>
<td>Boilers, Water Heaters, and Process Heaters (0.075 - 2 MMBtu/hr)</td>
<td>2018</td>
<td>$2,800 to $11,300</td>
<td>1,770</td>
<td>-</td>
</tr>
<tr>
<td>361</td>
<td>Boilers, Steam Generators, and Process Heaters (2 - 5 MMBtu/hr)</td>
<td>2018</td>
<td>$13,100 to $17,300</td>
<td>160</td>
<td>-</td>
</tr>
<tr>
<td>342</td>
<td>Boilers, Steam Generators, and Process Heaters (5+ MMBtu/hr)</td>
<td>2018</td>
<td>$8,700 to $21,000</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td>321</td>
<td>Solvent Cleaning Machines and Solvent Cleaning</td>
<td>Contingency Measure</td>
<td>$0 to $1,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>351</td>
<td>Surface Coating of Wood Products</td>
<td>Contingency Measure</td>
<td>$1,000 to $2,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>354</td>
<td>Graphic Arts</td>
<td>Contingency Measure</td>
<td>$1,000 to $3,100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Totals:</td>
<td>0.10 (36.58)</td>
</tr>
</tbody>
</table>
Reasons for Revising the Implementation Schedule to Proceed with NOx Measures Only

The District’s strategy to attain and maintain the state ozone standard has included the implementation of over 25 control measures to reduce emissions of both NOx and ROC, and recently measured ozone levels demonstrate that this strategy has been successful. Our current rules, compliance, and permit programs are in place to ensure that these measures continue to be effective. The revisions to the control measure implementation schedule included herein are recommended as an interim measure to address the District’s change in designation from nonattainment to nonattainment-transitional. The District’s overall attainment strategy will be reassessed as part of the 2019 Ozone Plan update.

The 2016 Ozone Plan includes both NOx and ROC control measures. As discussed in Section 2 of this report, we believe that the scheduled NOx reductions are needed to reduce ozone levels and achieve attainment and maintenance of the ozone standard. We are edging closer to achieving attainment with continued implementation of a wide variety of ROC and NOx measures developed through prior planning efforts. Requiring new and modified combustion units to achieve the low-emission standards that are already being met in neighboring air districts and that produce long-term clean air benefits will help provide a margin of safety for the future. And, the NOx control measures in particular were revised from the prior plan (the 2013 Clean Air Plan) so that they would be more cost-effective, and would not require businesses to retrofit older devices that may be used infrequently. The cleaner combustion technology associated with these measures will yield reductions over the life of the equipment, which could be 15 to 20 years or more.

The revised implementation schedule still includes the three NOx control measures that were proposed for implementation during the 2016 Plan cycle (2017-2019) and holds off on implementing the three ROC control measures. The ROC control measures are shifted to contingency measures. Measures that are placed in a contingency status can be implemented if, at some point in the future, they are deemed necessary to meet the mandates of the California Clean Air Act and to achieve the agency’s clean air goals.

During the next triennial plan update, as required by HSC 40925.5 (g), the District will need to review this decision and action, and determine whether the measures should remain as contingency measures, or whether they should be implemented to further reduce ozone precursor emissions. The 2016 Ozone Plan also includes a list of measures that the District has identified for further study. During the next triennial plan update, the District will also consider whether any of the further study measures should be implemented during the next 3-year plan period. As required by HSC Section 40925.5(f), district actions may be disapproved by the Air Resources Board within 90 days if it finds that the actions will delay expeditious attainment of the state ozone standard.
As discussed in Section 2 of this report, additional proposals at the state and federal levels may also help to reduce ozone precursor emissions (mostly NOx) from mobile and area sources. These measures, along with the many voluntary measures and incentive programs that the district and other local agencies are doing, will also help to reach our clean air goals.

In the future, if any of the ozone monitors in Santa Barbara County record more than 3 days above the state ozone standard in one calendar year, the District’s attainment status will shift from nonattainment-transitional back to nonattainment. In that case, pursuant to HSC 40925.5(e), the schedule would revert back to the original control measure implementation schedule in the 2016 Ozone Plan (or the most current plan update).

Following is a list of the main points that support the recommended revised schedule:

- Air quality modeling studies in other regions in California have shown that additional NOx reductions are critical to lowering ozone concentrations and meeting the applicable air quality standard (described further in Section 2).
- Although we are not able to determine the precise amount of emission reductions needed to achieve attainment, additional reductions of NOx emissions will help to ensure that we eventually achieve attainment of the state ozone standards, and will add a margin of safety towards achieving that goal.
- Continuing to pursue cost-effective control measures is aligned with our mission to protect public health. Implementing control measures over time has improved the air quality in our community, and we should continue that trend.
- The NOx control measures were revised as part of the 2016 Ozone Plan process so that they no longer require retrofits and, as a result, they are more cost-effective.
- The NOx control measures, by design, involve long-term investments in cleaner combustion technology, and ensure that the anticipated emission reductions will continue to occur for long periods of time (in most cases, for decades).
- Although we are aware of state and federal proposals to implement measures that would reduce mobile and area-wide ozone precursors, many of these proposals are not directed at ozone precursor benefits and there are no assurances that the proposals will be implemented. It’s possible that some of these proposals will not be implemented, and the emission benefits may not be realized.
- The federal ozone standard, although it differs from the state standard in how designations are determined, is now set at the same level as the state standard. Moving forward with feasible, cost-effective NOx control measures would help avoid a situation where both the state and the federal ozone standard are exceeded in the future. Exceeding the federal ozone standard would introduce additional and more stringent planning and control requirements.

In summary, Santa Barbara County has come a long way in reducing emissions of ozone precursor pollutants and achieving progressively lower ozone concentrations and many fewer
high ozone days. We expect that with our existing programs, which include continued implementation of all of the adopted control measures from prior plans and our permitting and compliance programs, Santa Barbara County will continue to be very successful in reducing ozone precursor emissions (both NOx and ROC) and measured ozone concentrations. In recommending the proposed revisions to the stationary source control measure implementation schedule, we considered whether additional measures were necessary beyond those that have already been adopted and implemented. The conclusion was that the three identified NOx measures are necessary to further reduce ozone levels, and that they would provide a margin of safety to ensure that we continue our progress and eventually attain and maintain the state ozone standard.
4 – SUMMARY OF REQUIRED ANALYSES

Revising the Schedule pursuant to HSC Section 40925.5

Because the state ozone designation has changed from nonattainment to nonattainment-transitional, this section of the Health & Safety Code (HSC) requires the District to review its plan (the 2016 Ozone Plan), determine whether any of the measures in the plan are no longer necessary, and if some measures are no longer necessary, to shift them to contingency status. Alternatively, the District can delay implementation of a control measure if the District finds that delay “will not retard achievement of the state ozone standard.” In making the determination, this section requires the District to consider air quality trends, the effect of the state mobile and area source control programs, turnover of the vehicle fleet, the impact of measures previously adopted by the District, ARB, and EPA, and other significant factors influencing emission trends.

Sections 2 and 3 of this report include all of the above required information for the District Board to consider when it decides whether to revise the control measure implementation schedule as required by this section of the Health & Safety Code. The District will review these actions in connection with its next triennial state plan update, pursuant to HSC Section 40925.5(g).

Conducting a Cost-Benefit Analysis pursuant to HSC Section 40930

As required by HSC Section 40930 and as discussed in Section 1 of this report, the District must do a cost-benefit analysis and provide a justification before any new control measures are adopted. The analysis must include an assessment of the costs and benefits of all additional district, state, and federal regulatory actions necessary to achieve attainment of the state ozone standard, taking into account only the additional costs and benefits attributable to achieving the state standard for the remaining three or fewer days each year.

Section 2 of this report provides preliminary information on the costs and benefits of the 2016 Plan control measures, and also provides reasoning for continuing to seek NOx reductions. Section 3 of this report discusses the proposed revisions to the 2016 Ozone Plan control measure implementation schedule.

Should the Board decide to adopt the revised schedule as recommended in this report, District staff plans to commence the rule development process for the NOx control measures in the fall of 2017. The District’s typical rule development/revision process involves 30-day noticing for a public workshop, a CAC meeting, outside agency review (CARB and/or EPA), District Counsel review, and a District Board approval, which is expected to take a minimum of four months, and can take 6 months or more. The cost-effectiveness of each control measure will be more precisely determined and analyzed as part of the rule adoption that implements that control
measure, and the findings required by HSC 40930 will be included in the rule adoption package.
**ATTACHMENT 1 – APPLICABLE CALIFORNIA HEALTH & SAFETY CODE SECTIONS**

The following language is provided verbatim from the *California Health & Safety Code, Division 26, Air Resources; Part 3, Air Pollution Control Districts; Chapter 10, District Plans to Attain State Ambient Air Quality Standards*. Explanatory footnotes have been added to clarify requirements in the context of this report.

**HSC Section 40925.5. Nonattainment-transitional District**

(a) A district which is nonattainment for the state ozone standard shall be designated "nonattainment-transitional" by operation of law if, during a single calendar year, the state standard is not exceeded more than three times at any monitoring location within the district.

(b) Any district which is designated nonattainment-transitional under subdivision (a) shall review its plan for attaining the state ozone standard and shall determine whether the stationary source control measures scheduled for adoption or implementation within the next three years by the district are needed to accomplish expeditious attainment or to maintain the state standard following the projected attainment date. In making that determination, the district shall consider air quality trends, the effect of the state's adopted and proposed motor vehicle and area source control programs, turnover of the vehicle fleet, the impact of measures previously adopted by the district, the state board, and the Environmental Protection Agency which are in the process of being implemented, and other significant factors influencing emissions trends.

(c) If a nonattainment-transitional district determines that one or more of the stationary source control measures scheduled for adoption or implementation within the next three years are no longer necessary to accomplish expeditious attainment or to maintain the state standard, the district shall shift those measures to the contingency category.

(d) If a nonattainment-transitional district determines that delaying one or more stationary source control measures will not retard the achievement of the state ozone standard, it may delay that measure.

(e) Subdivisions (c) and (d) shall not apply to any stationary source control measures required by Section 39610. In addition, subdivisions (c) and (d) shall be suspended at any time that the district ceases to qualify for a nonattainment-transitional designation under subdivision (a).¹

¹ HSC Section 39610 pertains to air districts that have been identified by the Air Resources Board as being affected by transported air pollutants from upwind areas outside of the air basin, or air basins whose pollutants affect ozone concentrations in a downwind air basin. Santa Barbara County, as part of the South Central Coast Air Basin, has not been identified for either of those situations.
(f) Actions of any district pursuant to this section are effective immediately. The state board may disapprove any action of the district pursuant to this section within 90 days of the action. The state board shall not disapprove district actions pursuant to this section unless it finds that the actions will delay expeditious attainment of the state ozone standard. Actions taken by the state board pursuant to this subdivision are subject to Section 41503.4.

(g) Actions of any district pursuant to subdivisions (c) or (d) shall be reviewed by the district in connection with its next review and revision of its attainment plan pursuant to Section 40925.

HSC Section 40930. Report on number of days district violated state standards; Restrictions on adoption of more stringent control measures

(a) Each district that has adopted a plan pursuant to this chapter shall, on or before January 31 of each year, prepare and submit to the state board a report identifying the number of days during the preceding calendar year that air quality in the district violated each state ambient air quality standard for which the district's status is nonattainment.

(b) For any pollutant for which the report indicates that the applicable state ambient air quality standard was not violated during more than three days during the calendar year at any one or more monitoring locations within the district, the district shall not adopt any new or more stringent control measure until after preparation, and approval by the district board, of an analysis that does all of the following:

1. Assesses the costs and benefits of all additional district, state, and federal regulatory actions that would be necessary to achieve attainment of the applicable state ambient air quality standard, taking into account only the additional costs and benefits attributable to achieving the state standard for the remaining three or fewer days each year.

2. Includes consideration of all of the socioeconomic impacts specified in Section 40728.5.

3. Identifies, if the district is an upwind district, the benefits of the additional regulatory actions in the district on the air quality in any downwind district, and identifies the costs attributable to those regulatory actions.

(c) The state board shall review the district analyses prepared pursuant to subdivision (b) to ensure expeditious progress towards attainment in both the district that prepared the analysis and any downwind district and to ensure that any resulting action of the district that prepared the analysis does not adversely affect any downwind district.

---

2 HSC Section 40728.5 does not apply to air districts with a population of less than 500,000 persons.
State of California
Office of Administrative Law

In re:
Air Resources Board

Regulatory Action:
Title 17, California Code of Regulations

Adopt sections: 60201
Amend sections: 
Repeal sections: 

NOTICE OF APPROVAL OF CHANGES WITHOUT REGULATORY EFFECT

California Code of Regulations, Title 1, Section 100

OAL Matter Number: 2017-0303-02

OAL Matter Type: Nonsubstantive (N)

This action by the California Air Resources Board makes changes without regulatory effect section 60201 in Title 17 of the California Code of Regulations. Specifically, this action lists the counties within the South Central Coast Air Basin: Santa Barbara, San Luis Obispo, and Ventura. This action further changes the designation of the Santa Barbara county area from "Nonattainment" to "Nonattainment-Transitional."

OAL approves this change without regulatory effect as meeting the requirements of California Code of Regulations, Title 1, section 100.

Date: April 17, 2017

Thinh Huynh
Senior Attorney

For: Debra M. Cornez
Director

Original: Richard W. Corey
Copy: Trini Balcazar
Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule
August 2017 Report to the District Board of Directors

A. PUBLICATION OF NOTICE

<table>
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<th>Requested Publication Date</th>
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B. SUBMISSION OF REGULATIONS

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Area Designations for Ozone

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3. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLES AND SECTIONS (Including Title 20, if title related):

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4. ALL REQUIRING AND EXPIRING DATES OF AVAILABILITY OF RULEMAKING REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs, title 1, s44 and Gov. Code 11348.1):

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5. EFFECTIVE DATE OF CHANGES (Cal. Code, §§ 11344.1, 11346.111): Effective on:

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<th>Related Material or File</th>
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6. CHECK IF THESE REGULATIONS REQUIRE NOTICETO, OR REVIEW, CONSULTATION, APPROVAL, OR CONCORDANCE BY ANOTHER AGENCY OR ENTITY:

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<th>Related Material or File</th>
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7. CONTACT PERSON

<table>
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<tr>
<th>Name</th>
<th>Telephone Number</th>
<th>Fax Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trini Balcazar</td>
<td>916-445-9564</td>
<td>916-322-3928</td>
</tr>
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8. Certification

Signature of Agency Executive Officer:

<table>
<thead>
<tr>
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<th>Date</th>
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<tbody>
<tr>
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### Final Regulation Order

**AREA DESIGNATIONS FOR STATE AMBIENT AIR QUALITY STANDARDS**

**Chapter 1. Air Resources Board**

**Subchapter 1.5. Air Basins and Air Quality Standards**

**Article 1.5 Area Pollutant Designations**

[Note: The preexisting regulation text is set forth below in normal type. The amendments are shown in *underline italics* to indicate additions and *strikeout* to indicate deletions.]

Amend sections 60201 title 17, California Code of Regulations, to read as follows:

§ 60201. Table of Area Designations for Ozone.

<table>
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<tr>
<th>Area</th>
<th>Designation</th>
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<tbody>
<tr>
<td>North Coast Air Basin</td>
<td>Attainment</td>
</tr>
<tr>
<td>San Francisco Bay Area Air Basin</td>
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<tr>
<td>North Central Coast Air Basin</td>
<td>Nonattainment-Transitional</td>
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<td>South Central Coast Air Basin</td>
<td>Nonattainment</td>
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<tr>
<td>Santa Barbara County</td>
<td>Nonattainment-Transitional</td>
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<tr>
<td><strong>San Luis Obispo and Ventura Counties</strong></td>
<td>Nonattainment</td>
</tr>
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<td>South Coast Air Basin</td>
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<td>San Diego Air Basin</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>Northeast Plateau Air Basin</td>
<td>Attainment</td>
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<tr>
<td>Sacramento Valley Air Basin</td>
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</tr>
<tr>
<td>Colusa and Glenn Counties</td>
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<td>Sutter and Yuba Counties</td>
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<td>Placer, Sacramento, Solano, and</td>
<td></td>
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<tr>
<td>Yolo Counties</td>
<td>Nonattainment</td>
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<td>San Joaquin Valley Air Basin</td>
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<tr>
<td>Great Basin Valleys Air Basin</td>
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<td>Alpine County</td>
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<tr>
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<tr>
<td>Mono County</td>
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<td>Area</td>
<td>Designation</td>
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<td>Mountain Counties Air Basin</td>
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<td>Placer, Mariposa, and Tuolumne Counties</td>
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ATTACHMENT 3 – THE WEEKEND EFFECT: IS SANTA BARBARA COUNTY NOX-LIMITED?

Introduction

In an effort to better understand whether ozone formation in our region is typically limited by the amount of nitrogen oxides in the air (NOx-limited) or by the amount of reactive organic compounds in the air (ROC-limited), District staff consulted with California Air Resources Board (CARB) staff and came up with a methodology to analyze whether the region experiences the “weekend effect,” where a reduction in NOx levels on the weekend can actually cause ozone levels to increase on the weekend. The weekend effect generally occurs in regions that are ROC-limited. Whereas, a reverse weekend effect (i.e., lower ozone during weekends) would suggest that the region is NOx-limited.

Numerous studies on the weekend effect have been conducted in other areas of California (e.g., the South Coast and San Joaquin Valley Air Basins\(^1\)\(^2\)) because it is a useful metric for evaluating a region’s response to changes in emissions. These studies have correlated well with the photochemical modeling for those regions in terms of what areas of the basin are NOx-limited vs. ROC-limited.

District staff examined previous studies and also consulted with CARB staff to come up with a methodology to study the weekend effect locally. The methodology involved gathering historical air monitoring data for NOx and ozone for the monitoring locations in the County and performing calculations to evaluate the trends at each station. The District initially looked at several monitoring stations, and decided to focus on the three monitoring stations with the most exceedances of the State 8-hour ozone standard from 2006 through 2016: the Las Flores Canyon, Paradise Road, and Carpinteria monitoring stations. Staff focused on these stations because, based on past trends, they are more likely to record a violation of the ozone standard in the future. Staff also evaluated the Santa Barbara monitoring station because it is located in an urban environment, and so it could have a different ozone trend in its vicinity. And finally, staff compiled traffic data, in consultation with Santa Barbara County Association of Governments (SBCAG) staff, in order to examine how the NOx and ozone data compared temporally to traffic activity/volumes.

This report includes a description of the analysis that was done, and data summaries to support the analysis and conclusions.

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Traffic Volume and Daily Patterns

To understand whether a weekend effect occurs, one must first understand the time-dependent nature of emission sources in the County. Whether the emission source is an industrial spray painting operation, a residential boiler, or an agricultural tractor, emission inventories are comprised of various sources that emit pollution at different times of the day, week, and year.

Emissions from on-road vehicles make up approximately 43% of the onshore NOx inventory, and these vehicles have a very clear temporal pattern. The amount of vehicle miles travelled (VMT) is typically high during weekdays due to the commuting workforce, while the VMT generally decreases on the weekends since more people are at home. The District verified this trend by looking at data from the Caltrans Performance Monitoring System (PeMS). The PeMS system has monitors that are set up on certain sections of Highway 101 to observe the amount of traffic that passes by. Although the monitors do not cover all the highways within the County, the data provides a good representation of the temporal traffic patterns. The data can be seen below in Table A3-1.

<table>
<thead>
<tr>
<th>Day</th>
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<th>SB County All trucks: 2013-2015 (VMT/day)</th>
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<td>29,904</td>
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<td>Tuesday</td>
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<td>37,023</td>
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<tr>
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<td>37,507</td>
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</tr>
<tr>
<td>Friday</td>
<td>1,858,099</td>
<td>38,969</td>
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<tr>
<td>Saturday</td>
<td>1,659,126</td>
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</tbody>
</table>

When evaluating the PeMS data, District staff saw that the total VMT for the County dropped significantly on Sundays as compared to the normal Monday through Thursday work week. It amounted to around a 10% decrease in total VMT and a 21% decrease in truck VMT, which is important because heavy duty trucks are large contributors to the on-road NOx inventory. The PeMS data also showed that the VMT was highest on Fridays, which most likely occurs from pass through traffic and people beginning their weekend activities. These substantial changes in VMT activity between the weekdays and the weekend is expected to affect measured NOx levels in the region, with higher levels being recorded on weekdays vs. weekends.

3 http://pems.dot.ca.gov/
**NOx Levels in Santa Barbara County**

To perform this weekend effect analysis, the District compiled the NOx data from 2006 to 2016 for the Las Flores Canyon, Carpinteria, and Paradise Road monitoring stations. All NOx data was taken directly from EPA’s Air Quality System (AQS)\(^4\), a database that stores verified monitored data for state, local, and tribal monitoring agencies across the United States.

The analysis began with comparing the average site-specific weekday (represented by an average of Wednesday and Thursday values) and weekend (represented by Sunday values) NOx concentrations observed during our ozone season, which is April through October.\(^5\) Based on CARB guidance, the District focused on the average daily NOx values, as opposed to the 1-hour maximum NOx values, because ozone gradually rises throughout the day when the precursor pollutants are exposed to sunlight. The monitored NOx data can be seen numerically in Table A3-2 and graphically in Figure A3-1 below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Las Flores Canyon Monitoring Station</th>
<th>Carpinteria Monitoring Station</th>
<th>Paradise Road Monitoring Station</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sunday avg NOx (ppm)</td>
<td>Wed-Thurs avg NOx (ppm)</td>
<td>Sunday avg NOx (ppm)</td>
</tr>
<tr>
<td>2006</td>
<td>0.00286</td>
<td>0.00356</td>
<td>0.00370</td>
</tr>
<tr>
<td>2007</td>
<td>0.00263</td>
<td>0.00345</td>
<td>0.00267</td>
</tr>
<tr>
<td>2008</td>
<td>0.00253</td>
<td>0.00323</td>
<td>0.00137</td>
</tr>
<tr>
<td>2009</td>
<td>0.00186</td>
<td>0.00216</td>
<td>0.00179</td>
</tr>
<tr>
<td>2010</td>
<td>0.00208</td>
<td>0.00275</td>
<td>0.00103</td>
</tr>
<tr>
<td>2011</td>
<td>0.00200</td>
<td>0.00237</td>
<td>0.00172</td>
</tr>
<tr>
<td>2012</td>
<td>0.00210</td>
<td>0.00247</td>
<td>0.00251</td>
</tr>
<tr>
<td>2013</td>
<td>0.00329</td>
<td>0.00346</td>
<td>0.00283</td>
</tr>
<tr>
<td>2014</td>
<td>0.00023</td>
<td>0.00029</td>
<td>0.00255</td>
</tr>
<tr>
<td>2015</td>
<td>0.00155</td>
<td>0.00182</td>
<td>0.00181</td>
</tr>
<tr>
<td>2016</td>
<td>-</td>
<td>-</td>
<td>0.00235</td>
</tr>
<tr>
<td>2006-2016 Average</td>
<td>0.00211</td>
<td>0.00256</td>
<td>0.00221</td>
</tr>
</tbody>
</table>

**Table A3-2: Site-Specific Average Weekday and Weekend Average NOx Concentrations**

\(^4\) [https://aqsdr1.epa.gov/aqsweb/aqstmp/airdata/download_files.html](https://aqsdr1.epa.gov/aqsweb/aqstmp/airdata/download_files.html)

\(^5\) Different definitions of weekday days were investigated and did not show appreciable differences from the “Wednesday-Thursday average” definition. Friday was not chosen as a weekday since it exhibits qualities of both the weekdays and the weekend. Sunday was chosen to represent the weekend as it had lower values than Saturday.
Since all the points fall above the 1:1 dashed line, the scatterplot shows that the monitored NOx concentrations are consistently lower on the weekend year after year. The bottom row on Table A3-2 shows the quotient of the average weekend (Sunday) value divided by the average weekday (Wed-Thurs) value. Depending on the monitoring station, NOx concentrations decrease during the weekend between 12% and 24% when compared to weekday concentrations. This NOx decrease correlates well with the 10% decrease in total VMT and 21% decrease in truck VMT that was observed in PeMS. The decrease in the monitored NOx concentrations is also substantial enough to potentially affect the ozone concentrations and could create a weekender effect in Santa Barbara County.
Ozone Levels in Santa Barbara County

Similar to the NOx evaluation, the District compiled the ozone data from 2006 to 2016 for the Las Flores Canyon, Carpinteria, and Paradise Road monitoring stations. All ozone data was taken directly from EPA’s Air Quality System (AQS). However, instead of focusing on the daily average ozone concentrations, the data consists of the maximum daily 8-hour averages, because this criteria affects whether the monitoring station records an exceedance of the state or federal 8-hour ozone standard. As with the NOx data, District staff looked at 8-hour ozone concentrations on a weekday (represented by an average of Wednesday and Thursday values) and compared them to a weekend (represented by Sunday values) during our ozone season (April through October). The monitored ozone data can be seen numerically in Table A3-3 and graphically in Figure A3-2 below.

**Table A3-3: Site-Specific Average Weekday and Weekend Maximum Daily 8-hour Ozone**

<table>
<thead>
<tr>
<th></th>
<th>Las Flores Canyon Monitoring Station</th>
<th>Carpinteria Monitoring Station</th>
<th>Paradise Road Monitoring Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0.0507</td>
<td>0.0528</td>
<td>0.0378</td>
</tr>
<tr>
<td>2007</td>
<td>0.0530</td>
<td>0.0527</td>
<td>0.0466</td>
</tr>
<tr>
<td>2008</td>
<td>0.0482</td>
<td>0.0511</td>
<td>0.0478</td>
</tr>
<tr>
<td>2009</td>
<td>0.0465</td>
<td>0.0482</td>
<td>0.0478</td>
</tr>
<tr>
<td>2010</td>
<td>0.0452</td>
<td>0.0455</td>
<td>0.0450</td>
</tr>
<tr>
<td>2011</td>
<td>0.0414</td>
<td>0.0443</td>
<td>0.0435</td>
</tr>
<tr>
<td>2012</td>
<td>0.0457</td>
<td>0.0458</td>
<td>0.0485</td>
</tr>
<tr>
<td>2013</td>
<td>0.0376</td>
<td>0.0388</td>
<td>0.0462</td>
</tr>
<tr>
<td>2014</td>
<td>0.0426</td>
<td>0.0443</td>
<td>0.0437</td>
</tr>
<tr>
<td>2015</td>
<td>0.0452</td>
<td>0.0458</td>
<td>0.0399</td>
</tr>
<tr>
<td>2016</td>
<td>0.0400</td>
<td>0.0414</td>
<td>0.0351</td>
</tr>
<tr>
<td>2006-2016 Average</td>
<td>0.0451</td>
<td>0.0464</td>
<td>0.0438</td>
</tr>
<tr>
<td>Sunday / Wed-Thurs</td>
<td>0.972</td>
<td>0.990</td>
<td></td>
</tr>
</tbody>
</table>
Unlike the NOx scatterplot, some of the points fall both above and below the 1:1 dashed line in the ozone scatterplot. This indicates that NOx is not always the strongest contributing factor to ozone formation. However, the majority of the points still fall above the 1:1 dashed line, so the figure shows that ozone concentrations are typically lower on the weekend. When evaluating the monitoring stations individually, Carpinteria was observed to have a 1% decrease in weekend ozone concentrations, Las Flores Canyon was observed to have a 2.8% decrease, and Paradise Road was observed to have a 6.4% decrease. It is also worth noting that overall, 8-hour ozone concentrations have decreased during the last decade.

These three stations assessed above do not represent the entire county, and certain areas within the County may still be ROC-limited. The Santa Barbara monitoring station in particular showed a slight tendency of being ROC-limited, which is most likely due to having a more urban setting. Despite this tendency, the Santa Barbara station still has much lower average ozone...
concentrations than the three stations evaluated in this study, and it is less likely to exceed the 8-hour ozone standard. Furthermore, the state’s vehicular emission reduction program is expected to yield additional NOx reductions, which will further shift the Santa Barbara station to a more NOx-limited regime. These transitions and the disappearance of the weekend effect is being observed in many urban centers around the United States.6

**Conclusion**

The above comparisons of NOx and ozone data on weekdays vs. weekends indicate that ozone formation in the areas with the most exceedances of the State 8-hour ozone standard in Santa Barbara County is dependent on the presence of NOx. This phenomenon can be described as a “reverse weekend effect” and it demonstrates that the air around these monitoring locations is in generally a NOx-limited regime.

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Resolution in the Matter of
Revising the Schedule for Implementing the
2016 Ozone Plan Stationary Source Control Measures

ATTACHMENT #C

Addendum to the 2010 Clean Air EIR
MEMORANDUM

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer
Staff Contact: Molly Pearson, Planning & Grants Supervisor, Technology & Environmental Assessment Division

DATE: August 10, 2017

RE: CEQA Determination: CEQA Section 15164 Addendum for the August 2017 Revised 2016 Ozone Plan Control Measure Implementation Schedule (Addendum to the 2010 Clean Air EIR)

1.0 BACKGROUND

The 2016 Ozone Plan (2016 Plan) is the eighth triennial update to the initial state Air Quality Attainment Plan adopted by the Santa Barbara County Air Pollution Control District (District) Board of Directors in 1991 (other updates were done in 1994, 1998, 2001, 2004, 2007, 2010, and 2013). Each of the Santa Barbara County plan updates have implemented an “all feasible measures” strategy to ensure continued progress towards attainment of the state ozone standards. Since 1992, Santa Barbara County has adopted or amended rules implementing more than 25 control measures aimed at reducing emissions at stationary sources. These measures have substantially reduced ozone precursor pollutants (nitrogen oxides, or NOx, and reactive organic compounds, or ROCs). This strategy has successfully improved the County’s air quality so that we now meet the state 1-hour ozone standard. While we have yet to attain the state 8-hour ozone standard, we are getting closer. In order to be designated attainment, air quality measurements must show that both the 1-hour and the 8-hour standards are not violated.

The 2016 Plan was adopted by the District Board in October, 2016. The plan included a discussion of the possibility that the District’s designation under the state ozone standard may change from attainment to nonattainment-transitional. Because measured ozone concentrations in 2015 and 2016 in Santa Barbara County did not exceed the 8-hour state ozone standard more than three times at any one monitoring location, the designation has now officially changed to nonattainment-transitional. This designation change requires the District to re-evaluate the stationary source control measure implementation schedule in the plan, and to decide whether all of the proposed control measures are still necessary to attain and maintain the state ozone standard (CA Health and Safety Code Section 40925.5).

An addendum to the 2010 Clean Air Plan EIR was prepared to address the differences between the 2010 Plan and the 2016 Ozone Plan. That addendum was approved by the District Board in October 2016, at the same time that the 2016 Plan was adopted.
This memorandum serves as another Addendum to the 2010 Clean Air Plan EIR that addresses the potential impacts related to the August 2017 revised schedule for implementing stationary source control measures in the 2016 Ozone Plan.

2.0 REASON FOR THIS ADDENDUM TO THE 2010 CLEAN AIR PLAN EIR

The District’s 2010 Clean Air Plan (2010 Plan) included control measure options for numerous District rules. These control measures generally focused on two types of control strategies: (1) reducing the allowable ROC content of cleaning solvents and other products, and (2) lowering the NOx emission limits for combustion units. The District prepared a program Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) to analyze the potential environmental impacts of implementing the 2010 Plan (State Clearinghouse #2010071014), including implementation of all of the control measures proposed for adoption in the 2010 Plan. The project description in the 2010 Plan EIR, Section 2, includes a summary of the proposed control measures and how they might be implemented. The EIR analyzes the potential for environmental impacts in several different issue areas, including air quality, biological resources, hazards-risk of upset, hazardous materials, water resources, land use/planning, noise & nuisance, public service, transportation/circulation, utilities/energy, and global climate change/greenhouse gas emissions. As documented in the 2010 Clean Air Plan EIR, no significant environmental impacts were anticipated to occur as a result of implementation of the 2010 Plan. The 2010 Clean Air Plan EIR was finalized and was certified by the District Board in January, 2011.

The 2010 Clean Air Plan EIR was designed to act as a program EIR which, pursuant to CEQA Guidelines, may be prepared on a series of actions that can be characterized as one large project and are related “...in connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program.” [CEQA Guidelines Section 15168 (a)(3)]. The use of the program EIR with later activities must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared [CEQA Guidelines Section 15168 (c)].

In August 2017, the District Board will consider whether to revise the stationary source control measure implementation schedule that is in the 2016 Ozone Plan. District staff recommends that the schedule be changed so that all of the proposed NOx control measures are retained but with revised implementation dates (changed from 2017 to 2018), and all of the proposed ROC control measures are shifted to a contingency measure category. Staff evaluated the difference between the control measure implementation schedule that was evaluated in the 2010 Clean Air Plan EIR and the revised schedule that will be considered by the District Board in August 2017, to assess whether the difference would result in significant new environmental impacts.

None of the conditions described in State CEQA Guidelines Section 15162 or Section 15163, calling for the preparation of a subsequent EIR or supplement to an EIR, are anticipated to result from these differences. Therefore, pursuant to Section 15164 of the State CEQA Guidelines, and the explanation set forth below, the District prepared this Addendum to the 2010 Clean Air Plan EIR.
3.0 DIFFERENCES BETWEEN THE 2010 CLEAN AIR PLAN AND THE REVISED STATIONARY SOURCE CONTROL MEASURE IMPLEMENTATION SCHEDULE IN THE 2016 OZONE PLAN

The control measure implementation schedule in the 2016 Ozone Plan is being revised in order to address certain requirements in the California Health & Safety Code that apply to air districts that are designated “nonattainment-transitional” for the state ozone standard. This revised schedule is different from the 2010 Plan in the following ways:

1. Some of the proposed control measures from the 2010 Plan have already been implemented (Revisions to Rules 323, 330, 337, 349, 352, and 353).

2. For the three remaining NOx control measures, which consist of revisions to Rules 342, 360 and 361 that are all aimed at reducing NOx emissions from combustion devices, the adoption schedule has been changed from an earlier adoption date (that has already passed) to 2018.

3. For the three remaining ROC control measures, which consist of revisions to Rules 321, 351, and 354 to change the ROC content of materials used at different industrial facilities, the control measures no longer have tentative adoption dates; instead, they have shifted to contingency measures.

The control measures in the 2010 Clean Air Plan and the 2016 Ozone Plan are all designed to seek further ozone precursor reductions from stationary sources that, for the most part, are already subject to District rules and permit requirements. As documented in the 2010 Clean Air Plan EIR, and reiterated above, none of the stationary source control measures proposed for implementation in the 2010 Clean Air Plan were found to cause a significant environmental impact. It follows then that revising the implementation schedules for these control measures would not result in a significant environmental impact, either. Because the ROC control measures are shifted to a contingency status in the revised implementation schedule, any potential environmental impacts related to those control measures will not occur during the 2016 Ozone Plan implementation period of 2017-2019. As described above, the 2010 Clean Air Plan EIR already investigated the potential for impacts from implementing the ROC control measures, and no significant impacts were identified.

The 2010 Clean Air Plan EIR included an assessment of the potential environmental impacts for a range of project alternatives, as required by CEQA. These alternatives included one that was identified as a “Less Stringent Control Measures Alternative”, which was described as the implementation of some, but not all, of the control measures included in the project description. Additionally, the alternative might involve a less stringent control measure option for any of the control measures. The certified EIR concluded that no significant environmental impacts would occur with the “Less Stringent Control Measures” alternative.

Air quality over the last several years has continued to improve, and ozone levels measured at air monitoring stations in the District with the highest ozone levels are inching closer to meeting the state ozone standard. The many NOx and ROC control measures that are already in place have proven to be successful based on the measured ozone values. At this point in time, the ROC control measures identified in the 2016 Ozone Plan are no longer necessary to accomplish expeditious attainment or to
maintain the state ozone standard, and have been moved to a contingency status. Therefore, the proposed change to the control measure implementation schedule will not involve any adverse air quality impacts.

Additionally, the ROC control measures are not being deleted from the Ozone Plan; rather, they are being moved to contingency and can be reinstated if and when needed.

4.0 CONCLUSION

Pursuant to Section 15164 of the State CEQA Guidelines, and the explanation set forth above, the District has prepared this Addendum to the 2010 Clean Air Plan EIR. Section 15164(a) states that, “The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” As documented in this addendum, the August 2017 revised schedule for implementing stationary source control measures in the 2016 Ozone Plan will not result in significant new environmental impacts, as compared to the project that was analyzed in the 2010 Clean Air Plan EIR. No new mitigation measures are required.
Resolution in the Matter of
Revising the Schedule for Implementing the
2016 Ozone Plan Stationary Source Control Measures

ATTACHMENT #D

Final Environmental Impact Report
for the
2010 Clean Air Plan EIR

1 Due to its length, the 2010 Clean Air Plan EIR is included as a CD rather than as a paper version.
FINAL ENVIRONMENTAL IMPACT REPORT

FOR THE

2010

CLEAN AIR PLAN

SANTA BARBARA COUNTY’S PLAN TO ATTAIN THE STATE OZONE STANDARD

STATE CLEARINGHOUSE NO. 2010071014

SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT
260 N. SAN ANTONIO ROAD, SUITE A
SANTA BARBARA, CALIFORNIA 93110
WWW.SBCAPCD.ORG
(805) 961-8800
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Executive Summary

This Environmental Impact Report (EIR) has been prepared to address the potential adverse environmental impacts of the 2010 Clean Air Plan, referred to hereafter as the 2010 Plan, in accordance with the California Environmental Quality Act (CEQA).

The 2010 Plan, prepared by the Santa Barbara County Air Pollution Control District (APCD), is a three-year update required by the State of California to show how the APCD plans to meet the state 8-hour ozone standard. In addition to planning for attainment of the state ozone standard, the 2010 Plan contains two chapters that are provided for informational purposes, and are not regulatory in nature: a climate protection chapter with an inventory of carbon dioxide (CO₂) emissions in the County, and a transportation and land use planning chapter.

The APCD Board is a lead agency under the California Environmental Quality Act (CEQA) for the 2010 Plan, and will use the 2010 Plan EIR in its decision-making process when it considers whether to adopt the control measures included in the 2010 Plan as APCD rules. The control measures in the 2010 Plan will be potentially implemented over a number of years and affect a broad spectrum of industries.

This EIR contains a description of the proposed project, a summary of the existing environmental setting for the project, and an assessment of the potential environmental impacts related to the project. No significant (Class 1) environmental impacts were identified for the 2010 Plan; therefore, no mitigation measures are included in the EIR.

The EIR contains eight Sections and four Appendices; the Sections are summarized below:

Section 1.0, Introduction

This section includes background information for the project, the project objectives, intended use of the EIR, document organization, effects found not to be significant, and a glossary of terms and acronyms used in the EIR. The APCD develops Clean Air Plans to provide an overview of air quality and sources of air pollution and to identify the pollution control measures needed to meet clean air standards. The 2010 Plan builds on previous Clean Air Plans developed by APCD for Santa Barbara County. Impacts that were found not to be significant and did not warrant discussion in the EIR include: Aesthetics, Geology/Soils, Population/Housing, Agricultural and Forestry Resources, Cultural Resources, Mineral Resources, and Recreation.

Section 2.0, Project Description

This section identifies the project proponent, location, a summary of the content of the 2010 Plan, and a description of the control measures that are proposed for implementation during the Plan period. The control measures that apply to stationary sources of air pollution and will be implemented by APCD are identified in Chapter 4 of the 2010 Plan. Chapter 4 of the 2010 Plan also includes a discussion of control measures that will be implemented by other agencies such as the California Air Resources Board and the International Maritime Organization. The control measures that will be implemented by APCD are
grouped into two general categories, in order to facilitate the analysis of environmental impacts in the applicable issue areas.

Group 1 Control Measures are described as “Solvent Cleaning ROC Limits and Other Reductions in Material ROC Content.” Revisions to APCD rules are proposed that will result in a lowering of reactive organic compound, or ROC, limits for solvent cleaning activities in various industries. To meet the California Clean Air Act requirement to adopt “every feasible control measure”, there may also be revisions to:

1) The ROC content limits for other process materials (e.g., coatings, adhesives, sealants, inks, resins, wash primers, fountain solutions),
2) The maximum allowable ROC content limit for solvent cleaning activities, and
3) The equipment and operation requirements.

Group 2 Control Measures are described as “Combustion Equipment NOX Limits.” These control measures involve a reduction in the allowable nitrogen oxides, or NOX, emissions limits from external combustion equipment (such as water heaters, boilers, steam generators and process heaters) as listed in APCD Rules 352, 360, 361, and 342.

The 2010 Plan identifies transportation control measures (TCMs) in Chapter 5. As discussed in Chapter 5 of the 2010 Plan, Santa Barbara County Association of Governments (SBCAG) is responsible for developing the transportation elements of air quality plans for Santa Barbara County. The SBCAG Board is scheduled to adopt the 2010 Plan TCMs in November, 2010. Impacts related to the adoption of the TCMs are not assessed in this EIR, since the TCMs will be adopted by another agency. The 2010 Plan contains two chapters that are provided for informational purposes, and are not regulatory in nature: a climate protection chapter, with an inventory of carbon dioxide (CO2) emissions in the county, and a transportation and land use planning chapter.

Section 3.0, Environmental Setting

Section 3 identifies the existing, or baseline, setting for the project, in terms of both the physical environment and the regulatory environment. The environmental setting establishes the conditions to which the proposed project actions are compared, in order to facilitate an accurate assessment of the impacts that will result from project implementation. The environmental setting is described for the following impact areas: Air Quality, Biological Resources, Hazards/Risk of Upset, Hazardous Materials, Hydrology and Water Quality, Land Use/Planning, Noise, Public Services, Transportation/Circulation, and Utilities/Energy.

Section 4.0, Project Impacts and Mitigation Measures

For all of the applicable issue areas discussed in Section 3.0, this section includes the CEQA significance thresholds that are applied to the project and identifies whether any of the proposed control measures would result in significant impacts. APCD’s Environmental Review Guidelines establish classification categories for impacts:

- **Class I Impacts** - Significant unavoidable adverse impacts for which the decision maker must adopt a Statement of Overriding Consideration.
- **Class II Impacts** - Significant adverse environmental impacts that can be feasibly mitigated or avoided for which the decision maker must adopt findings and mitigation measures.
- **Class III Impacts** - Adverse impacts found not to be significant for which the decision maker does not have to adopt findings under CEQA.
- **Class IV Impacts** - Beneficial impacts of the project.

Significance thresholds are presented for each of the issue areas that are examined in Section 4; these thresholds are based on APCD’s *Environmental Review Guidelines*, CEQA Guidelines including Appendix G, and Santa Barbara County’s *Environmental Thresholds Manual* and Initial Study Checklist. Impacts in all issue areas were determined to be either Class IV (beneficial, for Air Quality), or Class III (less than significant, for all other impact areas). No significant impacts were identified; therefore, no mitigation measures are proposed.

**Section 5.0, Cumulative Impacts and Global Climate Change**

This section includes a discussion of cumulative impacts that may result from implementation of the project, in combination with other past, present or future projects. The 2010 Plan is anticipated to result in improvements to air quality in Santa Barbara County, and no significant cumulative impacts are anticipated to occur as a result of implementing the 2010 Plan and its related control measures. Section 5.1 includes a discussion of the existing setting, both in terms of the physical setting and the regulatory setting, for global climate change and greenhouse gas impacts. Climate change impacts are presented in terms of: (1) the impacts of the project on global climate change, and (2) the impacts of global climate change on the proposed project. No significant impacts to global climate change and greenhouse gas emissions are anticipated to occur.

Section 5.2 includes a brief discussion of other potential cumulative impacts related to implementation of the 2010 Plan. The 2010 Plan was prepared in coordination with other regional planning agencies and does not involve any new development activities or impacts that would affect other programs in the Plan’s jurisdictional area. No other significant cumulative impacts are anticipated to occur.

**Section 6.0, Alternatives**

This section includes a discussion of project alternatives that were considered, including a “No Project” alternative, as well as a qualitative discussion of the environmental impacts associated with project alternatives. The following alternatives are evaluated in Section 6.0:

- No Project Alternative
- More Stringent Control Measure Alternative
- Less Stringent Control Measure Alternative
- Environmentally Superior Alternative
- Alternatives Rejected As Infeasible

A “No Project” alternative would not result in adverse environmental impacts as compared to the existing environmental setting. However, the “No Project” alternative would not meet the basic objective of the 2010 Plan.
A “More Stringent Control Measures” alternative would involve the implementation of some or all of the further study measures that are identified in Chapter 4 of the 2010 Plan. A “More Stringent Control Measures” alternative would, in theory, enhance progress toward attainment of the California ambient air quality standard for ozone. However, implementation of the further study measures may involve possible environmental, technical, and economic impacts that, at this point in time, are less well known for a variety of reasons. In addition, these measures may not be as well suited for application in Santa Barbara County as they are for other areas. The discussion includes a listing of potential environmental impacts associated with a “More Stringent Control Measures” alternative. A detailed assessment of these impacts is too speculative to include in this EIR.

The “Less Stringent Control Measures” alternative is defined as implementation of some, but not all, of the control measures that are proposed for implementation. Additionally, this alternative might involve a less stringent control option for any of the proposed control measures. Because this alternative does not avoid any significant environmental impacts and postpones attainment of the ozone standard, it does not fully meet the project objectives and is not considered a feasible alternative.

The proposed project is considered to be the most efficient means of attaining the basic objectives of the California Clean Air Act, while limiting adverse effects to a reasonable level. Therefore, the proposed project (The 2010 Plan) is considered to be the “Environmentally Superior” alternative. The alternatives that are considered by the District to be infeasible at this time are retained in the 2010 Plan as further study measures.

Section 7.0, Other CEQA Topics

This section includes a discussion of significant irreversible changes, growth-inducing impacts, and economic and social effects associated with implementation of the 2010 Plan control measures.

No significant irreversible changes are anticipated to result from implementation of the 2010 Plan. Improving air quality through implementation of control measures to reduce NOx and ROC emissions is not expected to have growth-inducing impacts. In the context of the 2010 Plan and implementation of the proposed ROC and NOx control measures, some level of economic impact may be realized by the industries that are regulated under the rules associated with the proposed control measures. However, pursuant to CEQA, “...economic or social effects of a project shall not be treated as significant effects on the environment.”(CEQA Guidelines Section 15131 (a)). Thus, this EIR did not consider them in the significance determinations.

Section 8.0, References

Section 8.0 provides a listing of the organizations and persons consulted, the documents that were used to prepare the EIR and supplement discussion of environmental impacts, and the specific reference materials that are cited in the EIR text.

Areas of Controversy and Issues to Be Resolved

Section 15123 of the CEQA Guidelines requires that the EIR Executive Summary include a discussion of “Areas of controversy known to the Lead Agency including issues raised by agencies and the public...” The summary should also identify, “Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant impacts.” APCD has been planning for clean air in Santa
Barbara County for decades, and the 2010 Plan is a continuation of these ongoing efforts. The clean air planning process involves input from APCD professional staff and the APCD Board, the regulated community, the general public, and other local and state agencies. Several controversial issues have been raised in the 2010 clean air planning process as noted below:

- Whether the 2010 Plan should include recommendations related to land use decisions;
- The extent to which the 2010 Plan should address transportation-related control measures;
- The level of emissions controls set forth in proposed control measures.

These issues were discussed and considered as the 2010 Plan was developed. The 2010 Plan is a result of careful consideration of these issues, along with APCD’s clean air planning goals and state regulatory requirements. The clean air planning process inherently involves a consideration of project alternatives by way of examining various control measures, determining their feasibility and effectiveness, and evaluating various industry concerns. No significant environmental impacts were identified; therefore, the APCD Board’s decision to adopt the 2010 Plan will not include choices of whether and how to mitigate significant impacts.
1.0 Introduction

1.1 BACKGROUND

The Santa Barbara County Air Pollution Control District (APCD) develops Clean Air Plans to provide an analysis of air quality and sources of air pollution and to identify the pollution-control measures needed to meet clean-air standards. The schedule for plan development is outlined by state and federal requirements, and is influenced by our air quality. Clean Air Plans direct the development of our rules and regulations and other programs.

The United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) specify the type of Clean Air Plan needed and set guidelines for the plan contents. Working closely with the APCD’s Community Advisory Council and the Santa Barbara County Association of Governments, APCD develops draft Clean Air Plans in accordance with USEPA and CARB timelines. After a public review process, APCD staff prepares a final Clean Air Plan. The Plan is presented to the APCD Board for adoption, and after adoption it is transmitted to the USEPA and/or the CARB for final approval.

The 2010 Clean Air Plan (referred to hereafter as the 2010 Plan) is a three-year update required by the state of California to show how the APCD plans to meet the state 8-hour ozone standard. In addition to planning for attainment of the state ozone standard, the draft 2010 Plan contains two chapters that are provided for informational purposes, and are not regulatory in nature: a climate protection chapter, with an inventory of carbon dioxide (CO₂) emissions in the County, and a transportation and land use planning chapter.

Following is a brief summary of the Clean Air Plans the APCD has developed:

- **The 2001 Clean Air Plan** was prepared as required by the Federal Clean Air Act, was adopted by the APCD Board, and was approved by both the USEPA and the CARB. This Plan is in effect for federal standards; it shows how the County will maintain attainment with the federal 1-hour ozone standard through 2015 (note that the federal 1-hour ozone standard was revoked in 2005). It also includes a three-year plan revision required by the state to show how the County will work toward meeting the state 1-hour ozone standard.

- **The 2004 Clean Air Plan** was prepared as a three-year update as required by California Clean Air Act. This Plan was adopted by the APCD Board in December of 2004, and has been submitted to CARB. This Plan shows how the County will make progress towards meeting the state 1-hour ozone standard (the 2001 Plan remains in effect for federal requirements).

- **The 2007 Clean Air Plan** was adopted by the APCD Board on August 16, 2007. The federal requirements pertain to provisions of the Federal Clean Air Act that apply to our current designation as an attainment area for the federal 8-hour ozone standard. Areas that are designated as attainment for the federal 8-hour ozone standard and attainment for the previous federal 1-hour ozone standard with an approved maintenance plan must submit an 8-hour ozone standard maintenance plan. The 2007 Clean Air Plan addresses the California Clean Air Act requirement for a three-year update to plan for attainment of the state 1-hour ozone standard. Previous plans developed to comply with the state ozone standard include the 1991...
Air Quality Attainment Plan, the 1994 Clean Air Plan, the 1998 Clean Air Plan, and the 2001 Clean Air Plan.

A Clean Air Plan generally includes an overview of air quality planning efforts, information on county-specific air quality issues, an inventory of the air pollutant emissions in the County, existing and proposed emission control measures, existing and proposed transportation control measures, emissions forecasts, public comments, and other topics as appropriate.

1.2 Project Objectives

The purpose of the 2010 Plan is to chart a course of action that will implement state plan requirements, with the goal to achieve clean, healthful air for the residents and environment of Santa Barbara County. Clean air is fundamental to public health; enhances the environment and contributes to the attractiveness of the area to residents, businesses, and visitors. Air quality has improved in the County as past air quality plan strategies have been implemented.

Santa Barbara County's air quality has historically violated both the state and federal ozone standards. Ozone concentrations above these standards adversely affect public health, diminish the production and quality of many agricultural crops, reduce visibility, and damage native and ornamental vegetation. Since 1999, however, local air quality data show that every monitoring location in Santa Barbara County complies with the federal 1-hour ambient air quality standard for ozone (note that the federal 1-hour ozone standard was revoked in 2005). And on August 8, 2003, Santa Barbara County officially became an attainment area for the federal 1-hour ozone standard.

In 2004, USEPA replaced the federal 1-hour ozone standard with an 8-hour ozone standard. In the 2004 Plan, the 8-hour standard was 0.08 parts per million measured over eight hours and is more protective of public health and more stringent than the federal 1-hour standard. Santa Barbara County has been designated as attainment for the federal 8-hour ozone standard, and the 2007 Clean Air Plan provided for maintenance of this federal standard.

In March 2008, USEPA revised the 8-hour federal ozone standard from 0.08 ppm to 0.075 ppm. However, on September 16, 2009, EPA announced it would reconsider the 2008 standard of 0.075 ppm to ensure that this standard is clearly grounded in science and protects public health with an adequate margin of safety. In January 2010, USEPA announced that the revised standard would be between 0.060 and 0.070 ppm. A final decision is anticipated in Fall 2010.

Our County's air quality has improved enough to be considered in attainment of the federal 8-hour ozone standard and the state 1-hour ozone standard. As we have yet to attain the state 8-hour ozone standard, the 2010 Plan demonstrates how we plan to attain that standard and satisfies all state triennial planning requirements.

Therefore, the implementation of the control measures included in the 2010 Plan, through adoption of source-specific regulations for the control of ozone precursor pollutants, is designed to bring the region into attainment of state ozone air quality standards.

Included in this 2010 Plan is a new Climate Protection chapter that discusses greenhouse gas emissions and climate change issues in a planning context. This chapter is informational and not
regulatory in nature, presents an overview of global climate change issues, and provides a baseline 2007 carbon dioxide (CO₂) inventory for the County. Also new in this 2010 Plan is another informational chapter that discusses the impact transportation and land use planning have on air quality, and strategies to mitigate those impacts.

1.3 INTENDED USE OF THE ENVIRONMENTAL IMPACT REPORT

The 2010 Plan and its associated Environmental Impact Report (EIR) were developed to support and guide the APCD’s efforts to control air pollutant emissions and reduce ambient air pollutant concentrations in Santa Barbara County. The APCD Board is a lead agency under the California Environmental Quality Act (CEQA) for the 2010 Plan, and will use the 2010 Plan EIR in its decision-making process when it considers whether to adopt the control measures included in the 2010 Plan as APCD rules.

The California Air Resources Board (CARB) is the primary state agency responsible for air quality in the State of California. CARB is tasked with review and approval of the 2010 Plan; therefore, CARB is a CEQA responsible agency.

Other jurisdictions within Santa Barbara County, including the County of Santa Barbara, the eight cities within the County, the University of California at Santa Barbara, and Vandenberg Air Force Base, will need to consider the 2010 Plan as they issue land use entitlements and plan for development within their jurisdictional boundaries. For projects undertaken by other lead agencies, an analysis of whether those projects are consistent with the 2010 Plan is required by the California Environmental Quality Act (CEQA Guidelines Section 15064, 15125, and Appendix G; SBCAPCD Environmental Review Guidelines).

1.4 TOPICS AND ORGANIZATION OF DRAFT EIR

An Initial Study was not prepared for the 2010 Plan. The control measures in the 2010 Plan will be potentially implemented over a number of years and affect a broad spectrum of industries. Therefore, APCD staff decided that in the interest of full disclosure under CEQA, an EIR should be prepared for the 2010 Plan. Implementation of the 2010 Plan is anticipated to benefit regional air quality, and significant environmental impacts are not anticipated to occur as a result of plan implementation. As the control measures in the 2010 Plan are implemented, this EIR will provide a broad analysis of impacts in the CEQA context. When specific APCD rule revisions are considered by the APCD Board, those projects may rely on this EIR to support an assessment of project impacts, using the concept of tiering. Additional, focused review of project-specific impacts may be required for individual projects, depending on the nature of the proposed action.

There are a number of issue areas that warrant discussion and analysis in the 2010 Plan EIR. The analysis for the following issue areas has been included in this document:

- Air Quality
- Biological Resources
- Hazards/Risk of Upset
- Hazardous Materials
- Water Resources
The EIR was prepared in accordance with Articles 9 (Sections 15120 to 15132) and 10 (Sections 15140 to 15155) of the CEQA Guidelines, which address the content and level of analysis required for EIRs. The EIR is organized as follows:

**Executive Summary** – Includes a summary of the project, alternatives considered, and the anticipated environmental impacts and mitigation measures associated with the project.

**Section 1.0 – Introduction**: Includes background information for the project, the project objectives, intended use of the EIR, document organization, effects found not to be significant, and a glossary of terms and acronyms used in the EIR.

**Section 2.0 – Project Description**: Identifies the project proponent, location, a summary of the content of the 2010 Plan, and a detailed description of the control measures that are proposed for implementation during the plan period.

**Section 3.0 – Environmental Setting**: Identifies the existing, or baseline, setting for the project, in terms of both the physical environment and the regulatory environment.

**Section 4.0 – Project Impacts and Mitigation Measures**: For all applicable issue areas, this section includes the CEQA significance thresholds that are applied to the project, and identifies whether or not any of the proposed control measures would result in significant impacts. No significant impacts were identified; therefore, no mitigation measures are proposed.

**Section 5.0 – Cumulative Impacts and Global Climate Change**: This section includes a discussion of cumulative impacts that may result from implementation of the project, in combination with other past, present or future projects. Also included is a discussion of the physical and regulatory setting for global climate change/greenhouse gas impacts, as well as an analysis of whether:

a) Implementation of the proposed control measures in the 2010 Plan will significantly impact global climate change, and

b) Global climate change will impact the implementation of the control measures in the 2010 Plan.

**Section 6.0 – Alternatives**: Includes a discussion of project alternatives that were considered, including a “No Project” alternative, as well as a qualitative discussion of the environmental impacts associated with project alternatives.

**Section 7.0 – Other CEQA Topics**: Includes a discussion of significant irreversible changes, growth-inducing impacts, and economic and social effects associated with implementation of the 2010 Plan control measures.
Section 8.0 – References: Provides all relevant documents that were used to prepare the EIR and supplement discussion of environmental impacts.

1.5 Effects Found Not to be Significant

A number of resource areas did not have any relevance to implementation of the 2010 Plan and its associated control measures, and did not warrant discussion in the EIR. Those issue areas, and the reasons for not including additional discussion in the EIR, are as follows (CEQA Guidelines Section 15128):

- **Aesthetics:** The control measures in the 2010 Plan will be applied to existing industrial operations and are not anticipated to impact the aesthetic characteristics of those operations. If a new industrial operation is proposed, the CEQA analysis for that operation will be conducted as part of the land use approval process of the applicable decision-making agency, and will require examination of impacts to aesthetics as part of that process.

- **Geology/Soils:** The control measures in the 2010 Plan will be applied to existing industrial operations and are not anticipated to impact the geologic or soils characteristics of those operations. If a new industrial operation is proposed, the CEQA analysis for that operation will be conducted as part of the land use approval process of the applicable decision-making agency, and will require examination of impacts to geology and soils as part of that process.

- **Population/Housing:** The control measures in the 2010 Plan apply to industrial operations and, to a very small extent, some larger residential operations that use large water heating devices (boilers). The measures are not anticipated to have any impact on the population or housing in Santa Barbara County as a whole, or in any of the individual jurisdictions within Santa Barbara County.

- **Agricultural and Forestry Resources:** The control measures in the 2010 Plan apply to industrial operations, and may apply to a very limited amount of agricultural operations if they involve the use of large water heating devices (boilers) or cleaning solvents. The measures are not anticipated to have any impact on agricultural and forestry resources.

- **Cultural Resources:** The control measures in the 2010 Plan will be applied to existing industrial operations and are not anticipated to impact the cultural resources associated with those operations. If a new industrial operation is proposed, the CEQA analysis for that operation will be conducted as part of the land use approval process of the applicable decision-making agency, and will require examination of impacts to cultural resources as part of that process.

- **Mineral Resources:** The control measures in the 2010 Plan will be applied to existing industrial operations and are not anticipated to impact the mineral resources of those operations. If a new industrial operation is proposed, the CEQA analysis for that operation will be conducted as part of the land use approval process of the applicable decision-making agency and will require examination of impacts to mineral resources as part of that process.
Recreation: The control measures in the 2010 Plan will be applied to existing industrial operations and are not anticipated to impact the recreation characteristics of those operations. If a new industrial operation is proposed, the CEQA analysis for that operation will be conducted as part of the land use approval process of the applicable decision-making agency and will require examination of impacts to recreation as part of that process.

1.6 Glossary of Terms and Acronyms

Air Pollution Control District (APCD) – A local/regional agency with jurisdiction over stationary sources of air pollution. The Santa Barbara County APCD jurisdictional area is the same as the geographical boundaries of Santa Barbara County.

Air Resources Board (ARB or CARB) – The California Air Resources Board, the agency that regulates mobile and consumer product sources of air pollution in the State of California. CARB is also tasked with implementing climate change legislation in the state.

Airborne Toxics Control Measure (ATCM) – A regulation developed by CARB to limit emissions of toxic air contaminants such as diesel particulate, perchloroethylene, etc.

Authority to Construct (ATC) Permit – A permit issued by the APCD prior to commencement of project construction.

CAAQS – California Ambient Air Quality Standard(s).

CEQA Guidelines – Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act, Sections 15000 et. seq.

CEQA Statute – California Environmental Quality Act, California Public Resources Code, Division 13, Environmental Quality, Sections 21000 et. seq.

Clean Air Plan (CAP) – Santa Barbara County APCD’s plans to meet and/or maintain state and federal air quality standards, as applicable.

Environmental Impact Report (EIR) – A document prepared pursuant to CEQA for projects with significant impacts.

Greenhouse Gases (GHGs) – Pollutants that are known to increase the greenhouse effect in the earth’s atmosphere, thereby adding to global climate change impacts. A number of pollutants have been identified as GHGs, including carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). The State of California defines GHGs in the Health & Safety Code, §38505(g).

Health Risk Assessment (HRA) – An assessment of the acute (immediate) and chronic (cumulative) effects that a project will have on human health.

Initial Study (IS) – The initial evaluation of a project, prepared pursuant to CEQA, to determine whether significant environmental impacts exist. Depending on the outcome of the IS, the lead agency may proceed with a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report.

Lead Agency – The agency that has discretionary authority over a permit action or decision that is subject to CEQA.

NAAQS – National Ambient Air Quality Standard(s).

Negative Declaration (ND) or Mitigated Negative Declaration (MND) – A declaration, prepared in compliance with CEQA, that states that a project will not have a significant impact on the
environment (ND) or that a project will not have significant impacts if documented mitigation measures are adopted and enforced (MND).

**Notice of Preparation (NOP) of an EIR** – An official public notice, issued by the CEQA lead agency, that an EIR will be prepared pursuant to CEQA.

**Oxides of Nitrogen (NO\textsubscript{x})** – An air pollutant (includes nitrogen oxide, or NO, and nitrogen dioxide, or NO\textsubscript{2}). NO\textsubscript{x} is typically a product of combustion. Emissions of NO\textsubscript{x} cause human health impacts and contribute to the formation of ozone.

**Ozone (O\textsubscript{3})** – A pollutant of regional concern, formed by in the lower atmosphere by a combination of ozone precursors (ROC, NO\textsubscript{x}) in the presence of heat and sunlight.

**Particulate Matter (PM\textsubscript{2.5}, PM\textsubscript{10}, diesel PM)** – Fine particulate matter (PM) that remains suspended in the atmosphere and can be inhaled into human lungs. PM\textsubscript{10} measures 10 micrometers or less in diameter; PM\textsubscript{2.5} measures 2.5 micrometers or less in diameter. Diesel PM is particulate matter that is emitted from diesel-fueled combustion devices.

**Permit to Operate (PTO)** – A permit issued by the APCD prior to operation of a project.

**Reactive Organic Compounds (ROC)** – Pollutants that react in the atmosphere to form ozone.

**Stationary Source** – Generally, an industrial operation that emits air pollutants regulated by the APCD.

**Toxic Air Contaminant (TAC)** – An air pollutant that is considered to have toxic attributes, be them acute (immediate), chronic (cumulative), or both. Refer to California Health & Safety Code Section 39655 for a regulatory definition of this term.
2.0 Project Description

2.1 Project PropONENT

The project proponent is:

Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110

2.2 Project Location

The 2010 Plan will apply to the entire geographical region defined as Santa Barbara County, to the state tidelands, and to the outer continental shelf (OCS). State tidelands facilities are located in coastal waters within three miles of the coastline. OCS facilities are in waters within 25 miles of the seaward boundaries of the state and located off the coast of Santa Barbara County, which is the corresponding onshore area.

FIGURE 2–1
MAP OF PROJECT AREA: SANTA BARBARA COUNTY.
2.3 SANTA BARBARA COUNTY 2010 CLEAN AIR PLAN AND CONTROL MEASURES

2.3.1 Chapter Descriptions and Summaries

The 2010 Plan includes the following chapters:

- Chapter 1 – Introduction
- Chapter 2 – Local Air Quality
- Chapter 3 – Emission Inventory
- Chapter 4 – Emission Control Measures
- Chapter 5 – Transportation Control Measures
- Chapter 6 – Emission Forecasting
- Chapter 7 – State Clean Air Act Requirements
- Chapter 8 – State Mandated Triennial Progress Report and Triennial Plan Revision
- Chapter 9 – Greenhouse Gases and Climate Change
- Chapter 10 – Transportation, Land Use and Air Quality
- Chapter 11 – Public Participation

Chapters 1, 2, 3, 5, 6, 7, 8, 9, 10, and 11 include background information related to Santa Barbara’s historic and current air quality and meteorology, air pollutant emissions inventories and forecasted emissions, and potential policies or strategies to reduce air pollution from a variety of sources. The information contained in these chapters does not involve discretionary decisions that will be made by the APCD’s Board of Directors.

The 2010 Plan identifies transportation control measures (TCMs) in Chapter 5. As discussed in Chapter 5 of the 2010 Plan, Santa Barbara County Association of Governments (SBCAG) is responsible for developing the transportation elements of air quality plans for Santa Barbara County. The TCMs are outlined in the 2010 Plan, and are implemented by a variety of local and regional agencies, depending on the nature of the specific TCM. There are no new TCMs proposed for adoption in the 2010 Plan. The TCMs identified in Chapter 5 include TCMs from APCD’s 2007 Clean Air Plan as well as the addition of two “further study” TCMs and deletion of a “further study” TCM that has become a regulatory requirement.

The SBCAG Board adopted the 2010 Plan TCMs in November, 2010. SBCAG’s Vision 2030: 2008 Regional Transportation Plan and the 2008 Santa Barbara County Regional Transportation Plan Final Environmental Impact Report SCH#: 2004081136 (2008 SBC RTP Final EIR) include discussion of TCMs in the context of Santa Barbara County’s regional and local transportation plans and projects, and both of these documents are incorporated by reference into this EIR (SBCAG, 2008; SBCAG, 2009). Section 4.1 of the 2008 SBC RTP Final EIR includes a discussion of the TCM projects that are included in the 2007 Clean Air Plan, and identifies the TCMs that were implemented as RTP projects. Table 4.1-17 of the 2008 SBC RTP Final EIR identifies the RTP goals and policies that implement TCMs. Table 4.3-8 lists the TCM projects and programs approved by the SBCAG Board, as part of the 101-In-Motion process, for incorporation into the RTP. Table 4.3-9 and the text that follows identify the 2007 Clean Air Plan TCMs and identifies specific projects from the RTP that support those TCMs. Environmental impacts related to implementation of the TCMs were found to
be less than significant (Class III) in the 2008 RTP EIR. In summary, the potential environmental impacts related to the adoption of the TCMs were addressed adequately in the 2008 SBC RTP Final EIR, and are therefore not addressed further in this EIR.

Chapter 9, *Greenhouse Gases and Climate Change*, provides a discussion of greenhouse gas emissions and climate protection; however, this chapter is informational and not regulatory in nature, and its inclusion is not mandated by state planning requirements. Chapter 10, *Transportation, Land Use and Air Quality*, discusses the connection between land use development, transportation and air quality and introduces a few ideas and concepts to minimize the air pollution impacts of growth. The chapter is purely informational; its intent is not to establish land use policies.

The control measures that are included in Chapter 4, *Emission Control Measures*, include measures that the APCD’s Board of Directors has discretionary authority to adopt as APCD Rules (or rule revisions) and apply to stationary sources of air pollutants. Chapter 4 also includes control measures that are under the authority or jurisdiction of other agencies. This EIR focuses on the environmental impacts that would occur with implementation of the control measures listed in Chapter 4.

*This EIR does not identify the potential environmental impacts that will result from discretionary decisions made by land use agencies on individual projects. The CEQA analysis for an individual land use project is addressed at the time that the land use decision is made, and this is done by the agency or jurisdiction that is making the land use decision (for example, State Lands Commission, Cities within Santa Barbara County, or Santa Barbara County Planning & Development Department).*

Chapter 4 of the 2010 Plan should be consulted for a detailed description of control measures that have been considered in previous Clean Air Plans or Air Quality Attainment Plans. The summary of Chapter 4 that follows focuses on the control measures that the APCD’s governing board may consider for implementation during the 2010 Plan period.

Chapter 4 includes emission control measures adopted and proposed by the Santa Barbara County Air Pollution Control District (APCD), the California Air Resources Board (CARB), and the International Maritime Organization to reduce ROC or NOX emissions and identifies additional stationary source control measures for further study. This chapter also addresses the state triennial plan assessment and update requirements specified in Health and Safety Code Sections 40924 and 40925. The control measures presented Chapter 4 are founded on the following plans:

- 1989 Air Quality Attainment Plan
- 1991 Air Quality Attainment Plan
- 1993 Rate-Of-Progress Plan
- 1994 Clean Air Plan
- 1998 Clean Air Plan
- 2001 Clean Air Plan
- 2004 Clean Air Plan
- 2007 Clean Air Plan
Through a public process, the APCD Board of Directors adopts control measures as local rules. Once the APCD Board adopts a rule, the APCD is responsible to ensure that the affected parties comply with the rule. Some rules impose emission limits and other requirements on business and industrial sources of air pollution. Other rules require manufacturers and retailers to comply with requirements that limit emissions. Control measures are evaluated and classified as adopted, proposed, or in consideration for further study, based on an analysis of the measures' applicability to Santa Barbara County, potential emission reductions, and the implementation of similar measures in other areas of California. The following describes the control measure classes:

**Adopted control measures** are those that the APCD has formally adopted as APCD rules for inclusion in the State Implementation Plan (SIP). These are also adopted for the purpose of attaining the state ozone standards. For a detailed listing of the control measures adopted before 2007 and the control measures adopted or modified within the reporting period (2007 to 2009), see Chapter 4 of the 2010 Plan. These measures essentially represent the project “baseline” for the CEQA analysis included in this EIR.

**Proposed control measures** are those that the APCD plans to adopt for the purposes of 1) maintaining the state 1-hour ozone standard, and 2) attaining the state 8-hour ozone standard. These measures are scheduled as either near-term (2010 to 2012) or mid-term (2013 to 2015). Table 2-1 shows the proposed control measures for this 2010 Plan. The proposed control measures for the 2010 Plan represent the discretionary actions that the APCD’s governing board may take, and therefore represent the proposed project for the CEQA analysis included in this EIR.

**Further study measures** are emission reduction techniques that the APCD plans to investigate further before making a commitment to adopt them in the next triennial plan update and revision. For a detailed listing of these measures, see Chapter 4 of the 2010 Plan. The further study measures are not part of the proposed project that is considered in this EIR. CEQA Guidelines Section 15145 provides that environmental impacts that are speculative in nature need not be included in the EIR analysis; inclusion of further study measures is considered to be speculative at this time.

The control measure requirements (for example, parts-per-million or grams-per-liter ROC content limits) indicated in the 2010 Plan are subject to change when the APCD undertakes the actual rulemaking effort. The figures included herein are used to develop emission reduction estimates that CARB requires in the Plan and to give a general indication of today’s limits necessary to comply with the “every feasible measure” mandate required by the California Clean Air Act. However, there could be technological advancements between the time of adoption of the 2010 Plan and the time the APCD undertakes the rulemaking effort; such advancements could lower the emission limits or other limits used in this plan. The rulemaking staff will consider such improvements in technology and lower emission limits or other limits found in other air district rules during the rule development process. The state statutory mandate to comply with the requirement to adopt every feasible control measure applies to both the Clean Air Plan and to rule adoptions.

### 2.3.2 Summary of Proposed Emission Control Measures

The proposed control measures, as well as their anticipated ROC and NO\textsubscript{x} emission reductions, are summarized in Table 2-1. These control measures are scheduled as either near-term (2010 - 2012) or mid-term (2013-2015). *For a more detailed discussion, including quantification of and justification for the anticipated emission reductions, refer to Chapter 4 of the 2010 Plan.*
## Table 2-1

### Proposed Emission Control Measures

<table>
<thead>
<tr>
<th>Rule (Status)</th>
<th>CAP Control Measure ID</th>
<th>Description</th>
<th>Adoption Schedule</th>
<th>Year for the Emission Reduction Estimate</th>
<th>Emission Reductions (Tons per Day) from the Control Measure When Fully Implemented (Unless Otherwise Specified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>342 (Revised)</td>
<td>N-XC-4 and N-XC-5</td>
<td>Revisions to Reduce the NOx Limits for Boilers, Steam Generators and Process Heaters Greater than or Equal to 5 MMBtu/hr</td>
<td>2010 – 2012</td>
<td>2020</td>
<td>ROC: 0.0000, NOx: 0.0080</td>
</tr>
<tr>
<td>330 (Revised)</td>
<td>R-SC-2</td>
<td>Surface Preparation and Coating of Metal Parts and Products (Revisions to Include Solvent Cleaning Requirements)</td>
<td>2010 - 2012</td>
<td>2020</td>
<td>ROC: 0.0212, NOx: 0.0000</td>
</tr>
<tr>
<td>337 (Revised)</td>
<td>R-SC-2</td>
<td>Surface Preparation and Coating of Aircraft or Aerospace Vehicle Parts and Products (Revisions to Include Solvent Cleaning Requirements)</td>
<td>2010 - 2012</td>
<td>2020</td>
<td>ROC: 0.0000, NOx: 0.0006</td>
</tr>
<tr>
<td>351 (Revised)</td>
<td>R-SC-5</td>
<td>Surface Preparation and Coating of Wood Products (Revisions to Include Solvent Cleaning Requirements and to Incorporate any New or Modified State Suggested Control Measure Provisions)</td>
<td>2010 - 2012</td>
<td>2020</td>
<td>ROC: 0.0019, NOx: 0.0000</td>
</tr>
<tr>
<td>349 (Revised)</td>
<td>R-SL-5</td>
<td>Polyester Resin Operations (Revisions to Include Solvent Cleaning Requirements)</td>
<td>2010 – 2012</td>
<td>2020</td>
<td>ROC: 0.0058, NOx: 0.0005</td>
</tr>
<tr>
<td>353 (Revised)</td>
<td>R-SL-9</td>
<td>Adhesives and Sealants (Revisions to Include Solvent Cleaning Requirements)</td>
<td>2010 - 2012</td>
<td>2020</td>
<td>ROC: 0.0050, NOx: 0.0000</td>
</tr>
<tr>
<td>Rule (Status)</td>
<td>CAP Control Measure ID</td>
<td>Description</td>
<td>Adoption Schedule</td>
<td>Year for the Emission Reduction Estimate</td>
<td>Emission Reductions (Tons per Day) from the Control Measure When Fully Implemented (Unless Otherwise Specified)</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>354 (Revised)</td>
<td>R-SL-7</td>
<td>Graphic Arts and Paper, Film Foil, and Fabric Coatings (Revisions to Rule 354 to Include Solvent Cleaning and Additional Requirements for Rotogravure, Flexographic, Lithographic, Letterpress, and Screen Printing)</td>
<td>2010 – 2012</td>
<td>2020</td>
<td>0.0579</td>
</tr>
<tr>
<td>352 (Revised)</td>
<td>N-XC-1</td>
<td>Residential Water Heaters; Residential and Commercial Space Heaters (Revisions to Reduce the NOx Limits on the Residential Water Heaters to 15 ppmv)</td>
<td>2013 – 2015</td>
<td>2020</td>
<td>---</td>
</tr>
<tr>
<td>323 (Revised)</td>
<td>R-SC-1</td>
<td>Architectural Coatings (Revision to Regulate General Solvent Wipe Cleaning and the Cleaning of Application Equipment used in Architectural Coating Applications and to Incorporate any New or Modified State Suggested Control Measure Provisions)</td>
<td>2013 – 2015</td>
<td>2020</td>
<td>0.0887</td>
</tr>
<tr>
<td>361 (Revised)</td>
<td>N-XC-4</td>
<td>Small Boilers, Steam Generators, and Process Heaters (Greater than 2 MMBtu/hr to Less than 5 MMBtu/hr)</td>
<td>2013 – 2015</td>
<td>2020</td>
<td>---</td>
</tr>
</tbody>
</table>
### Table 2-1

**Proposed Emission Control Measures**

<table>
<thead>
<tr>
<th>Rule (Status)</th>
<th>CAP Control Measure ID</th>
<th>Description</th>
<th>Adoption Schedule</th>
<th>Year for the Emission Reduction Estimate</th>
<th>Emission Reductions (Tons per Day) from the Control Measure When Fully Implemented (Unless Otherwise Specified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>321 (Revised)</td>
<td>R-SL-2</td>
<td>Solvent Cleaning Machines and Solvent Cleaning (Revisions to Lower ROC-Content Limits)</td>
<td>2013 – 2015</td>
<td>2020</td>
<td>0.0273</td>
</tr>
<tr>
<td>325, 326, 343, &amp; 344 (Revised)</td>
<td>R-PP-1, R-PT-1, and R-PT-2</td>
<td>Crude Oil Production and Separation and Storage of Reactive Organic Compound Liquids; Petroleum Tank Degassing; and Petroleum Sumps, Pits and Well Cellars (Add New Solvent Cleaning Provisions (25 grams per liter))</td>
<td>2013 – 2015</td>
<td>2020</td>
<td>0.0074</td>
</tr>
<tr>
<td><strong>Total for the local control measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.2161</td>
</tr>
</tbody>
</table>
The control measures listed in Table 2-1 can be organized into two general groups, based on the emissions control technologies or strategies that each of these groups uses. These two groups will be referred to throughout the EIR, and the environmental impacts of the control measures will be evaluated in terms of these two types of emission control strategies.

**Group 1: Solvent Cleaning ROC Limits and Other Reductions in Material ROC Content.**

Revisions to rules are proposed that will result in a lowering of ROC limits (to 25 or 50 grams per liter, depending on the specific industrial application) for solvent cleaning activities. The actual sequence of the proposed rule revisions may change within their respective near- or mid-term timeframes. To meet the requirement to adopt every feasible control measure, there may also be revisions to:

4) The ROC content limits for other process materials (e.g., coatings, adhesives, sealants, inks, resins, wash primers, fountain solution),

5) The maximum allowable ROC content limit for solvent cleaning activities that is lower than 50 grams per liter (e.g., a limit of 25 grams of ROC per liter), and

6) The equipment and operation requirements.

Rules proposed for revision that fall under Group 1 are listed below:

- Rule 330, *Surface Preparation and Surface Coating of Metal Parts and Products*.
- Rule 337, *Surface Preparation and Surface Coating of Aircraft or Aerospace Vehicle Parts and Products*.
- Rule 351, *Surface Preparation and Surface Coating of Wood Products*.
- Rule 349, *Polyester Resin Operations*.
- Rule 353, *Adhesives and Sealants*.
- Rule 354, *Graphic Arts and Paper, Film, Foil, and Fabric Coatings*.
- Rule 321, *Solvent Cleaning Machines and Solvent Cleaning*.
- Rule 325, *Crude Oil Production and Separation*.
- Rule 343, *Petroleum Storage Tank Degassing*.
- Rule 344, *Petroleum Sumps, Pits and Well Cellars*.

**Group 2: Combustion Equipment NO\(_x\) Limits.**

Table 2-1 includes the following control measures for combustion equipment (other than internal combustion engines), ranked from the smallest to the largest units summarized in the chart below:
<table>
<thead>
<tr>
<th>Control Measure</th>
<th>Rule</th>
<th>Equipment Subject to the Control Measure</th>
<th>Heat Input Range of Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-XC-1</td>
<td>352</td>
<td>Residential water heaters</td>
<td>Less than 75,000 British thermal units (Btu) per hour (hr)</td>
</tr>
<tr>
<td>N-XC-2</td>
<td>360</td>
<td>Large water heaters and small boilers, steam generators, and process heaters</td>
<td>Greater than or equal to 75,000 Btu/hr to 2 million (MM) Btu/hr</td>
</tr>
<tr>
<td>N-XC-4</td>
<td>361</td>
<td>Small boilers, steam generators, and process heaters</td>
<td>Greater than 2 MMBtu/hr to less than 5 MMBtu/hr</td>
</tr>
<tr>
<td>N-XC-5</td>
<td>342</td>
<td>Boilers, steam generators, and process heaters</td>
<td>Greater than or equal to 5 MMBtu/hr</td>
</tr>
</tbody>
</table>

Rule 352, *Natural Gas-Fired Fan-Type Central Furnaces and Residential Water Heaters.*

For the revision to Rule 352, the APCD proposes that the natural gas-fired water heater NO\textsubscript{X} limit be lowered to 15 parts per million by volume (ppmv) of NO\textsubscript{X} at 3 percent oxygen (0.0175 pound of NO\textsubscript{X} per MMBtu on a heat input basis). In addition, the Rule 352.E.1 provision on certification tests will be revised to accept only certifications performed per Rule 352 or South Coast AQMD (SC) Rules 1111 (furnaces) or 1121 (water heaters). Rule 352 will remain a *point-of-sale* type rule and the emission limits for central furnaces will remain unchanged.

Rule 360, *Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers.*

Currently Rule 360 has two NO\textsubscript{X} limits:

1) 55 ppmv at 3 percent oxygen for units in the 0.075 MMBtu/hr to 0.4 MMBtu/hr range.

2) 30 ppmv at 3 percent oxygen for units in the greater than 0.4 MMBtu/hr range to 2.0 MMBtu/hr range.

This control measure would reduce the NO\textsubscript{X} limits to 20 ppmv at 3 percent oxygen (0.024 lb/MMBtu of heat input) for both categories. Certain specific provisions, such as higher limits for instantaneous water heaters and pool heaters and for the use of natural gas that does not meet Public Utility Company (PUC) specifications or liquid fuel, will also be considered. Rule 360 will remain a *point-of-sale* type rule.


The proposed revision to Rule 361, would involve a NO\textsubscript{X} limit of 15 ppmv at 3 percent oxygen when burning gaseous fuel. Under the proposed revised Rule 361, some equipment categories will have higher limits, which is similar to provisions in other district rules. Thermal fluid heaters, for example, will have a NO\textsubscript{X} limit of 30 ppm (same as the current Rule 361 limit).
Rule 342, Control of Oxides of Nitrogen (NO\textsubscript{X}) from Boilers, Steam Generators and Process Heaters.

For revisions to Rule 342, the APCD plans to revise the rule to have a NO\textsubscript{X} limit of 15 ppmv at 3 percent oxygen when burning gaseous fuel. Under the proposed revised Rule 342, some equipment categories will have higher limits, which is similar to provisions in other district rules. Some specific equipment categories will be subject to higher NO\textsubscript{X} limits (e.g., boilers burning a mixture of PUC quality gas and vapor recovery system hydrocarbons, and thermal fluid heaters, will have a NO\textsubscript{X} limit of 30 ppm).
3.0 **Environmental Setting**

The following section includes a description of the physical environmental conditions in the project area, which consists of the entire Santa Barbara County jurisdictional boundaries, as they existed at the time the NOP was published. These baseline physical conditions are the conditions by which the APCD, as the CEQA lead agency for the project, determines whether impacts are significant. As described in CEQA Guidelines Section 15125, the description of the environmental setting should be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives.

3.1 **AIR QUALITY**

3.1.1 **Physical Setting**

*Climate and Meteorology*

Santa Barbara County’s air quality is influenced by both local topography and meteorological conditions. Surface and upper-level wind flow varies both seasonally and geographically in the County and inversion conditions common to the area can affect the vertical mixing and dispersion of pollutants. The prevailing wind flow patterns in the County are not necessarily those that cause high ozone values. In fact, high ozone values are often associated with atypical wind flow patterns.

Meteorological and topographical influences that are important to air quality in Santa Barbara County are as follows:

- Semi-permanent high pressure that lies off the Pacific Coast leads to limited rainfall (around 18 inches per year), with warm, dry summers and relatively damp winters. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast and in the high 80s to 90s inland. During winter, average minimum temperatures range from the 40s along the coast to the 30s inland. Additionally, cool, humid, marine air causes frequent fog and low clouds along the coast, generally during the night and morning hours in the late spring and early summer. The fog and low clouds can persist for several days until broken up by a change in the weather pattern.

- In the northern portion of the County (north of the ridgeline of the Santa Ynez Mountains), the sea breeze (from sea to land) is typically northwesterly throughout the year while the prevailing sea breeze in the southern portion of the County is from the southwest. During summer, these winds are stronger and persist later into the night. At night, the sea breeze weakens and is replaced by light land breezes (from land to sea). The alternation of the land-sea breeze cycle can sometimes produce a “sloshing” effect, where pollutants are swept offshore at night and subsequently carried back onshore during the day. This effect is exacerbated during periods when wind speeds are low.

- The terrain around Point Conception, combined with the change in orientation of the coastline from north-south to east-west can cause counterclockwise circulation (eddies) to form east of the Point. These eddies fluctuate temporally and spatially, often leading to highly variable winds along the southern coastal strip. Point Conception also marks the change in the prevailing surface winds from northwesterly to southwesterly.
Santa Ana winds are northeasterly winds that occur primarily during fall and winter, but occasionally in spring. These are warm, dry winds blown from the high inland desert that descend down the slopes of a mountain range. Wind speeds associated with Santa Ana’s are generally 15-20 mph, though they can sometimes reach speeds in excess of 60 mph. During Santa Ana conditions, pollutants emitted in Santa Barbara County, Ventura County, and the South Coast Air Basin (the Los Angeles region) are moved out to sea. These pollutants can then be moved back onshore into Santa Barbara County in what is called a "post-Santa Ana condition." The effects of the post-Santa Ana condition can be experienced throughout the County. Not all post-Santa Ana conditions, however, lead to high pollutant concentrations in Santa Barbara County.

Upper-level winds (measured at Vandenberg Air Force Base once each morning and afternoon) are generally from the north or northwest throughout the year, but occurrences of southerly and easterly winds do occur in winter, especially during the morning. Upper-level winds from the south and east are infrequent during the summer. When they do occur during summer, they are usually associated with periods of high ozone levels. Surface and upper-level winds can move pollutants that originate in other areas into the County.

Surface temperature inversions (0-500 ft) are most frequent during the winter, and subsidence inversions (1000-2000 ft) are most frequent during the summer. Inversions are an increase in temperature with height and are directly related to the stability of the atmosphere. Inversions act as a cap to the pollutants that are emitted below or within them; ozone concentrations are often higher directly below the base of elevated inversions than they are at the earth’s surface. For this reason, elevated monitoring sites will occasionally record higher ozone concentrations than sites at lower elevations. Generally, the lower the inversion base height and the greater the rate of temperature increase from the base to the top, the more pronounced effect the inversion will have on inhibiting vertical dispersion. The subsidence inversion is very common during summer along the California coast, and is one of the principal causes of air stagnation.

Poor air quality is usually associated with "air stagnation" (high stability/restricted air movement). Therefore, it is reasonable to expect a higher frequency of pollution events in the southern portion of the County where light winds are frequently observed, as opposed to the northern part of the County where the prevailing winds are usually strong and persistent.

Air Quality Standards and Attainment Status

Both the Federal and State Clean Air Acts identify pollutants of specific importance, which are known as criteria pollutants. Ambient air quality standards are adopted by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (USEPA) to protect public health, vegetation, materials and visibility, shown in Table 3.1-1. State standards for ozone and both respirable (less than 10 microns in diameter—PM$_{10}$) and fine (less than 2.5 microns in diameter—PM$_{2.5}$) particles are more stringent than federal standards.
### Table 3.1-1
Ambient Air Quality Standards

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Concentration</th>
<th>Attainment Status</th>
<th>Primary</th>
<th>Secondary</th>
<th>Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>8 Hour</td>
<td>0.070 ppm</td>
<td>N&lt;sup&gt;8&lt;/sup&gt;</td>
<td>0.075 ppm (147 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>1 Hour</td>
<td>0.09 ppm</td>
<td>A</td>
<td>0.12 ppm (235 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>8 Hour</td>
<td>9.0 ppm</td>
<td>A</td>
<td>9.0 ppm (10 mg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>1 Hour</td>
<td>20.0 ppm</td>
<td>A</td>
<td>35.0 ppm (40 mg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Nitrogen Dioxide&lt;sup&gt;10&lt;/sup&gt;</td>
<td>Annual Average</td>
<td>0.03 ppm</td>
<td>A</td>
<td>0.053 ppm (100 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>1 Hour</td>
<td>0.18 ppm</td>
<td>A</td>
<td>0.100 ppm (188 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Same as Primary</td>
<td>U</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Annual Average</td>
<td>--</td>
<td>--</td>
<td>0.03 ppm (80 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 Hour</td>
<td>0.04 ppm&lt;sup&gt;6&lt;/sup&gt;</td>
<td>A</td>
<td>0.14 ppm (365 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>--</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>3 Hour</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.5 ppm (1,300 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>1 Hour</td>
<td>0.25 ppm</td>
<td>A</td>
<td>0.075 ppm (147 µg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Respirable Particulate Matter (PM&lt;sub&gt;10&lt;/sub&gt;)</td>
<td>Annual Arithmetic Mean</td>
<td>20 µg/m&lt;sup&gt;3&lt;/sup&gt;</td>
<td>N</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 Hour</td>
<td>50 µg/m&lt;sup&gt;3&lt;/sup&gt;</td>
<td>N</td>
<td>150 µg/m&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td>Fine Particulate Matter (PM&lt;sub&gt;2.5&lt;/sub&gt;)</td>
<td>Annual Arithmetic Mean</td>
<td>12 µg/m&lt;sup&gt;3&lt;/sup&gt;</td>
<td>U</td>
<td>15 µg/m&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>24 Hour</td>
<td>--</td>
<td>--</td>
<td>35 µg/m&lt;sup&gt;3&lt;/sup&gt;&lt;sup&gt;11&lt;/sup&gt;</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td>Sulfates</td>
<td>24 Hour</td>
<td>25 µg/m&lt;sup&gt;3&lt;/sup&gt;</td>
<td>A</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
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<td>-------------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Lead</td>
<td>Calendar Quarter</td>
<td>--</td>
<td></td>
<td>1.5 µg /m³</td>
<td>Same as Primary</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>30 Day Average</td>
<td>1.5 µg /m³</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rolling 3-month Average</td>
<td>--</td>
<td>--</td>
<td>0.15 µg /m³</td>
<td>--</td>
<td>U</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>1 Hour</td>
<td>0.03 ppm (42 µg/m³)</td>
<td>A</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vinyl Chloride (Chloroethene)</td>
<td>24 Hour</td>
<td>0.010 ppm (26 µg/m³)</td>
<td>A</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Visibility Reducing Particles[^7]</td>
<td>8 Hour (1000 to 1800 PST)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

[^1]: CALIFORNIA STANDARDS
[^2]: NATIONAL STANDARDS
[^3]: Concentration
[^4]: Primary
[^5]: Secondary
[^7]: Visibility Reducing Particles

A = Attainment, N = Nonattainment, U = Unclassified
**Table 3.1-1 (Footnotes)**

1) California standards for ozone, carbon monoxide, sulfur dioxide (1 hour), nitrogen dioxide and particulate matter - PM$_{10}$ and visibility reducing particles are values that are not to be exceeded. The sulfur dioxide (24-hour), sulfates, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded.

2) National standards, other than ozone and those based on annual averages or annual arithmetic means are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

3) Concentration expressed first in units in which it was promulgated. Equivalent units given in parenthesis are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. All measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4) National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than three years after that state’s implementation plan is approved by the Environmental Protection Agency (EPA).

5) National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the implementation plan is approved by the EPA.

6) At locations where the state standards for ozone and/or suspended particulate matter are violated. National standards apply elsewhere.

7) This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range when relative humidity is less than 70 percent.

8) This state 8-hour ozone standard went into effect in June, 2006.

9) This federal 1-hour ozone standard was revoked in 2005.

10) The state nitrogen dioxide (NO$_2$) ambient air quality standard was amended on February 22, 2007, to lower the 1-hour standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. EPA set a new one-hour NO$_2$ standard of 0.100 ppm on January 25, 2010 and retained the existing annual average standard of 0.053 ppm.

11) Effective December 18, 2006, the USEPA revoked the annual PM$_{10}$ standard and lowered the 24-hour PM$_{2.5}$ standard, with the changes reflected in the table.

Monitoring of ambient air pollutant concentrations is conducted by CARB, APCD and industry. Monitors operated by CARB and APCD are part of the State and Local Air Monitoring System (SLAMS). The SLAMS stations are located to provide local and regional air quality information. Monitors operated by industry, at the direction of the APCD, are called Prevention of Significant Deterioration (PSD) stations. PSD stations are required by the APCD to ensure that new and modified sources under APCD permit do not interfere with the County’s ability to attain or maintain air quality standards.

Santa Barbara County is currently in “attainment” or “unclassified” status for all federal (USEPA) ambient air quality standards. As indicated in Sections 1.0 and 2.0 of this EIR, the purpose of the 2010 Plan is to plan for attainment of the state 8-hour ambient air quality standard for ozone. Figure 3.1-1 presents the number of state ozone exceedances in Santa Barbara County during the period of 1988 to 2009. As shown in the figure, Santa Barbara County has experienced from as many as 42 days of exceedances of the state 1-hour ozone standard to no exceedance days in 2005. The number of state 8-hour ozone standard exceedance days ranges from 98 in 1989 to 10 in 2009.
As indicated in Table 3.1-1, Santa Barbara County is also classified as nonattainment for the state ambient air quality standard for particulate matter less than 10 microns in diameter (PM$_{10}$).

**Figure 3.1-1**  
**Number of Days Exceeding State 1-hour and 8-hour Ozone Standards**  
**Santa Barbara County**  
**1988 - 2009**

### 3.1.2 Regulatory Setting

The Federal Clean Air Act, as amended in 1990, establishes federal air quality standards, federal permit requirements for major sources, and regulations for hazardous air pollutants. There are many federal laws that pertain to emissions standards for criteria air pollutants and hazardous air pollutants. Many of the federal programs and emissions standards are incorporated in APCD’s Rules and Regulations and are implemented and enforced as part of the APCD’s stationary source permitting and compliance programs.

CARB establishes ambient air quality standards as authorized by the California Health & Safety Code, Section 39606. The standards are established for protection of public health, safety and welfare, and consider protection for even the most sensitive individuals in our communities. The California standards are generally more health protective than the federal standards, and also include standards for some pollutants that are not addressed by federal standards.

Regulation of mobile sources of air pollution, including motor vehicles and heavy-duty diesel trucks, is done by CARB. CARB also regulates air pollutants from consumer products such as household cleaners and beauty products and establishes motor vehicle fuel specifications for gasoline and diesel fuel to minimize air quality impacts. In order to reduce emissions from toxic air contaminants,
CARB has implemented airborne toxic control measures (ATCMs) that apply to a variety of industries. As part of its Diesel Risk Reduction Plan, CARB has implemented a number of ATCMs that apply specifically to diesel engines and diesel vehicles to minimize the carcinogenic health risk that results from emissions of diesel particulate matter.

Locally, the APCD has regulatory authority over air pollutant emissions from stationary sources. APCD’s Rules and Regulations have been adopted and revised over time to meet the specific air quality needs of Santa Barbara County with consideration of the types of industries that operate in the region.

3.2 BIOLOGICAL RESOURCES

3.2.1 Physical Setting

The ecology of Santa Barbara is complex and diverse. Many different habitat types occur within the region including the coastal and inland wetlands, riparian habitats, native chaparral communities, oak woodlands, and other sensitive habitats.

Santa Barbara County is transitional between the Coast Ranges Geologic Province to the north, with mountain ranges trending north-south, and the Transverse Ranges Geologic Province to the south, with mountain ranges oriented in an east-west direction. The transitional geography creates microclimates along steep slopes. The northern north-south trending slopes exhibit more extreme climate differences on their east- and west-facing slopes than are observed on the east-west trending southern mountains. The results of these well-defined microclimates are plant communities associated with slope exposure in addition to soil type, elevation, etc.

The Santa Barbara County region is home to approximately 1,400 plant species (Smith, 1976). Approximately 140 endemic species occur in the County, with several rare species as well. Many non-native species have become naturalized, especially in agricultural areas and disturbed soil.

3.2.1.1 Flora

Santa Barbara’s plant communities include Coastal Strand, three forms of Coastal Scrub (Coastal Bluff Scrub, Coastal Dune Scrub, and Coastal Sage Scrub), Grassland, Chaparral (including Burton Mesa Chaparral), Sagebrush Scrub Oak Savannah and Woodland, three forms of Evergreen Forest (Mixed Evergreen, Closed-cone Pine Forest and Douglas Fir Forest), and diverse and intergrading wetland communities, including Coastal Saltmarsh, Freshwater Marsh and Riparian Woodland. These communities are described in detail in the Conservation Element of the County’s General Plan.

3.2.1.2 Fauna

The variety of habitats in the region benefits many animal species. Birds are abundant in the County, including many migratory varieties (CNDDDB, 2010). Many small mammals occur in a variety of habitats. Large mammals (i.e. mule deer, coyote, and gray fox) are less common. Numerous species of amphibians and reptiles occur in the region including the Pacific tree frog, fence lizard, common king snake, and western rattlesnake.
3.2.1.3 Sensitive Habitats

The coastal terraces, plains, and foothills support grassland, scrubland, and woodland habitats. A significant amount of land on the coastal plain between the ocean bluffs and Santa Ynez Mountains is covered by urban and agricultural uses. Chaparral is found on the steeper slopes above the coastal plain. Forest communities occur at higher elevations in the Santa Ynez Mountains, including mixed evergreen forests on the northern slopes.

The County’s numerous creeks have carved deep canyons through the mountains and hills. These creeks produce lush riparian woodlands composed of large sycamores, willows, cottonwoods, alders, and live oaks (Chambers, 1986). Riparian woodlands can provide nesting habitat for rare birds such as Cooper’s hawk, Least Bell’s vireo, Swainson’s thrush, and the yellow breasted chat (Lehman, 1982). Riparian habitats in the County have diminished over time.

Grasses, sedges, and dwarf brush species are dominant in the Santa Barbara County estuaries and fresh water wetlands. Estuarine wetlands (salt marshes) occur at the mouths of many of the coastal streams.

While most of the accessible lower elevation habitats have been modified by agricultural or urban developments, mountain slopes provide large expanses of native habitat that have been protected from human disturbance. This is due to the rugged terrain and often dense vegetation found within the Santa Ynez Mountains, most of which is located in the Los Padres National Forest. Unincorporated county land and the Local Coastal Plan provide a specific overlay zone district for Environmentally Sensitive Habitats (ESHs) and establish a set of policies to ensure protection from development.

The following is a listing of plant communities in Santa Barbara County (SBC Comprehensive Plan, 2010; SBC Comprehensive Plan, 2009a). Detailed descriptions of the communities can be found in these documents. An asterisk (*) Indicates a rare or endangered community, as identified in the Conservation Element (2010).

- Coastal Bluff*
- Coastal Strand*
- Coastal Salt Marsh*
- Freshwater Marsh*
- Coastal Sage (Soft Chaparral)
- Native Grassland*
- Canyon Oak - Big Cone Spruce*
- Coulter Pine Forest*
- Southern Oak Woodland*
- Closed Cene Pine Forest (Bishop Pine)*
- Douglas Fir Forest*
- Interior Cypress Forest*
- Chaparral (Hard Chaparral)
- Montane Coniferous Forest*
- Mixed Evergreen Forest*
3.2.1.4 Sensitive Species

There are several classifications of sensitive species developed by various federal, state, and local agencies. Classifications are based on the mapped biological information primarily available from the California Natural Diversity Database, Santa Barbara County rare plant and wetlands maps available at the County Planning Department. Table 3.2-1 lists endangered or threatened species that have been identified in the County (CNDDB, 2010).

### Table 3.2-1

**Threatened or Endangered Species in Santa Barbara County**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Federal Status</th>
<th>California Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>California condor</td>
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<td>Endangered</td>
</tr>
<tr>
<td>light-footed clapper rail</td>
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<td>Endangered</td>
</tr>
<tr>
<td>California least tern</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>southwestern willow flycatcher</td>
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<td>Endangered</td>
</tr>
<tr>
<td>least Bell's vireo</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>unarmored threespine stickleback</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>giant kangaroo rat</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>blunt-nosed leopard lizard</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>Gaviota tarplant</td>
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<td>Endangered</td>
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</tr>
<tr>
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<td>Endangered</td>
</tr>
<tr>
<td>California jewel-flower</td>
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<td>Endangered</td>
</tr>
<tr>
<td>Santa Barbara Island dudleya</td>
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<td>Endangered</td>
</tr>
<tr>
<td>Santa Cruz Island bush-mallow</td>
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<td>Endangered</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Santa Cruz Island fox</td>
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<td>Threatened</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>La Graciosa thistle</td>
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</tr>
<tr>
<td>Gambel's water cress</td>
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</tr>
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<td>California tiger salamander</td>
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<td>Guadalupe fur-seal</td>
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<td>southern steelhead - southern California DPS</td>
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<tr>
<td>Contra Costa goldfields</td>
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<tr>
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<tr>
<td>island malacothrix</td>
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<td>None</td>
</tr>
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<td>Species/Species Name</td>
<td>Status</td>
<td>Category</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------</td>
<td>------------</td>
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</tr>
<tr>
<td>Hoffmann’s rock-cress</td>
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</tr>
<tr>
<td>Santa Cruz Island rock cress</td>
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</tr>
<tr>
<td>Santa Cruz Island fringepod</td>
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</tr>
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<td>Santa Rosa Island manzanita</td>
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</tr>
<tr>
<td>northern Channel Islands phacelia</td>
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<td>None</td>
</tr>
<tr>
<td>Hoffmann’s slender-flowered gilia</td>
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</tr>
<tr>
<td>soft-leaved paintbrush</td>
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<td>None</td>
</tr>
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<td>Lompoc yerba santa</td>
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<td>Rare</td>
</tr>
<tr>
<td>box bedstraw</td>
<td>Endangered</td>
<td>Rare</td>
</tr>
<tr>
<td>California red-legged frog</td>
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</tr>
<tr>
<td>western snowy plover</td>
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</tr>
<tr>
<td>island night lizard</td>
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<td>None</td>
</tr>
<tr>
<td>vernal pool fairy shrimp</td>
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<td>None</td>
</tr>
<tr>
<td>Kern primrose sphinx moth</td>
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<td>None</td>
</tr>
<tr>
<td>island rush-rose</td>
<td>Threatened</td>
<td>None</td>
</tr>
<tr>
<td>Santa Cruz Island dudleya</td>
<td>Threatened</td>
<td>Rare</td>
</tr>
<tr>
<td>Xantus’ murrelet</td>
<td>Candidate</td>
<td>Threatened</td>
</tr>
<tr>
<td>bald eagle</td>
<td>Delisted</td>
<td>Endangered</td>
</tr>
<tr>
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<td>Endangered</td>
</tr>
<tr>
<td>Santa Cruz Island bird’s-foot trefoil</td>
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<td>Endangered</td>
</tr>
<tr>
<td>seaside bird’s-beak</td>
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<td>Endangered</td>
</tr>
<tr>
<td>bank swallow</td>
<td>None</td>
<td>Threatened</td>
</tr>
<tr>
<td>Nelson’s antelope squirrel</td>
<td>None</td>
<td>Threatened</td>
</tr>
<tr>
<td>surf thistle</td>
<td>None</td>
<td>Threatened</td>
</tr>
<tr>
<td>beach spectaclepod</td>
<td>None</td>
<td>Threatened</td>
</tr>
</tbody>
</table>

3.2.2 Regulatory Setting

Biological resources such as endangered species, wetlands, and riparian areas are governed by state and federal agencies. The U.S. Army Corps of Engineers has jurisdiction over waterways and wetlands. The U.S. Fish and Wildlife Service is responsible for implementing the Federal Endangered Species Act. The Regional Water Quality Control Board regulates the discharge of wastewater into the environment. The California Coastal Commission regulates development in the Coastal Zone. The California Department of Fish and Game has oversight over development near wetlands and creeks.

3.3 HAZARDS/RISK OF UPSET

3.3.1 Physical Setting

The potential for hazards exists in the production, storage, transport, and use of hazardous material. Hazardous materials may be found at industrial production and processing facilities. Some facilities produce hazardous materials as their end product; other facilities use hazardous materials in the
production process. Consumer products such as solvents, paint, and gasoline are examples of hazardous materials. Consumer products that can be considered hazardous materials are stored at production facilities and bulk warehouses for distribution. Hazardous materials may be transported by rail, pipeline, and highway. Potential hazards in the processing and handling of hazardous materials depend on the properties of the material and the nature of their processing. One possible hazard is an accidental release of volatile chemicals from a production or processing facility or a storage or transport container. Under certain atmospheric conditions, a toxic gas cloud may migrate and expose individuals at a distance. Rupture of a storage or transport container containing flammable materials can result in a flash fire or explosion. At processing facilities, accidental build-up of pressure or accidental contact of hazardous materials with an ignition source may also result in fire or explosion. Accidental explosions or fires from hazardous substances may result in burns to exposed individuals in the vicinity.

3.3.2 Regulatory Setting

The U.S. Department of Transportation, Office of Pipeline and Hazardous Materials Safety Administration (PHMSA) is the federal entity that compiles statistics on incidents involving the accidental release of hazardous materials. The California Hazardous Materials Incident Reporting System (CHMIRS) is the state-level database that compiles incidents involving hazardous materials and is maintained by the Governor’s Office of Emergency Services. In 2009, in Santa Barbara County, 267 spills of hazardous materials were reported to the Office of Emergency Services.

3.4 HAZARDOUS MATERIALS

3.4.1 Physical Setting

The County’s largest generator of hazardous wastes is the oil and gas industry, which generates about 68% (by weight) of the County's hazardous wastes. Other large generating industries include auto dealers and service stations (7%), utilities (5%) and the military (3%) (1991 AQAP EIR). There are no Class I hazardous waste landfills in the County and most hazardous waste is hauled either by truck to the Chemical Waste Management Landfill in Kettleman City, California or by rail to Salt Lake City, Utah. Small business and household hazardous wastes are collected at the Hazardous Waste Collection Facility at the University of California's Santa Barbara campus and shipped out of the County periodically. The facility opened in 1992 and has since been operating to decrease the illegal disposal of small amounts of hazardous wastes.

3.4.2 Regulatory Setting

Numerous federal, state, and local regulations regarding use, storage, transportation, handling, processing and disposal of hazardous materials and waste have been adopted since the passage of the federal Resource Conservation and Recovery Act (RCRA) of 1976. The goal of RCRA is to assure adequate tracking of hazardous materials from generation to proper disposal. California Fire Codes (CFC) Articles 79, 80 et seq., which augment RCRA, are the primary regulatory guidelines used to govern the storage and use of hazardous materials. The CFC also serves as the principal enforcement document from which corresponding violations are written. Pursuant to SB 1082 (1993), the State of California has adopted regulations to consolidate six hazardous materials management programs.
under a single, local agency, known as the Certified Unified Program Agency (CUPA). The CUPA provides regulatory oversight for the following program elements:

- Aboveground Storage Tanks Hazardous Materials Release Response Plans and Inventories
- California Accident Prevention Program
- Hazardous Waste Programs: Generator programs and Onsite Hazardous Waste Treatment Activities
- Underground Tank Program
- Above Ground Petroleum Storage Act Requirements For Spill Prevention, Control, and Countermeasure Plans

The Santa Barbara County Fire Department Hazardous Materials Unit has been designated as the administering agency for CUPA within the County of Santa Barbara. Accordingly, the County Fire Department compiles and maintains the Hazardous Materials Business Plan database, which is a list of businesses that meet the threshold criteria for use, storage, or disposal of hazardous materials, compressed gases and/or hazardous waste. In addition to conducting annual facility inspections, the Hazardous Materials Program is involved with hazardous materials emergency response, investigation of the illegal disposal of hazardous waste, public complaints, and storm water illicit discharge inspections.

Transportation of hazardous materials on highways falls under federal legislation; however, authority is delegated to various state and local agencies that are focused on specific aspects of hazardous materials and transportation. The Hazardous Waste Control Act establishes the California Department of Health Services (DHS) as the lead agency in charge of the implementation of the RCRA program. However, when the California Environmental Protection Agency (California EPA) was created in 1991, the Toxic Substances Control Program under DHS became the new Department of Toxic Substances Control (DTSC ), making the DTSC the RCRA lead agency. The Department of Toxic Substances Control (DTSC) under the California EPA regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC requires that hazardous waste shipped off-site be documented by a filed manifest identifying the type and quantity of wastes in the shipment and the origination and destination points. The DTSC develops regulations based on the RCRA and the California Health and Safety Code. The California Health and Safety Code is the collection of state laws that govern, among other things, the handling of hazardous waste. Division 20, Chapter 6.5, of the Code deals with Hazardous Waste Control and Article 6 of this chapter deals with transportation of hazardous waste.

State and local agencies such as the California Highway Patrol (CHP), State of California Department of Transportation (Caltrans), and the Santa Barbara County Fire Department are responsible for the enforcement of state and federal regulations and responding to hazardous materials transporting emergencies. The CHP establishes state and federal hazardous material truck routes and has lead responsibility over hazardous material spills on State highways. If coordination of additional agencies is required at the scene of a transportation accident, the County Fire Department is responsible for their coordination. Local law enforcement agencies and the CHP are continually assessing strategies to prevent and reduce the impact of accidents involving hazardous material transport.
3.5 HYDROLOGY AND WATER QUALITY

3.5.1 Physical Setting

The discussion of existing hydrology and water quality resources is divided into discussions of surface water, groundwater, and water quality.

3.5.1.1 Surface Water

Santa Barbara County’s surface water system includes two major river systems, a few perennial streams, and many seasonal and intermittent streams.

The Cuyama River forms most of the northern boundary of the County and feeds into the Santa Maria River. The Twitchell Reservoir is located on the Cuyama River. The Sisquoc River, which also terminates at the Santa Maria River, spans across the central portion of the County from east to west, originating in the Sierra Madre Mountains. The Santa Maria River terminates at the Pacific Ocean approximately five miles north of Point Sal.

The Santa Ynez Watershed is bounded by the San Rafael Mountains to the north and the Santa Ynez Mountains to the south. The Santa Ynez River runs west from the northern side of the Santa Ynez Mountains and flows into the Pacific Ocean approximately seven miles northwest of Lompoc. Major impoundments of South Coast community water on the Santa Ynez River include Cachuma Lake and Reservoir, Gibraltar Reservoir, and Jameson Lake and Reservoir.

Many small watersheds between the Santa Maria and Santa Ynez rivers drain agricultural lands and empty into the Pacific, generally running east to west. South of the Santa Ynez Mountains, along the South Coast, numerous streams run north to south emptying into the Santa Barbara Channel. Most of these minor streams are dry for most of the year, flowing only briefly after major rain events. Alluvial deposits along streams may absorb water during the rainy season, releasing it over time into the summer. These minor streams are not generally sources of drinking water beyond natural aquifer recharge. The winter months experience the highest concentration of rainfall, with the summer and fall months being generally dry. Perennial streams draw from groundwater during approximately half the year. Heavy rains result in rapid, voluminous runoff through dry streambeds.

3.5.1.2 Groundwater

The majority of potable water for residential and agricultural use countywide comes from groundwater. Thirteen major groundwater regions have been delineated (SBC Public Works Dept., 2009), which include the Carpinteria, Montecito, Santa Barbara, Goleta, Buellton Uplands, Santa Ynez River Uplands, Lompoc, Santa Maria, and Cuyama groundwater basins. A water basin is said to be in overdraft when the average annual demand for water in a groundwater basin exceeds the maximum amount of water that withdrawn without inducing a drop in water level. Groundwater basins currently in a state of overdraft include: the Santa Ynez Uplands, Lompoc, San Antonio, Santa Maria, and Cuyama groundwater basins.
Rock aquifers also occur in the County’s many stream canyons. A typical consolidated rock aquifer underlies a canyon watershed collecting percolated rain water. Aquifers may also flow along intermittent streams where water collects in the porous subsurface rock.

### 3.5.1.3 Water Quality

The County’s groundwater basins vary in water quality. As the water volumes in the groundwater basins gradually decline, contributing factors degrading water quality become increasingly concentrated. These factors include public and private sewage treatment systems, agricultural runoff, and seawater intrusion to aquifers.

### 3.5.2 Regulatory Setting

Many state and federal plans, policies, and regulations govern water resources. The Federal Clean Water Act is the law that establishes standards and goals for toxic contaminants and other pollution from surface water. The Regional Water Quality Control Board (RWQCB) is the local authority that implements state and federal regulations. The Central Coast Regional Water Quality Control Board (RWQCB) is responsible for monitoring impacted water bodies, and evaluating storm water discharge and groundwater recharge from new development. The RWQCB manages the Storm Water Management Program and the National Pollutant Discharge Elimination System Permit Program. The County’s Flood Control Agency maintains flood control facilities in the County.

### 3.6 LAND USE/PLANNING

#### 3.6.1 Physical Setting

Santa Barbara County encompasses approximately 1,383,000 acres. The Los Padres National Forest covers approximately 44 percent of central and eastern portions of the County (608,520 acres), and is the largest single land use in Santa Barbara County. Land uses occurring in the National Forest include recreation, protected watershed for reservoirs, limited grazing, and mining. Of the remaining area outside of the National Forest, over 70 percent is in private agricultural cultivation or grazing uses and 10 percent is included in Vandenberg Air Force Base (VAFB) along the western coast of the County. There are a total of 20 county day-use parks. In addition, the County contains five state park facilities located along the coast. The Santa Ynez Mountains naturally divide the County into two main regions, referred to as South County and North County.

The Southern portion of Santa Barbara County is comprised of a 60-mile-long, 3- to 8-mile-wide coastal strip south of the crest of the Santa Ynez Mountains between Point Conception on the west and Ventura County on the east. This region contains the County's most densely populated and developed area, which extends from Goleta to the Ventura County line. This area includes the cities of Santa Barbara, Goleta, and Carpinteria and unincorporated communities of Isla Vista, Montecito, and Summerland. The University of California at Santa Barbara occupies a large coastal area adjacent to the City of Goleta.

To the west of the county-designated urban boundary lies the Gaviota Coast, a sparsely developed coastal area that stretches west from Coal Oil Point in the Goleta area to Point Conception, and north to Point Sal. The principal land uses along the southern portion of the Gaviota Coast consist of
recreation, transportation (U.S. Highway 101), agriculture (grazing and orchards), and the southernmost extent of the Los Padres National Forest. Residential development is not the dominant land use, and consists primarily of sparse single-family residences on large agricultural properties.

Although most of the Gaviota Coast maintains a rural land use designation, there are also industrial onshore oil and gas processing facilities and related offshore oil and gas production, as well as a municipal landfill, all of which increase the industrial character of the region. Outdoor recreation is a prominent use along the southern portion of the Gaviota Coast due to the relatively rural natural environment and access to undeveloped beaches. Three state parks are located along the southern portion of the Gaviota Coast: Gaviota Beach State Park, Refugio State Beach, and El Capitan Beach. There is also a private campground at El Capitan Canyon.

The North County includes the coastal land extending from Gaviota westward around Point Conception and northward through Vandenberg Air Force Base to the San Luis Obispo County boundary at the Santa Maria River mouth. It is largely maintained in a rural state. This 64-mile stretch of coastline includes broad coastal terraces and bluffs, rolling oak woodlands, and rugged headlands with very little development. Hollister Ranch, lying to the west of Gaviota State Beach Park, includes 14,400 acres, and is subdivided into 135 ranch estates of 100 acres each. There are several oil-related onshore sites near Point Conception. Vandenberg Air Force Base occupies a large coastal area near the City of Lompoc.

Much of the northern county area is rural, with many properties in agricultural preserves. The Williamson Act enables the County to enter into contracts with agricultural property owners that limit the development of property to agricultural uses in exchange for lower property taxes. Agricultural uses are varied and include cut flowers, vegetables, fruits, livestock, and seed crops. The top five revenue-generating agricultural products in the County in 2009 were strawberries, broccoli, wine grapes, cauliflower, and lettuce (County of Santa Barbara, 2010).

Most of the County's active onshore oil and gas production is located in North County. Of the 16 active fields, 13 are located in North County, covering approximately 123 square miles. Oil fields occur in both rural and urban areas; onshore oil production has generally been on the decline since the 1970s. In 1988, there were 1,469 producing wells and 1,789 shut-in wells in the County, with a total annual production of 10,737,308 barrels of oil and 10.94 billion cubic feet of gas (California Department of Conservation, 1988). In 2008, there were 862 producing wells and 1,259 shut-in wells, with a total production of 3,009,057 barrels of oil and 2.58 billion cubic feet of gas (California Department of Conservation, 2009).

Urban development in the North County (both residential and commercial) has occurred in the cities of Solvang, Lompoc, Guadalupe, and Santa Maria as well as the unincorporated areas of Santa Ynez, Los Olivos, Vandenberg Village, Mission Hills, Orcutt, and Casmalia. Agriculturally zoned lands in and adjacent to the Santa Maria area are gradually being converted to residential and commercial uses.

3.6.2 Regulatory Setting

Land use and development patterns within the County are guided by plans developed for specific jurisdictions. Land use policies and programs in the unincorporated areas are defined in the Santa
Barbara County Comprehensive General Plan, which includes additional plans that are developed for specific communities, areas, or redevelopment areas. Each city within the County has its own General Plan, which may include numerous elements (such as housing elements or conservation elements) that are developed specifically for that city.

The Santa Barbara County Association of Governments (SBCAG), the functional Metropolitan Planning Organization for Santa Barbara County, is responsible for regional transportation planning. The SBCAG 2008 Regional Transportation Plan, or RTP, includes assumptions about transportation patterns and infrastructure projects for the entire County. SBCAG and APCD work closely to coordinate the RTP and clean air planning efforts, to ensure that the two plans do not interfere with either agency’s goals.

Several of the County’s jurisdictions have land use policies that specifically address air quality issues, as follows:

- Santa Barbara County has an Air Quality Supplement to the Land Use Element in the Comprehensive Plan. The Supplement establishes policies encouraging compact and mixed use development and discouraging vehicle dependent uses such as drive-throughs.
- The Circulation Element in the City of Santa Barbara’s General Plan outlines goals to achieve more transportation alternatives. The Circulation Element outlines numerous policies to encourage transit ridership; it also highlights bicycling and walking as important alternative transportation methods. The City of Santa Barbara’s Land Use Element discusses several aspects of land use including: residential density, jobs/housing balance, and urban/rural boundaries. These three land use topics directly affect Vehicle Miles Travelled (VMT) and thereby impact air quality. The policies established in the Land Use Element set boundaries for urban development, and establish criteria for development or subdivision of different land use types.
- The City of Goleta’s General Plan Conservation Element includes several policies related to air quality. These policies are consistent with APCD’s mission and relate to the siting of sensitive populations in relation to sources of air pollutants, control of air pollutant emissions from construction and operation of new development projects, and minimizing air pollution from transportation sources.
- The City of Lompoc’s General Plan Resource Management Element includes air quality enhancement policies relating to participation in regional air quality planning efforts, and collaboration with the APCD to minimize air quality impacts of new development.

3.7 NOISE

3.7.1 Physical Setting

Santa Barbara County contains several large-scale noise sources, primarily associated with transportation facilities including highways, railroads, and airports. Santa Barbara County contains four airports in the cities of Lompoc, Santa Ynez, Santa Maria, and Santa Barbara. An airfield at Vandenberg Air Force Base is used exclusively by military aircraft. Noise contours of flight paths in the vicinity of the County’s airport facilities were mapped in 1972. By the authority of the California Administrative Code, the County may not permit noise exposures exceeding 65 decibels (dB) Community Noise Equivalent Level (CNEL).
Trains are another large-scale transportation noise generator. The two railroad companies operating in Santa Barbara County are the Southern Pacific Railroad and the Santa Maria Valley Railroad. The Santa Maria Valley Railroad serves the Santa Maria area, providing freight transport from the Santa Maria Public Airport to the City of Guadalupe where it connects to the Southern Pacific Railroad. The Southern Pacific generally follows the coastline through the County to the greater region. The Southern Pacific also branches to provide service to the City of Lompoc and Vandenberg Air Force Base. On the Southern Pacific line at 100 feet from the tracks, noise levels approach 100 decibels “A-weighted”, a commonly used loudness measure referred to as “dB(A)”.

The U.S. Highway 101 is the main transport corridor for motor vehicles, and average noise levels at a distance of 50 feet from the highway range approximately from 78 dB(A) to 70 dB(A) depending on traffic speed, volume, time of day and other factors (SBC Comprehensive Plan, 2009b).

### 3.7.2 Regulatory Setting

Federal noise guidelines are developed by the U.S. Environmental Protection Agency (USEPA), the U.S. Department of Transportation (DOT), the Federal Aviation Administration (FAA), and the Federal Highway Administration (FHWA). The USEPA established noise criteria and measurement methods for interstate rail carriers under the authority of the Noise Control Act of 1972. The DOT has established noise measurement methods, instrument and monitoring standards, and allowable noise levels for motor vehicles. The FAA has authority over flight paths for all aircraft and FAA regulations establish noise level criteria for civilian fixed-wing aircraft. The FHWA has jurisdiction over national highways and has established standards for traffic noise levels for federally funded transportation projects.

At the state level, noise policy is developed by the California Department of Transportation (CalTrans). The California Administrative Code contains noise insulation standards for indoor noise level for multi-family residences, condominiums, and hotels. CalTrans must also provide local jurisdictions with a noise contour map along state highways. The California Motor Vehicle Code includes noise limits for new vehicles based on the vehicle type, with the majority limited to 80 dB(A) or less.

Local policy regulating noise is based on the local context of noise sources. Santa Barbara County’s Comprehensive Plan contains a Noise Element as required by California Government Code. The Noise Element contains several methods for reducing noise at the source and receptor. Cities may have policies regulating noise levels within their respective jurisdictional boundaries.

### 3.8 Public Services

#### 3.8.1 Physical Setting

The Santa Barbara County Fire Department provides fire protection services to the majority of the County with the exceptions of Montecito and Carpinteria/Summerland which have their own fire districts. The County Fire Department maintains 16 fire stations in communities across the County from New Cuyama in the northeast to Gaviota and Lompoc.
Law enforcement and public safety services for unincorporated portions of the County are provided by the County Sheriff’s Department. A number of jurisdictions within the County have their own police and fire departments, including Santa Maria, Santa Barbara, Goleta, Lompoc, Solvang, University of California at Santa Barbara and Vandenberg Air Force Base. Santa Barbara County Sheriff’s Department also maintains two correctional facilities in the County. The main county jail is located in the unincorporated southern county region and has an average daily population of approximately 640 inmates. The main jail is supplemented by a 256-bed medium security facility and a remote booking/temporary holding facility located in the Santa Maria region.

Santa Barbara County contains 22 school districts, with an enrollment of approximately 65,900 students. The County also contains two community college districts, one located in Santa Maria and another in Santa Barbara. The University of California at Santa Barbara is located near the City of Goleta. The Santa Barbara Public Library System is a department of the City of Santa Barbara and operates public library facilities in partnership with the County of Santa Barbara in seven locations: Santa Barbara, Solvang, Goleta, Carpinteria, Montecito, Santa Ynez and Los Olivos. The cities of Lompoc and Santa Maria operate their own libraries.

3.8.2 Regulatory Setting

Under Title 19, Public Safety, of California Code of Regulations (CCR), the California State Fire Marshal is responsible for developing regulations and standards to protect life and property against fire and explosion. Santa Barbara County and County Fire Department have also developed standards pertaining to roadways and fire protection. The Santa Barbara County Fire Department (SBCFD) evaluates fire protection with several measures including a firefighter to population ratio and a five-minute response time. The SBCFD has 16 fire stations throughout the County.

Due to the varying community needs for law enforcement and public safety services, there is no state or federal minimum standard regarding police service levels. The ratio of officers to residents varies based on local demographics, economic cycles, and department resources.

3.9 TRANSPORTATION/CIRCULATION

Santa Barbara County’s transportation infrastructure consists of paved roads, five major highway corridors (U.S. 101 and State Routes 1, 154, 166, and 246), six transit operators, one private intercity bus operator, five public airports, three railroad operators, and one harbor facility. These transport providers enable the movement of people and goods throughout the County.

3.9.1 Physical Setting

The County has approximately 2,013 miles of paved roads and includes two major highway corridors and 300 miles of bike routes. Most of the bicycle routes are painted on surface streets. Highway 101 is the primary interregional travel route, serving as the main traffic corridor through the region and connecting the incorporated communities and rural areas. Average daily traffic on Highway 101 through Santa Barbara is approximately 140,000 vehicles. Average daily traffic on Highway 101 through Santa Maria is approximately 45,000 vehicles (SBCAG, 2007). Although some congestion is attributable to the long-term widening of Highway 101, single-occupant commuting has increased by approximately 5 percent since 1980. In addition, long-distance commuting has increased
dramatically in the last twenty years, with approximately 20,000 workers commuting daily to Santa Barbara County from neighboring counties in 2000.

3.9.2 Regulatory Setting

Transportation planning and infrastructure are addressed at every level of government. The federal government delegates the responsibilities of maintaining the state highway system to the California Department of Transportation (CalTrans), which maintains Highway 101. The Santa Barbara Association of Governments (SBCAG) is designated as the Metropolitan Planning Organization and Regional Transportation Planning Agency. SBCAG prepares the Regional Transportation Plan and is responsible for all regional planning activities.

The individual jurisdictions within Santa Barbara County also have transportation plans that apply to their specific geographic areas, and may include supplementary documents such as pedestrian or bikeway plans. These supplementary documents can form the basis for enhancements to city infrastructure to promote alternative transportation methods.

3.10 UTILITIES/ENERGY

3.10.1 Physical Setting

Electricity

California produces 78 percent of the power generated to meet electricity demand within the State; the remaining demand is supplemented by energy generated in neighboring states (CEC, 2007). Reliant Energy operates a peaking station in the Goleta area; however, there are no regular demand power plants located in Santa Barbara County and all power is conveyed into the region via power transmission lines. The primary supplier of electric power in the northern region of the County is Pacific Gas and Electric (PG&E); the southern region is supplied by Southern California Edison (SCE). The split between the two providers is roughly equal; approximately 50 percent of the energy consumed for residential use is provided by each utility. The City of Lompoc acquires its electrical power through a separate purchase agreement with an independent energy provider and provides this power to customers within the city limits. In 2008, Santa Barbara County consumed a total of 3,274,279 kilowatt-hours (kWh) of electricity; 25 percent of the total was consumed by residential uses, and the majority was used by the business and industrial sectors (ECDMS, 2008a). There are a few renewable energy projects still in planning stages. These include a commercial solar installation in the Cuyama area and a large-scale wind power installation in the Lompoc area.

Natural Gas

Natural gas is the primary fuel that is used for space heating, water heating, industrial process heating, and cooking purposes in Santa Barbara County. A much lesser amount of natural gas is used to fuel vehicles. Other fuels that are used less frequently include liquid propane and wood fuel. Natural gas is supplied to residential, commercial and industrial sectors by Sempra Energy (Southern California Gas Company). In 2008, Santa Barbara County consumed a total of 129,150,034 therms of natural gas, with usage split 50/50 between the residential sector and the commercial/industrial sector (ECDMS, 2008b).
**Water Supply and Wastewater Disposal**

Water supply and wastewater disposal services are provided by a number of private and public entities. Water supply sources (e.g., surface and groundwater) are discussed in Section 3.6. The water and wastewater treatment methods vary depending on the characteristics of the local water resources, the needs of the local communities, and the capabilities of the local facilities. Some wastewater treatment plants (such as the Laguna Sanitation District and the City of Santa Barbara El Estero Wastewater Treatment Plant) have processes that facilitate the use of reclaimed water for large-scale landscaping needs.

**Solid Waste**

Tajiguas Landfill, located on the Gaviota Coast, is an active County owned and operated facility that receives non-recyclable solid waste from around the County. It is a Class III landfill, meaning that it can accept most non-hazardous wastes. The landfill is approximately 357 acres in total size, with 118 acres of disposal area. Tajiguas is not open to the public; self-hauled waste can be taken to one of four transfer stations located throughout the County for disposal. Tajiguas is currently permitted to accept up to 1,500 tons of waste per day. The landfill is estimated to reach its capacity in the year 2022 (CalRecycle, 2010). The Public Works Department Resource Recovery & Waste Management Division is responsible for planning and implementing waste collection and recycling programs throughout the County. The Division contracts with private waste haulers to provide waste collection services.

Other active non-County owned and operated landfills within the geographical boundaries of Santa Barbara County include: Santa Maria Regional Landfill, City of Lompoc Sanitary Landfill, and Vandenberg Air Force Base Landfill.

**3.10.2 Regulatory Setting**

**Electricity**

Title 10 of the Code of Federal Regulations established the U.S. Department of Energy, and other federal agencies with energy programs addressing conservation, energy efficiency, alternative-fueled vehicles, power plant regulations, and regulation of nuclear power. The Federal Energy Regulatory Commission is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil.

In California, the California Energy Commission (CEC) is the state’s primary energy policy and planning agency. The CEC’s responsibilities include: forecasting energy needs and tracking historical usage, licensing of power plants, supporting energy research and advancing energy science, developing and implementing programs to promote energy efficiency and renewable and alternative energy sources, and responding to energy emergencies. The California Public Utilities Commission has regulatory oversight of power generation facilities and infrastructure projects.

Several state codes and regulations address energy usage. Title 24 of the California Code of Regulations, also known as the California Building Standards Code, is an important regulation that
requires energy efficient building practices for all new buildings and for extensive renovations of existing buildings.

**Water Supply and Wastewater Disposal**

Under the Federal Clean Water Act (CWA), states are delegated certain responsibilities in the regulation of surface water quality. In California, the California State Water Resources Control Board (SWRCB) is the agency with the authority to allocate water and protect water quality in order to comprehensively protect California’s waters. Since climate, topography, geology, and hydrology vary from one region to another in California, nine Regional Water Quality Control Boards (RWQCBs) are also in place to develop and enforce water quality objectives and implementation plans as appropriate, taking into account regional circumstances. Santa Barbara County falls under the jurisdiction of the Central Coast (Region 3) RWQCB. California's Porter-Cologne Water Quality Control Act of 1969, now Division Seven Section 13100 et seq. (“Water Quality”) of the State Water Code, establishes the responsibilities and authorities of the nine RWQCBs and the SWRCB.

Wastewater discharges to surface and groundwater are regulated by the RWQCBs. The U.S. Environmental Protection Agency has designated authority for wastewater permitting via National Pollution Discharge Elimination System (NPDES) permits to regional boards. RWQCBs also develop Total Maximum Daily Loads (TMDLs) for waterbodies that do not meet water quality standards. The Central Coast RWQCB has a “Basin Plan” that serves as its master water quality control planning document. The Basin Plan includes designated beneficial uses for state waters, water quality objectives, and programs of implementation.

The Water Resources Division of the Santa Barbara County Public Works has several districts and programs that are involved in water supply and wastewater activities including: the Flood Control and Water Conservation District, the County Water Agency, and Project Clean Water. Delivery of water to various areas in the County is supplied by several water providers including local water districts, cities, and Community Service Districts (CSD) (e.g. Goleta Water District, City of Santa Barbara, and Mission Hills CSD).

**Solid Waste**

The California Integrated Waste Management Act requires cities to have developed a source reduction element to provide strategies for diverting at least 50 percent of all solid waste from County landfills by the year 2000. Long-range waste management and recycling plans are prepared by the Santa Barbara County Public Works Department Resource Recovery & Waste Management Division in accordance with state mandates. The California Integrated Waste Management Plan of 1989 requires counties and cities to produce a number of documents outlining current and future waste management and recycling programs. These documents describe the programs and policies that jurisdictions will employ to meet waste management and recycling goals. The Countywide Integrated Waste Summary Plan aggregates all elements of the county wide solid waste management planning process. The Source Reduction and Recycling Element outlines policies designed to divert solid waste from landfills and reduce the waste stream. The county-wide Siting Element addresses expansions of existing waste management facilities and potential sites for future facilities. The Multi-Jurisdictional Non-Disposal Element describes new non-disposal facilities and expansions of existing facilities. The county-wide Household Hazardous Waste Element establishes a plan for the management of household hazardous waste within the County.
4.0  Project Impacts and Mitigation Measures

As discussed in Section 2.0, Project Description, the environmental impact analysis focuses on the control measures that are under the authority of the APCD Board and that are proposed to be implemented as discussed in Chapter 4 of the 2010 Plan. Table 2-1 provides a tabular summary of the control measures. Section 2.3 includes a description of the control measures and groups them into two categories that will be referenced throughout the impacts section of the EIR as follows:

**Group 1: Solvent Cleaning ROC Limits and Other Reductions in Material ROC Content.** Revisions to rules are proposed that will result in a lowering of ROC limits (to 25 or 50 grams per liter, depending on the specific industrial application) for solvent cleaning activities. The actual sequence of the proposed rule revisions may change within their respective near- or mid-term timeframes. To meet the requirement to adopt every feasible control measure, there may also be revisions to:

1. The ROC content limits for other process materials (e.g., coatings, adhesives, sealants, inks, resins, wash primers, fountain solution),
2. The maximum allowable ROC content limit for solvent cleaning activities that is lower than 50 grams per liter (e.g., a limit of 25 grams of ROC per liter), and
3. The equipment and operation requirements.

**Group 2: Combustion Equipment NO\textsubscript{x} Limits.** These control measures involve a reduction in the allowable NO\textsubscript{x} emissions limits listed in APCD Rules 352, 360, 361, and 342.

**Classification of Impacts**

The project environmental impacts and residual impacts are classified as follows:

a) **Class I Impacts** - Significant unavoidable adverse impacts for which the decision maker must adopt a Statement of Overriding Consideration.

b) **Class II Impacts** - Significant adverse environmental impacts that can be feasibly mitigated or avoided for which the decision maker must adopt findings and mitigation measures.

c) **Class III Impacts** - Adverse impacts found not to be significant for which the decision maker does not have to adopt findings under CEQA.

d) **Class IV Impacts** - Beneficial impacts of the project.

The significance thresholds that are applied to each issue area were developed based on the following:

- *Environmental Review Guidelines* for the Santa Barbara County Air Pollution Control District (SBCAPCD, revised November 2000)
- *California CEQA Statute and CEQA Guidelines*, including CEQA Guidelines Appendix G (March 2010)
- Santa Barbara County’s *Environmental Thresholds & Guidelines Manual* (Santa Barbara County Planning & Development, revised September 2008) and Initial Study Checklist
APCD’s adopted CEQA significance thresholds were used for the for air quality impact analysis. For all other issue areas, Santa Barbara County’s document was generally used. The CEQA Guidelines, including Appendix G, were used as a supplemental reference, to ensure that all impact areas were addressed.

4.1 Air Quality

4.1.1 Significance Criteria

A proposed project will not have a significant air quality effect on the environment if operation of the project will:

- Emit (from all project sources, mobile and stationary) less than the daily trigger for offsets set in the APCD New Source Review Rule for any non-attainment pollutant (i.e., 55 pounds per day for ROC or NO\textsubscript{X}; 80 pounds per day for PM\textsubscript{10}); and
- Emit less than 25 pounds per day of NO\textsubscript{X} or ROC from motor vehicle trips only; and
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone); and
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than one (1.0) for non-cancer risk); and
- Be consistent with the adopted federal and state Air Quality Plans.

4.1.2 Impact Discussion

*Group 1 Control Measures:* Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to reduce ROC emissions throughout Santa Barbara County. By reducing ROC emissions, which are known to contribute to the formation of ozone, it is anticipated that air quality in Santa Barbara County will improve.

Substitution of solvents and other materials that contain higher levels of ROC compounds with water-based compounds or exempt compounds such as acetone would not result in generation of new ROC emissions. Studies have been conducted by air districts and CARB to assess whether the use of low-ROC reformulated products would result in an increase in the use of toxic or hazardous materials. Compliant materials are expected to contain less hazardous or toxic materials as compared to solvent-based compounds, resulting in less potential for toxic air contaminant emissions and less potential for human health risk.

As the control measures are implemented through revisions to APCD source-specific rules, the potential for increased health risk from toxic air contaminants will be evaluated for the specific industries affected. If deemed necessary, additional environmental review will be done to assess and mitigate impacts. Refer to Section 4.4.2 for additional discussion of hazardous or toxic materials.
**Group 2 Control Measures:** The control measures to reduce NO\textsubscript{X} limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\textsubscript{X} emissions throughout Santa Barbara County. By reducing NO\textsubscript{X} emissions, which are known to contribute to the formation of ozone, it is anticipated that air quality in Santa Barbara County will improve.

Control measures to reduce levels of NO\textsubscript{X} from combustion equipment may cause a slight increase in other air pollutants such as ROCs. In these cases the beneficial effect of limiting NO\textsubscript{X} must surpass the adverse impacts of increases in other air pollutants. When the trade-off is between NO\textsubscript{X} and ROC, both of which are ozone precursors, the impact is not generally considered adverse because there is an overall reduction in emissions of ozone precursor pollutants.

**Conclusion and Classification of Impacts**

Section 4.10 of this EIR includes a discussion of transportation impacts related to implementation of the Group 1 and Group 2 control measures. Implementation of the control measures is not anticipated to result in additional vehicle trips or vehicle miles travelled (VMT) or additional traffic congestion or circulation problems. Therefore, the project will not result in additional air pollutant emissions from mobile sources (motor vehicles).

The 2010 Plan was developed in order to comply with state air quality planning requirements. It is consistent with state and federal air quality plans.

Implementation of the control measures is not anticipated to result in additional health risk; therefore APCD health risk notification thresholds will not be exceeded.

Impacts related to climate change and greenhouse gas emissions are discussed in Chapter 5 of this EIR.

Impacts to Air Quality resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class IV, beneficial impacts.**

**4.2 Biological Resources**

**4.2.1 Significance Criteria**

Impacts may be potentially significant if the project will result in:

- A substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- A conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan
- A loss or disturbance to a unique, rare or threatened plant community
• A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants
• A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)
• An impact on non-native vegetation whether naturalized or horticultural if of habitat value
• The loss of healthy native specimen trees
• Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat
• A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals
• A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)
• A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)
• Introduction of barriers to movement of any resident or migratory fish or wildlife species
• Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife

4.2.2 Impact Discussion

Group 1 Control Measures: Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to increase the amount of water-based products in that are used in these industrial sectors. In general, there is a tendency to treat water-based products with less care than is given to solvent-based products, and in some cases this may result in improper disposal of waste. Water-based products that are improperly disposed of may enter the environment, via direct exposure or via municipal wastewater that is eventually released to the environment, and harm biological resources. However, the types of industrial sources that will be required to comply with these new formulations are generally sources that are currently regulated, and are aware of waste and wastewater disposal requirements. These facilities generally have a knowledge of proper disposal practices for potentially harmful chemicals. Some industrial facilities obtain waste disposal services from companies that specialize in the treatment and disposal of liquid and solid waste. Because the proposed control measures are not expected to apply to any new, non-regulated industries, improper waste and wastewater disposal is not expected to occur.

Group 2 Control Measures: The control measures to reduce NOx limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NOx emissions throughout Santa Barbara County. By reducing NOx emissions, which are known to contribute to the formation of ozone, it is anticipated that air quality in Santa Barbara County will improve.

Conclusion and Classification of Impacts

Implementation of the Group 1 and 2 control measures will generally affect geographical areas that are already developed with commercial or industrial land uses, and would not directly result in degradation or loss of native vegetation including trees, grassland, wetlands or other habitat. The project would not result in adverse impacts to wetlands, to rare or special status plant or animal species or disruption of migratory wildlife corridors. Biological organisms and habitat would benefit
from implementation of the control measures, through reductions of air pollutants from existing levels and prevention of exposure to air pollutants. The 2010 Plan is consistent with local policies, ordinances, and plans to protect and preserve biological resources.

Environmental impacts that are related to specific land use development projects should be evaluated and mitigated as part of the land use decision-making process for individual jurisdictions, such as cities and Santa Barbara County. Project-specific impacts to endangered, rare, or other special plants and animals can be avoided on a project-specific basis by requiring biological resource inventories and requiring adequate protective measures.

Impacts to Biological Resources resulting from implementation of the Group 1 and Group 2 control measures are considered to be *Class III, less than significant.*

### 4.3 Hazards/Risk of Upset

#### 4.3.1 Significance Criteria

Impacts may be potentially significant if the project will:

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.
- Result in a risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions.
- Result in possible interference with an emergency response plan or an emergency evacuation plan.
- Result in the creation of a potential public health hazard.
- Result in exposure to hazards from oil or gas pipelines or oil well facilities.

#### 4.3.2 Impact Discussion

*Group 1 Control Measures:* Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to increase the amount of water-based products in that are used in these industrial sectors. Reformulation of these solvents and materials to reduce the ROC content may result in substitution with compounds that are not regulated by APCD. Some increase in the use of acetone in reformulated coatings is expected. Increases in acetone usage may increase the amount of bulk acetone transported in Santa Barbara, increasing the risk of accidental release of acetone. However, trucks and rail cars are equipped to safely handle these materials and will not be affected by the proposed rule amendments. The severity of an accident involving transported acetone would not change from current levels as a result of the rule amendments.
Generally, the industries that will be required to comply with the Group 1 control measures already involve the use of materials with a varying level of hazardous properties. Some of the materials and technologies being used in these industries have already switched to less hazardous options. Increasing the use of water-based coatings and solvents and lower ROC materials is anticipated to result in a lower overall risk of hazards at industrial facilities. The types of materials and processes that will be regulated with these control measures do not generally involve the potential for harmful releases to the environment (e.g., explosion or large amounts of hazardous materials released), and the use of materials with a lower ROC content is not expected to change the potential for upset conditions or accidental releases at industrial facilities.

**Group 2 Control Measures:** The control measures to reduce NO\(_X\) limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\(_X\) emissions throughout Santa Barbara County. These NO\(_X\) emissions reductions will be achieved through the use of improved combustion control technologies. These control technologies have been implemented on a variety of equipment types and sizes in other air districts in California. Any currently operating external combustion device already involves the use of natural gas or other fuels that are potentially toxic and flammable; implementation of the control measures will not change the type of fuel used or significantly alter the operational parameters of the combustion equipment. Improved combustion technologies are not expected to cause additional risk of upset or additional exposure to hazardous materials at industrial facilities.

**Conclusion and Classification of Impacts**

When compared with the existing conditions at residential, commercial and industrial facilities that use the equipment and materials that would be regulated by the Group 1 and 2 control measures, adverse impacts are not anticipated to occur with respect to hazards and upset conditions. Implementation of the control measures will not interfere with emergency response or evacuation procedures, and human exposure to hazardous materials is anticipated to be reduced through the use of more water-based compounds.

Impacts to Hazards/Risk of Upset resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class III, less than significant.**

### 4.4 Hazardous Materials

#### 4.4.1 Significance Criteria

Impacts may be potentially significant if the project will:

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment
- In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?
• Result in the use, storage or distribution of hazardous or toxic materials
• Result in the contamination of a public water supply

4.4.2 Impact discussion

**Group 1 Control Measures:** Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to increase the amount of water-based products in that are used in these industrial sectors. However, the possibility exists that replacement solvents in reformulated products may be more hazardous, or toxic, than current formulations. Hazardous or toxic substances are chemicals that have adverse effects on human health and/or the environment. Although there are some regulatory differences between toxic and hazardous substances, these two words are assumed to follow this same general definition.

The various chemicals that are used in coatings and solvent formulations have a variety of properties that may result in their classification as toxic or hazardous. Studies have been conducted by air districts and CARB to assess whether the use of low-ROC reformulated products would result in an increase in the use of toxic or hazardous materials. South Coast Air Quality Management District (SCAQMD) compared the toxicity of commonly used solvents to those expected to be used in reformulated low-ROC products. Many of the replacement solvents have less severe toxicity levels than traditional solvents. The replacement solvents that may be used in reformulated products are mostly common chemicals used in a variety of industrial and consumer applications. Current coating formulations contain materials that, in general, are as toxic, or more toxic, than possible low-ROC formulations. Thus, any possible increase in the use of toxics in low-ROC reformulated products will generally be balanced by a concurrent decrease in the use of toxic materials in conventional products formulations (SCAQMD, 2001). As a result, an increase in the amount of hazardous or toxic materials, relative to existing conditions, is not expected. In addition, many commercial solvent applications occur primarily in industrial settings where safety equipment and procedures are already in place to prevent exposure of these materials to people or to the environment.

As the control measures are implemented through revisions to APCD source-specific rules, the potential for increased use of flammable, toxic, or hazardous materials will be evaluated for the specific industries affected. If deemed necessary, additional environmental review will be done to assess and mitigate impacts.

**Group 2 Control Measures:** The control measures to reduce NO\textsubscript{x} limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\textsubscript{x} emissions throughout Santa Barbara County. These NO\textsubscript{x} emissions reductions will be achieved through the use of improved combustion control technologies. These control technologies have been implemented on a variety of equipment types and sizes in other air districts in California. Any currently operating external combustion device already uses natural gas or other fuels that are potentially toxic and flammable; implementation of the control measures will not change the type of fuel used or significantly alter the operational parameters of the combustion equipment. Improved combustion technologies will not involve the use, storage, or distribution of toxic or hazardous materials or result in human exposure to toxic or hazardous materials.
Conclusion and Classification of Impacts

When compared with the existing conditions at residential, commercial and industrial facilities that utilize the equipment and materials that would be regulated by the Group 1 and 2 control measures, adverse impacts are not anticipated to occur with respect to hazards and upset conditions. Implementation of the control measures will not interfere with emergency response or evacuation procedures, and human exposure to hazardous materials is anticipated to be reduced through the use of more water-based compounds.

Impacts to Hazardous Materials resulting from implementation of the Group 1 and Group 2 control measures are considered to be Class III, less than significant.

4.5 Hydrology and Water Quality

4.5.1 Significance Criteria

Impacts may be potentially significant if the project will result in:

- Violation of any water quality standards or waste discharge requirements
- Changes in currents, or the course or direction of water movements, in either marine or fresh waters
- Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff
- Change in the amount of surface water in any water body
- Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution
- Alterations to the course or flow of flood water or need for private or public flood control projects
- Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion
- Alteration of the direction or rate of flow of ground water
- Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference
- Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin
- The substantial degradation of groundwater quality including saltwater intrusion
- Substantial reduction in the amount of water otherwise available for public water supplies
- Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water

4.5.2 Impact Discussion

Group 1 Control Measures: Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected
to increase the amount of water-based products in that are used in these industrial sectors. In general, there is a tendency to treat water-based products with less care than is given to solvent-based products, and in some cases this may result in improper disposal of waste. Water-based products that are improperly disposed of may enter the environment, via direct exposure or via municipal wastewater that is eventually released to the environment. However, the types of industrial sources that will be required to comply with these new formulations are generally sources that are currently regulated, and are aware of waste and wastewater disposal requirements. These facilities generally have a knowledge of proper disposal practices for potentially harmful chemicals. Some industrial facilities obtain waste disposal services from companies that specialize in the treatment and disposal of liquid and solid waste. Because the proposed control measures are not expected to apply to any new, non-regulated industries, improper waste and wastewater disposal is not expected to occur.

Because implementation of the Group 1 control measures potentially involves an increase in the use of water-based coatings and solvents, there is the potential for an increase in water demand from the increase in manufacture, use, and cleanup of water-based coatings. However, many industries have already switched to water-based coatings and cleaning solvents as a result of regulations that have already been implemented. The incremental additional amount of increase that would be attributed to the Group 1 control measures would be relatively small, and will occur over a period of years as the applicable regulations are phased in.

**Group 2 Control Measures:** The control measures to reduce NO\textsubscript{X} limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\textsubscript{X} emissions throughout Santa Barbara County. These NO\textsubscript{X} emissions reductions will be achieved through the use of improved combustion control technologies that do not involve the use of water or the discharge of water. Existing external combustion equipment, such as institutional heating boilers, may involve the use of recirculated water systems that require water treatment and conditioning. The proposed control measures are not expected to change the water use or water conditioning requirements for existing or proposed external combustion devices such as boilers.

**Conclusion and Classification of Impacts**

The Group 1 and 2 control measures are not expected to substantially increase the demand for water at industrial facilities. Implementation of the control measures will not change current practices related to protecting surface and groundwater water quality, and will not result in additional discharges to surface water or groundwater resources, or impede or alter the flow of water resources. These control measures will not change the operational requirements for existing external combustion devices that use water.

Impacts to Hydrology and Water Quality resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class III, less than significant**.

4.6 **LAND USE/PLANNING**

4.6.1 **Significance Criteria**

Impacts may be potentially significant if the project will result in:
- Physical division of an established community
- Structures and/or land use incompatible with existing land use
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect
- The induction of substantial growth or concentration of population
- The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project
- Loss of existing affordable dwellings through demolition, conversion or removal
- Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere
- The loss of a substantial amount of open space
- An economic or social effect that would result in a physical change (i.e. closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)
- Conflict with adopted airport safety zones

4.6.2 Impact Discussion

**Group 1 Control Measures:** Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to reduce ROC emissions throughout Santa Barbara County. By reducing ROC emissions, which are known to contribute to the formation of ozone, it is anticipated that air quality in Santa Barbara County will improve. Impacts to land use characteristics and land use planning efforts are not anticipated.

**Group 2 Control Measures:** The control measures to reduce NO\textsubscript{x} limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\textsubscript{x} emissions throughout Santa Barbara County. By reducing NO\textsubscript{x} emissions, which are known to contribute to the formation of ozone, it is anticipated that air quality in Santa Barbara County will improve.

**Conclusion and Classification of Impacts**

Implementation of the ROC and NO\textsubscript{x} control measures would not have the potential to divide existing communities, displace populations or housing, or create a conflict between incompatible uses, because the control measures would be applied to existing facilities and stationary equipment. The controls would not generate new sources and are not expected to result in new development or indirect physical changes to the built environment.
Impacts to Land Use/Planning resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class III, less than significant**.

### 4.7 Noise

#### 4.7.1 Significance Criteria

Impacts may be potentially significant if the project will result in:

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
- Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)
- Short-term exposure of people to noise levels exceeding County thresholds
- Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)

#### 4.7.2 Impact Discussion

**Group 1 Control Measures:** Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions are expected to reduce ROC emissions throughout Santa Barbara County. The use of lower ROC-content solvents and materials is not expected to impact noise levels at any locations in Santa Barbara County.

**Group 2 Control Measures:** The control measures to reduce NO\textsubscript{X} limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\textsubscript{X} emissions throughout Santa Barbara County. The proposed NO\textsubscript{X} reduction measures for combustion equipment may require existing commercial or industrial owners/operators of affected facilities to install air pollution control equipment or modify their operations to reduce stationary source emissions. The specific types of control equipment or operational modifications depend on the specific residential, industrial or commercial application. However, none of the equipment or operational modifications is expected to cause an increase in noise levels associated with equipment operation.

**Conclusion and Classification of Impacts**

It is not expected that any modifications to install air pollution control equipment would substantially increase ambient (operational) noise levels in the area, either permanently or intermittently, or expose people to excessive noise levels above and beyond existing ambient levels. It is not expected that affected facilities would exceed noise standards established in local general plans, noise elements, or noise ordinances currently in effect. Affected facilities would be required to comply with local noise ordinances and elements, which may require construction of noise barriers or other noise control devices.

Affected facilities would still be expected to comply, and not interfere, with any applicable airport land use plans and disclose any excessive noise levels to affected residences and workers pursuant to existing rules, regulations and requirements, such as CEQA. It is assumed that operations in areas
near airports are subject to and in compliance with existing community noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. None of the proposed control measures in the 2010 CAP would locate residents or commercial buildings or other sensitive noise sources closer to airport operations.

Impacts to Noise resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class III, less than significant**.

### 4.8 Public Service

#### 4.8.1 Significance Criteria

Impacts may be potentially significant if the project will result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, other public facilities
- A need for new or altered police protection and/or health care services
- Student generation exceeding school capacity

#### 4.8.2 Impact Discussion

**Group 1 Control Measures**: Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to reduce ROC emissions throughout Santa Barbara County. The use of lower ROC-content solvents and materials is not expected to impact the level of service requirements for public facilities such as police, fire protection, parks, schools, or other public facilities. Although acetone, which is flammable, may be used as a replacement product for solvents, as discussed under Hazards (Section 4.3), it does not pose a greater fire hazard than the solvents that it would replace.

**Group 2 Control Measures**: The control measures to reduce NO\(_X\) limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\(_X\) emissions throughout Santa Barbara County. These NO\(_X\) emissions reductions will be achieved through the use of improved combustion control technologies, which are not anticipated to generate additional need for public services such as police or fire protection.

**Conclusion and Classification of Impacts**

Impacts to Public Services resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class III, less than significant**.

### 4.9 Transportation/Circulation

#### 4.9.1 Significance Criteria
Impacts may be potentially significant if the project will result in:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
- Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system
- A need for private or public road maintenance, or need for new road(s)
- Effects on existing parking facilities, or demand for new parking
- Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods
- Alteration to waterborne, rail or air traffic
- Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)
- Inadequate sight distance, ingress/egress, general road capacity, emergency access
- Impacts to Congestion Management Plan system

4.9.2 Impact Discussion

**Group 1 Control Measures**: Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to reduce ROC emissions throughout Santa Barbara County. The use of lower ROC-content solvents and materials at existing industrial facilities is not expected to impact the transportation characteristics at these affected facilities. The types of facilities that are regulated under these rules already have systems in place for the proper transport, storage, and disposal of these materials. The use of reformulated materials will not require additional vehicle trips, nor will it increase trip distances to or from facilities. The use of reformulated solvents is not expected to alter emergency response procedures or emergency access routes.

**Group 2 Control Measures**: The control measures to reduce NOx limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NOx emissions throughout Santa Barbara County. These NOx emissions reductions will be achieved through the use of improved combustion control technologies, which are not anticipated to generate additional vehicle trips, increase trip distances, or impede emergency access routes. The control measures under consideration are measures that affect existing residential, institutional, commercial and industrial facilities. Modifications to stationary sources would almost always occur within the confines of existing facilities. Most of the equipment would typically be located inside the buildings of the affected facilities.

**Conclusion and Classification of Impacts**

The Group 1 and 2 control measures do not increase traffic or result in the exceedance of a level of service standard. The control measures do not alter street design. The control measures do not impede emergency access or impact parking. The control measures do not conflict with transportation alternatives. The control measures do not require constructing any structures that
could impede air traffic patterns in any way. Thus, neither air traffic, nor air traffic patterns, are expected to be directly or indirectly affected by adopting the proposed control measures.

Impacts to Transportation/Circulation resulting from implementation of the Group 1 and Group 2 control measures are considered to be **Class III, less than significant.**

4.10 **UTILITIES/ENERGY**

4.10.1 **Significance Criteria**

Impacts may be potentially significant if the project will result in:

- Substantial increase in energy demand, especially during peak periods, upon existing sources of energy
- Requiring the development or extension of new energy sources
- Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)
- A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)
- The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

4.10.2 **Impact Discussion**

**Group 1 Control Measures:** Reformulation of cleaning solvents and other ROC-containing materials such as coatings, adhesives, sealants, inks, resins, wash primers, and fountain solutions is expected to reduce ROC emissions throughout Santa Barbara County. The use of lower ROC-content solvents and materials at existing industrial facilities is not expected to increase the demand for electricity at these affected facilities or require development or extension of new energy sources. As discussed in Section 4.5.2, the types of industrial sources that will be required to comply with these new formulations are generally sources that are currently regulated, and are aware of waste and wastewater disposal requirements. The use of reformulated materials will not require additional sewer or storm drain facilities or an increase water demand.

**Group 2 Control Measures:** The control measures to reduce NO\textsubscript{X} limits from external combustion equipment, such as water heaters, boilers, steam generators and process heaters, are expected to reduce NO\textsubscript{X} emissions throughout Santa Barbara County. These NO\textsubscript{X} emissions reductions will be achieved through the use of improved combustion control technologies, which are not anticipated to increase the demand for electricity or natural gas at these affected facilities or require development or extension of new energy sources. As discussed in Section 4.5.2, these NO\textsubscript{X} emissions reductions will be achieved through the use of improved combustion control technologies that do not involve the use of water or the discharge of water. Existing external combustion equipment, such as institutional heating boilers, may involve the use of recirculated water systems that require water treatment and conditioning. The proposed control measures are not expected to change the water use or water conditioning requirements for existing or for proposed external combustion devices such as boilers.
More stringent NO\textsubscript{X} controls may reduce the operating efficiency of combustion equipment. A reduction in operating efficiency may result in a slight increase in fuel usage. However, the control technologies that are available to achieve the NO\textsubscript{X} limits in the proposed control measures are not expected to cause substantial losses in combustion efficiency. Some energy savings could be realized if control measures cause operators to replace older equipment with newer, more efficient equipment.

**Conclusion and Classification of Impacts**

The control measures under consideration are not expected to have a significant environmental impact on adopted energy conservation plans, or violate existing energy standards. Reformulation of solvent products would not increase demand for electricity or other utilities as the production process for reformulated solvents would not differ significantly from the process that is currently used.

Impacts to Utilities/Energy resulting from implementation of the Group 1 and Group 2 control measures are considered to be *Class III, less than significant*. 
5.0 Cumulative Impacts

CEQA Guidelines Section 15130 states that, “An EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable, as defined in Section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not ‘cumulatively considerable,’ a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.”

The 2010 Plan is anticipated to result in improvements to air quality in Santa Barbara County, and no significant cumulative impacts are anticipated to occur as a result of implementing the 2010 Plan and its related control measures. Section 5.1 includes a discussion of global climate change and greenhouse gas impacts, and concludes that no significant impacts to global climate change and greenhouse gas emissions are anticipated to occur. Section 5.2 includes a brief discussion of other potential cumulative impacts related to implementation of the 2010 Plan and concludes that no other significant cumulative impacts are anticipated to occur as a result of implementation of these measures.

5.1 Global Climate Change

The issue of how to address global climate change and greenhouse gas impacts in the context of CEQA is one that is evolving. Recent revisions to the CEQA Guidelines provide a framework for including global climate change in the CEQA process and provide an approach to assessing impacts from emissions of greenhouse gases. Although the 2010 Plan is designed to reduce emissions of criteria pollutants and result in an overall improvement in Santa Barbara County’s air quality, the implications for global climate change impacts must be addressed in the EIR. Section 5.1.1 provides a discussion of the existing setting for global climate change in Santa Barbara County, both in the physical and regulatory context. Section 5.1.2 includes a discussion of the potential for global climate change impacts with implementation of the 2010 Plan and its related control measures. No significant global climate change impacts are anticipated to occur.

5.1.1 Existing Setting

The 2010 Plan includes Chapter 9, Greenhouse Gases and Climate Change, which provides a detailed discussion of the concept of global climate change and an emissions inventory for carbon dioxide (CO₂) emissions within Santa Barbara County and the Outer Continental Shelf. As discussed in Section 2.3 of this EIR, Chapter 9 of the 2010 Plan is provided for informational purposes and does not include any regulatory requirements for greenhouse gas reductions. Therefore, no environmental impacts are anticipated to occur as a result of the inclusion of Chapter 9 of the 2010 Plan. However, the description of global climate change that is presented in this section draws on the material that is presented in Chapter 9.

5.1.1.1 Physical Setting

The greenhouse effect is a natural process by which some of the radiant heat from the Sun is captured in the lower atmosphere of the Earth, thus maintaining the temperature and making Earth habitable. The gases that help capture the heat are called greenhouse gases, or GHG’s.
Since the Industrial Revolution human activities such as fossil fuel burning, deforestation and other agricultural and industrial practices, as well as activities associated with our growing population (e.g. waste disposal), have been increasing the levels of greenhouse gases in the Earth’s atmosphere. The higher levels of these gases are in turn affecting the Earth’s climate. The world’s temperature has increased up to 1°F (0.5°C) over the past century and some of the colder, more remote regions have warmed much more. This phenomenon is referred to as global warming. Global climate change is perhaps a more accurate term, as higher levels of greenhouse gas emissions in the atmosphere not only raise overall temperatures, but also affect other climate-sensitive aspects of the environment, including precipitation, crop growth, pest populations, sea levels, and the fresh water supply.

Scientists estimate that emissions of greenhouse gases will need to be reduced by 80 percent by 2050 to avoid a 2°C (3.6°F) increase in global temperatures, which would escalate the risk of dangerous impacts. The most common greenhouse gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.

5.1.1.2 Regulatory Setting

Following is a summary of major state, federal, and local legislation, actions and activities that have been undertaken to address the issue of global climate change.

State of California Climate Change Legislation and Activities

Assembly Bill 32

In 2006, Governor Schwartzenegger signed into law Assembly Bill 32 (AB 32), which created the first-ever statewide cap on greenhouse gas (GHG) emissions. AB 32 required the California Air Resources Board (CARB) to establish a reporting program for GHG emissions, beginning with the largest sources of emissions, to determine a 1990 GHG emissions baseline and to set that as the statewide limit to be achieved by 2020. AB 32 also required that CARB publish a list of “Early-Action” GHG reduction measures by June 2007 and adopt regulations for those measures by January 2010. By January 2009, CARB had to prepare a detailed scoping plan outlining the direct reduction measures, market-based mechanisms, and incentives needed to meet the 2020 emissions cap. By January 1, 2011 CARB must adopt regulations to meet the 2020 emission cap, including provisions for using both market mechanisms (“Cap-and-Trade”) and alternative compliance mechanisms. By January 1, 2012 CARB is required to enforce regulations to meet the 2020 emissions cap.

CARB adopted the AB 32 Scoping Plan in December 2008. The key elements include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State’s long term commitment to AB 32 implementation.

**CARB Mandatory Reporting Regulation**

To track California’s progress in implementing AB 32, CARB adopted a mandatory reporting regulation to obtain facility-level data from the largest sources of greenhouse gas emissions in California. The regulation requires annual reporting of GHG emissions from the largest facilities in the State, accounting for 94 percent of greenhouse gas emissions from industrial and commercial stationary sources in California. There are approximately 800 separate sources that fall under the reporting rules, including electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources.

**Senate Bill 375**

In 2008, California enacted the Sustainable Communities and Climate Protection Act of 2008 (SB 375). This law aims to reduce greenhouse gas emissions by 5 million metric tons by reducing miles traveled by passenger vehicles and light duty trucks. In September 2010, GHG emission reduction targets were set by CARB for each Metropolitan Planning Organization. Each Metropolitan Planning Organization such as the Santa Barbara County Association of Governments (SBCAG) must develop a Sustainable Communities Strategy that achieves those targeted GHG reductions. SB 375 also aligns planning for GHG reductions with regional housing and transportation by 2013. By integrating transportation, land use, and housing planning with a Sustainable Communities Strategy, SB 375 ties together three major planning activities currently conducted by SBCAG, including their Regional Growth Forecast, Regional Transportation Plan, and Regional Housing Needs Assessment Plan.

**SB 97 and Amendments to the CEQA Guidelines**

California State Senate Bill 97 (SB 97), enacted in 2007, required that the CEQA Guidelines be amended to include “guidance for the mitigation of greenhouse gas (GHG) emissions or the effects of GHG emissions.” The California Office of Planning & Review (OPR) developed amendments to the CEQA Guidelines, which were adopted by the California Natural Resources Agency on December 30, 2009 and became effective March 18, 2010. These amendments establish a framework for including global climate change impacts in the CEQA process, and include revisions to the Environmental Checklist Form (Appendix G) as well as to the Energy Conservation appendix (Appendix F). A new section (§15064.4) has been added that provides an approach to assessing impacts from GHG’s.

**Federal Climate Change Actions**

As of this publishing, the federal government has not passed any significant pieces of legislation to address the issue of global climate change at the federal level. However, a number of bills
have been introduced to the legislative bodies, and steps have been taken to begin federal tracking and regulation of greenhouse gas emissions from industrial (or stationary) and mobile sources of greenhouse gas emissions.

**U.S. Environmental Protection Agency Tailoring Rule**

On May 13, 2010, the U.S. Environmental Protection Agency (USEPA) issued a final rule that establishes the approach to addressing GHG emissions from stationary sources under the federal Clean Air Act (CAA) permitting programs. This final rule sets thresholds for GHG emissions that define when permits under the New Source Review, Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities. The final USEPA rule “tailors” the requirements of these federal CAA permitting programs to limit the number of facilities that will be required to obtain PSD and Title V permits based on GHG emissions. Only facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation’s largest GHG emitters—power plants, refineries, and cement production facilities.

The Tailoring Rule involves two steps, the first of which will begin on January 2, 2011. The applicable requirements of PSD, most notably, the best available control technology (BACT) requirement, will apply to projects that increase net GHG emissions by at least 75,000 tons per year (tpy) carbon dioxide equivalent (CO₂e), but only if the project also significantly increases emissions of at least one non-GHG pollutant. For the Title V program, only existing sources with, or new sources obtaining, Title V permits for non-GHG pollutants will be required to address GHGs during this first step. The second step, which begins July 1, 2011, will phase-in additional large sources of GHG emissions. New sources as well as existing sources not already subject to Title V that emit, or have the potential to emit, at least 100,000 tpy CO₂e will become subject to the PSD and Title V requirements. In addition, sources that emit or have the potential to emit at least 100,000 tpy CO₂e and that undertake a modification that increases net emissions of GHGs by at least 75,000 tpy CO₂e will also be subject to PSD requirements.

**USEPA Mandatory Reporting Rule**

On October 30, 2009, USEPA published the Mandatory Greenhouse Gas Reporting Rule (MRR). The rule requires reporting of GHG emissions from large sources and suppliers in the United States, beginning in 2010, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions, are required to submit annual reports to USEPA. The rule does not require control of GHGs, it only requires that sources emitting above certain thresholds monitor and report GHGs.

**Nationwide Car and Truck CO₂ Standard**

On May 20, 2009, the White House announced that the federal government, major U.S. automakers and California had reached an agreement to establish a single nationwide car and truck emission standard that would require a reduction of 30 percent in CO₂ and other
emissions from vehicles sold in the United States by 2016. Capping GHG emissions would effectively require better gas mileage.

County of Santa Barbara Climate Change Actions

On March 17, 2009, the Santa Barbara County Board of Supervisors unanimously passed a resolution adopting Santa Barbara County’s climate change guiding principles and supporting county efforts to reduce GHG emissions (Resolution No. 09-Greenhouse Gas Emissions). These principles recognize the County’s role in the state climate change arena as threefold: a producer of operational GHGs and both a regulator and an incentivizer in reducing community-wide GHG emissions. The General Services Department has been charged with developing a plan that would enable the County, as a “producer” of GHG emissions, to achieve the State’s 15 percent reduction target for county operations. To address the “regulator” and “incentivizer” roles, the Office of Long Range Planning will develop a county-wide Climate Action Strategy.

5.1.2 Project Impacts

Section 5.1.2.1 includes a discussion of the potential impact that the 2010 Plan (and implementation of its related control measures) would have on global climate change, pursuant to CEQA Guidelines Section 15064.4.

The March 2010 CEQA Guidelines revisions included changes to Section 15126.2(a). This section states that, “The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected.” Broadly, this revision is considered a directive to examine the effects that global climate change may have on the proposed project. Therefore, Section 5.1.2.2 includes a brief discussion of the impacts that global climate change may have on implementation of the 2010 Plan and its related control measures.

Significance Criteria

CEQA Guidelines Section 15064.4 provides a framework for quantifying a project’s GHG emissions and for assessing whether those impacts are significant. This section states that,

“The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions of Section 15064...A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions...and/or (2) Rely on a qualitative analysis or performance based standards.”

The March 2010 CEQA Guidelines revisions do not include specific numeric or performance-based significance thresholds that should be applied to projects on a statewide basis.

In 2008, CARB issued a “Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significant Thresholds for Greenhouse Gases under the California Environmental Quality Act (CEQA).” This document was never finalized or adopted by CARB.

To date, the South Coast Air Quality Management District, the San Joaquin Valley Air Pollution Control District, and the Bay Area Air Quality Management District have all adopted guidance, in the
form of numeric thresholds or performance-based standards, to determine significance of global climate change impacts within their respective jurisdictional boundaries. No thresholds have been adopted by any agencies in Santa Barbara County; therefore, this EIR will use the guidance that is provided in the CEQA Guidelines to determine significance of impacts.

5.1.2.1 Impacts of the Proposed Project on Global Climate Change

The control measures that may be implemented during the 2010 Plan period include Group 1 and Group 2 Control Measures, as described in more detail in Sections 2.3 and 4.0 of this EIR.

**Group 1 Control Measures Impacts:** Group 1 control measures include measures to reduce emissions of reactive organic compounds (ROCs), a precursor to ozone pollution, by enhancing and revising existing prohibitory rules that APCD enforces for stationary sources. These enhanced regulatory requirements involve a reduction in the ROC emissions from solvents, coatings, adhesives, sealants, inks, resins, wash primers, and fountain solution at various industrial sources. These control measures are not anticipated to result in an increase in direct (stationary source or motor vehicles) or indirect (energy usage, water usage, or waste disposal) impacts, as documented in Section 4.0 of this EIR. Therefore, it is not anticipated that these control measures would result in an increase in GHG emissions as these control measures will not require additional motor vehicle trips associated with the existing stationary source operations, nor will they require additional energy usage. In summary, these measures are designed to reduce emissions of ozone precursors and will not result in emissions of greenhouse gases.

**Group 2 Control Measures Impacts:** Group 2 control measures include measures to reduce emissions of oxides of nitrogen (NO\textsubscript{X}) by requiring improved combustion technology on process equipment that burns natural gas, over a variety of residential, commercial, and industrial stationary source operations. These control measures are expected to reduce NO\textsubscript{X} emissions throughout Santa Barbara County. By reducing NO\textsubscript{X} emissions, which are known to contribute to the formation of ozone, it is anticipated that air quality in Santa Barbara County will improve.

Control technologies are currently available to achieve the NO\textsubscript{X} reductions that are proposed in these control measures, and similar NO\textsubscript{X} limits for these types of external combustion equipment have been implemented by other air districts. There are known trade-offs in air pollutant emissions when more stringent NO\textsubscript{X} controls are applied to external combustion equipment. A reduction in combustion temperature generally relates to lower NO\textsubscript{X} emissions; however, ROC emissions tend to increase with lower combustion temperatures, due to incomplete combustion. In addition, more stringent NO\textsubscript{X} controls may reduce the operating efficiency of combustion equipment. A reduction in operating efficiency may result in a slight increase in fuel usage. A substantial increase in fuel usage would result in additional greenhouse gas emissions, and has the potential to be a negative environmental impact. However, the control technologies that are available to achieve the NO\textsubscript{X} limits in the proposed control measures are not expected to cause substantial losses in combustion efficiency. In summary, the proposed NO\textsubscript{X} control measures are not anticipated to cause a significant increase in greenhouse gas emissions at affected facilities.

**Conclusion and Classification of Impacts**

None of the control technologies that are utilized in the Group 1 or Group 2, control measures are anticipated to generate emissions of greenhouse gases. Therefore, project-specific impacts of the
proposed project (the 2010 Plan) on global climate change are considered **Class III, less than significant**.

### 5.1.2.2 Impacts of Global Climate Change on the Proposed Project

As stated previously, the March 2010 CEQA Guidelines revisions included changes that call for an examination of the impact that global climate change may have on the proposed project. Identifying specific impacts and levels of impacts that global climate change may have on the APCD’s clean air goals, as expressed in the 2010 Plan, would be speculative in nature and is therefore not required by CEQA (CEQA Guidelines Section 15145). However, for informational purposes, a brief discussion of this topic is provided below, with no specific impacts identified or quantified for Santa Barbara County.

A number of studies have identified that global climate change may result in changes to the California climate, water supply, and landscape, and that these changes would have implications for air quality. Specifically, climate change may result in an increase in wildfires, which would compromise the air quality (increasing concentrations of ozone and particulate matter, as well as other pollutants) in those areas of the state experiencing wildfires. A change in water supply may cause drought conditions that, when combined with high winds, can increase particulate matter concentrations. Also, ozone levels are known to increase with temperature increases, resulting in potentially higher ozone concentrations as well as increased incidences of violations of state and federal ozone standards in some areas.

### 5.2 Other Cumulative Impacts

Cumulative Impacts are defined in the CEQA Guidelines Section 15355 as, “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” This section goes on to state that, “(a) The individual effects may be changes resulting from a single project or a number of separate projects, (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

The 2010 Plan was prepared in coordination with other regional planning agencies, such as the SBCAG, and does not involve any new development activities or impacts that would affect other programs in the Plan’s jurisdictional area. The Plan was prepared in coordination and consultation with CARB, and is an integral part of the clean air planning process for the State of California.

**Conclusion and Classification of Impacts**

The control measures identified in the 2010 Plan are not expected to result in any other cumulative impacts. Therefore, this impact area is considered to be **Class III, less than significant**.
Alternatives to the Proposed Project

CEQA Guidelines Section 15126.6 (a) requires that, “An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible...There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

CEQA Guidelines Section 15126.6 (e) (1) discusses the requirement to include a “No Project” alternative, to allow decisions makers to compare the impacts of approving the project to the impacts of not approving the project. Section 15126.6 (e) (2) identifies the need for discussion of the “Environmentally Superior” alternative. Section 15126.6 (c) requires that the EIR include a discussion of those project alternatives that were considered by the lead agency but were rejected as infeasible.

The following alternatives are evaluated in Section 6.0:

- No Project Alternative
- More Stringent Control Measure Alternative
- Less Stringent Control Measure Alternative
- Environmentally Superior Alternative
- Alternatives Rejected As Infeasible

6.1 NO PROJECT ALTERNATIVE

In the case of the 2010 Plan, the “No Project” alternative is identified as the continued implementation of existing emission control strategies that have been adopted by the APCD Board and incorporated into APCD’s Rules & Regulations. These existing air pollution control requirements would continue to be enforced by the APCD. In the “No Project” alternative, the 2010 Plan is not adopted, and the triennial planning requirements of the California Clean Air Act are not met.

The “No Project” alternative would not result in adverse environmental impacts as compared to the existing environmental setting. However, the “No Project” alternative would not meet the basic objective of the 2010 Plan, which is to identify and implement control measures that will improve air quality and eventually lead to attainment of the California ambient air quality standard for ozone (for additional information, see Section 1.2, Project Objective). The “No Project” alternative is not considered feasible because it results in failure to meet state clean air planning requirements.

6.2 MORE STRINGENT CONTROL MEASURES ALTERNATIVE

When deciding which control measures should be implemented during the 2010 Plan period, and which measures should be included as “Emission Control Measures for Further Study” (referred to hereafter as “further study measures”), APCD staff considered CARB-identified performance standards, California Air Pollution Control Officers Association (CAPCOA)-identified potential all feasible measures, commitments in the APCD’s 2007 Clean Air Plan, and other air district rules.
The “More Stringent Control Measures” alternative would involve the implementation of some or all of the further study measures that are identified in Chapter 4 of the 2010 Plan. These further study measures include proposed new rules, or revisions to existing rules, governing emissions and operations of the following types of equipment/industries:

- Gas Turbines
- Natural Gas Fuel Specifications
- Pleasure Craft Fuel Transfer
- Wineries and Breweries
- Fugitive Emissions Inspection and Maintenance (primarily oil & gas facilities)
- Internal Combustion Engines (diesel-fired) at stationary sources
- Internal Combustion Engines (natural gas-fired) at stationary sources
- Petroleum Solvent Dry Cleaners
- Storage of Reactive Organic Compound Liquids (primarily at public and private fueling stations)

Other further study measures that are outside of APCD’s discretionary authority, such as CARB control measures, and international agreements governing emissions from offshore shipping sources, are not considered as part of the “More Stringent Control Measures” alternative, because APCD has no authority to implement these measures.

The “More Stringent Control Measures” alternative would, in theory, enhance progress toward attainment of the California ambient air quality standard for ozone. However, implementation of the further study measures may involve possible environmental, technical, and economic impacts that, at this point in time, are less well known for a variety of reasons. In addition, these measures may not be as well suited for application in Santa Barbara County as they are for other areas. Possible environmental impacts that would result from implementation of the further study measures include, but are not limited to, the following:

- Control measures that result in decreasing efficiency (i.e., increased fuel usage) may result in additional impacts to greenhouse gas emissions and global climate change.
- Control measures that require a change in the type of solvent used in an industry (such as dry cleaning) may result in changes to toxic air contaminant emissions at specific locations.
- Changing fuel specifications may result in impacts at the fuel refinery. Although no refineries currently operate in Santa Barbara County, a refinery may have to modify its operational parameters to accommodate a reformulated fuel. A discussion of specific impacts related to refinery modifications is, at this point, too speculative to include in this EIR.

### 6.3 Less Stringent Control Measures Alternative

For the purpose of the alternatives discussion, the “Less Stringent Control Measures” alternative is defined as implementation of some, but not all, of the control measures that are proposed for implementation and are included in the Project Description (Section 2.3 of the EIR; Chapter 4, Section 4.5, of the 2010 Plan). Additionally, this alternative might involve a less stringent control option for any of the proposed control measures. Because no significant environmental impacts were identified for the proposed control measures, this alternative would not result in additional
environmental impacts beyond those discussed in the EIR. However, the “Less Stringent Control Measures” alternative would not achieve the desired result of fully implementing all feasible measures as mandated by the California Clean Air Act (CCAA), and may result in extending the amount of time required to attain the California ambient air quality standard for ozone.

Because this alternative does not avoid any significant environmental impacts and postpones attainment of the ozone standard, it does not fully meet the project objectives and is not considered a feasible alternative.

6.4 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 (a), (b), and (e) (2) discuss the range of project alternatives that should be considered and discussed in an EIR. Specifically, Section 15126.6 (e) (2) requires that, “If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Following is a discussion of which of the project alternatives the APCD considers to be the “Environmentally Superior” alternative.

The proposed project is considered to be the most efficient means of attaining the basic objectives of the California Clean Air Act, while limiting adverse effects to a reasonable level. As discussed above, the “Less Stringent Control Measures” results in a delay of important pollutant emissions reductions that are considered feasible and that have been implemented successfully in other areas of the state. The “More Stringent Control Measures” alternative includes measures that warrant further study prior to implementation, for a variety of reasons, as discussed in Section 6.2.

The 2010 Plan represents a balance of control measures that are considered to be feasible in the near-term, with little or no related environmental impacts. As discussed in Section 4.0, Project Impacts and Mitigation Measures, no significant impacts were identified for the 2010 Plan that required mitigation. A more stringent set of control measures would achieve additional air quality benefits; but without a clear understanding of how these measures would be applied to local businesses in Santa Barbara County and the overall emissions reductions that would result from their implementation, it is difficult, if not speculative, to identify the environmental impacts associated with these measures.

Therefore, the proposed project (The 2010 Plan) is considered to be the “Environmentally Superior” alternative. If potential environmental impacts are identified as the 2010 Plan control measures are specifically adopted through new APCD rules or revisions to existing rules, APCD’s CEQA review process for rule adoptions and revisions will ensure that these impacts will be identified and mitigated as appropriate. Thus, the “Environmentally Superior” alternative would include additional mitigation as necessary to avoid potentially significant impacts.

6.5 ALTERNATIVES REJECTED AS INFEASIBLE

CEQA Guidelines Section 15126.6 (c) states that, “The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process...”
The nature of the clean air planning process, as described in more detail in Section 1.0, *Introduction*, is that as updates are made to Clean Air Plans, emission control measures are developed, revised, and considered as to appropriateness for inclusion. Therefore, the consideration and reconsideration of project alternatives is already inherent in the process. The “Emission Control Measures for Further Study” identified in Chapter 4 (Section 4.5) of the 2010 Plan were not considered for implementation at this time, but are still retained in the plan for future consideration. In summary, the alternatives that are considered by the APCD to be infeasible at this time are retained in the 2010 Plan as further study measures.
7.0 Other CEQA Topics

Section 15126 of the CEQA Guidelines provides a listing of certain topics that should be discussed in an EIR, preferably in separate sections or paragraphs of the EIR. These topics include:

a) Significant environmental effects of the proposed project,
b) Significant environmental effects which cannot be avoided if the proposed project is implemented,
c) Significant irreversible environmental changes which would be involved in the proposed project should it be implemented,
d) Growth-inducing impact of the proposed project,
e) The mitigation measures proposed to minimize the significant effects, and
f) Alternatives to the proposed project.

As documented in Chapter 4, the EIR analysis for the 2010 Plan and its related control measures found that there would be no significant environmental impacts related to implementation of the control measures. As a result, no mitigation measures are required to reduce impacts to a level that is less than significant. Based on this analysis, additional discussion of environmental effects and mitigation as outlined in items (a), (b), and (e) above is not necessary. Items (c) and (d) are discussed in Sections 7.1 and 7.2 below. An analysis of the project alternatives is provided in Chapter 6 of this EIR.

7.1 Significant Irreversible Changes

Implementation of the 2010 Plan is anticipated to achieve air quality benefits for Santa Barbara County by reducing emissions of nitrogen oxides (NO\textsubscript{x}) and reactive organic compounds (ROC), both of which are precursor pollutants to the formation of ozone. Implementation of clean air planning efforts, as described in Chapter 1 of this EIR, has yielded air quality improvements in Santa Barbara County, and these improvements are expected to continue as additional control measures are implemented by the APCD and by other involved agencies such as the U.S Environmental Protection Agency (USEPA), California Air Resources Board (CARB) and the Santa Barbara County Association of Governments (SBCAG). If air pollution regulations in the region are relaxed, or if additional air pollutant emissions occur that are not accounted for in the clean air planning process, it is possible that the clean air goals of these agencies will not be achieved.

No significant adverse environmental impacts were identified in the EIR; all impacts were classified as less than significant, or beneficial impacts. Therefore, no significant irreversible changes are anticipated to result from implementation of the 2010 Plan.

7.2 Growth-Inducing Impacts

The over-arching goal of clean air planning efforts, as supported by the 2010 Plan, is to improve air quality in Santa Barbara County to meet ambient air quality standards. Improving air quality through implementation of control measures to reduce NO\textsubscript{x} and ROC emissions is not expected to have growth-inducing impacts. None of the control measures include incentives that would increase or expand growth of residential, commercial or industrial land uses in Santa Barbara County. Implementation of the control measures from the 2010 will not require additional public
infrastructure facilities, such as roads or wastewater disposal facilities, which would facilitate additional growth in Santa Barbara County.

### 7.3 Economic and Social Effects

Section 15131 of the CEQA Guidelines states that, “Economic or social information may be included in an EIR or may be presented in whatever form the agency desires.” This section goes on to further outline how information related to economic and social effects should be considered in the context of CEQA. Specifically, economic or social effects of a project shall not be treated as significant effects on the environment. However, economic or social effects of a project may be used to determine the significance of physical changes caused by a project. This type of assessment is necessary when project that consists of a physical change brings about economic or social impacts that make that physical change even more significant – for example, a construction project that divides a community.

In the context of the 2010 Plan and implementation of the proposed ROC and NO\textsubscript{X} control measures, some level of economic impact will be realized by the industries that are regulated under the rules associated with the proposed control measures. Chapter 2 of this EIR, as well as Chapter 4 of the 2010 Plan, provides a more in-depth discussion of the proposed control measures and the types of facilities affected by the control measures. No significant environmental impacts were identified, and economic and social considerations were not necessary to support a finding of significant impacts.
8.0 References

8.1 ORGANIZATIONS AND PERSONS CONSULTED (GUIDELINES 15129)

Leslie Wells. Santa Barbara County Public Works, Solid Waste and Utilities Division.


8.2 DOCUMENTS REFERENCED


California Global Warming Solutions Act of 2006 (Assembly Bill 32, Nunez). An act to add Division 25.5 (commencing with Section 38500) to the Health and Safety Code, relating to air pollution.


County of Santa Barbara Planning and Development. n.d. Initial Study Checklist. County of Santa Barbara Planning and Development.


Santa Barbara County Air Pollution Control District (SBCAPCD). 2010. Draft 2010 Clean Air Plan: Santa Barbara County’s Plan to Attain the State Ozone Standard. Prepared by the Santa Barbara County Air Pollution Control District and the Santa Barbara County Association of Governments. October 2010.


SBCAPCD. n.d. Rules and Regulations. Santa Barbara County Air Pollution Control District.


Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375, Steinberg). An act to amend Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, and 65588 of, and to add Sections 14522.1, 14522.2, and 65080.01 to, the Government Code, and to amend Section 21061.3 of, to add Section 21159.28 to, and to add Chapter 4.2 (commencing with Section 21155) to Division 13 of, the Public Resources Code, relating to environmental quality.
8.3 References Cited


Appendix A

Notice of Preparation and Comments Received in Response to NOP

A-1 Notice of Preparation of a Draft Environmental Impact Report for the 2010 Clean Air Plan for Santa Barbara County

A-2 Comments from State of California Governor's Office of Planning & Research, State Clearinghouse & Planning Unit

A-3 Comments from Native American Heritage Commission

A-4 Comments from County of Santa Barbara Executive Office

A-5 Comments from City of Goleta
A-1

Notice of Preparation of a Draft Environmental Impact Report for the 2010 Clean Air Plan for Santa Barbara County
NOTICE OF PREPARATION

DATE: June 29, 2010

TO: Interested Agencies and Individuals and the Office of Planning and Research


The Santa Barbara County Air Pollution Control District (APCD), as Lead Agency under the California Environmental Quality Act, will prepare a Draft Environmental Impact Report (DEIR) for the 2010 Clean Air Plan (2010 Plan) for Santa Barbara County.

Project Location
The 2010 Plan will apply to Santa Barbara County, the state tidelands and the outer continental shelf (OCS). State tidelands facilities are located in coastal waters within three miles of the coastline. OCS facilities are in waters within 25 miles of the seaward boundaries of the state and located off the coast of Santa Barbara County, which is the corresponding onshore area.

Project Description
The purpose of the 2010 Plan is to chart a course of action that will ensure clean, healthful air for the residents and environment of Santa Barbara County. Our County’s air quality has improved enough to be considered in attainment of the federal 8-hour ozone standard and the state 1-hour ozone standard. As we have yet to attain the state 8-hour ozone standard, the 2010 Plan demonstrates how we plan to attain that standard. This 2010 Plan will therefore satisfy all state triennial planning requirements pursuant to the California Clean Air Act of 1988.

Also included in this 2010 Plan is a new Climate Protection chapter that discusses greenhouse gas emissions and climate change issues in a planning context. This chapter, which is informational and not regulatory in nature, presents an overview of global climate change issues and provides a baseline 2007 carbon dioxide (CO$_2$) emissions inventory for the county. CO$_2$ emissions are estimated for industrial, commercial, transportation, residential, and agriculture activities in Santa Barbara County, as well as for electricity consumption within the county.

The air pollution control measures evaluated for the 2010 Plan include measures that are substantially the same as control measures that were considered in previous Clean Air Plans (CAPs), including the 2007 CAP, 2004 CAP, 2001 CAP, 1998 CAP, 1994 CAP and the 1991 AQAP. The twelve control measures considered for implementation during the plan period rely on established air quality control methods such as vapor controls, reformulation of products, improved transfer efficiency for application of coatings, external combustion modification, post-combustion modification, and operation and maintenance methods. The control measures will be implemented through revisions to existing APCD Rules as listed below:

1. First revision to Rule 321, Solvent Cleaning Machines and Solvent Cleaning
2. Revision to Rule 342, Control of Oxides of Nitrogen (NOₓ) from Boilers, Steam Generators and Process Heaters (With Heat Inputs in the Range of 5 MMBtu/hr and Greater)
3. Revisions to Rules 330 and 337, Surface Preparation and Surface Coating of Metal Parts and Products; Surface Preparation and Surface Coating of Aircraft or Aerospace Vehicle Parts and Products
4. Revision to Rule 351, Surface Preparation and Surface Coating of Wood Products
5. Revision to Rule 349, Polyester Resin Operations
6. Revision to Rule 353, Adhesives and Sealants
7. Revision to Rule 354, Graphic Arts and Paper, Film, Foil, and Fabric Coatings
8. Revision to Rule 352, Natural-Gas Fired Residential Water Heaters
9. Revision to Rule 323, Architectural Coatings
10. Revision to Rule 361, Control of Oxides of Nitrogen (NOₓ) from Boilers, Steam Generators, and Process Heaters (With Heat Input Ratings in the Range of > 2 MMBtu/hr to < 5 MMBtu/hr)
11. Revision to Rule 360, Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers, Steam Generators, and Process Heaters (With Heat Input Ratings in the Range of > 0.075 MMBtu/hr to 2 MMBtu/hr)
12. Second revision to Rule 321, Solvent Cleaning Machines and Solvent Cleaning

Environmental Issues to be addressed in the EIR:
The 2010 Plan EIR will focus on potentially significant impacts to the following issue areas:

- Air Quality
- Transportation/Circulation
- Water Resources
- Biological Resources
- Noise & Nuisance
- Land Use/Planning
- Public Service
- Utilities/Energy
- Hazardous Materials
- Geology
- Global Climate Change

Project Comments
The views of concerned agencies and any interested persons regarding the scope and content of the environmental document for the proposed project are hereby requested. Please send your written responses to this Notice of Preparation to: Molly Pearson, Community Programs Supervisor, 260 N. San Antonio Road Suite A, Santa Barbara, CA, 93110 or by email at mmp@sbcapcd.org. Due to time limits mandated by state law, your response must be sent at the earliest possible date but not later than 30 days after the receipt of this notice.
A-2

Comments from State of California Governor’s Office of Planning & Research, State Clearinghouse & Planning Unit
July 6, 2010

To: Reviewing Agencies

Re: 2010 Clean Air Plan for Santa Barbara County
SCH# 2010071014

Attached for your review and comment is the Notice of Preparation (NOP) for the 2010 Clean Air Plan for Santa Barbara County draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Molly Pearson
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Acting Director, State Clearinghouse

Attachments
cc: Lead Agency
### SCH# 2010071014

**Project Title:** 2010 Clean Air Plan for Santa Barbara County  
**Lead Agency:** Santa Barbara County Air Pollution Control District

**Type:** NOP  Notice of Preparation  
**Description:** The purpose of the 2010 Clean Air Plan is to chart a course of action that will ensure clean, healthful air for the residents and environment of Santa Barbara County. As we have yet to attain the state 8 hour ozone standard, the 2010 Plan demonstrates how we plan to attain that standard, and includes 12 control measures considered for implementation during the plan period that rely on established air quality control methods such as vapor controls, reformation of products, improved transfer efficiency for application of coatings, external combustion modification, post-combustion modification, and operation and maintenance methods. The 2010 Plan includes a Climate Protection chapter that discusses greenhouse gas emissions and climate change and presents a baseline carbon dioxide emissions inventory for Santa Barbara County.

**Lead Agency Contact**  
**Name:** Molly Pearson  
**Agency:** Santa Barbara County Air Pollution Control District  
**Phone:** 805-961-8838  
**Fax:**  
**Address:** 280 N. San Antonio Road, Suite A  
**City:** Santa Barbara  
**State:** CA  
**Zip:** 93110

**Project Location**  
**County:** Santa Barbara  
**City:**  
**Region:**  
**Cross Streets:** Countywide  
**Lat / Long:**  
**Parcel No.:**  
**Township:**  
**Range:**  
**Section:**  
**Base:**

**Proximity to:**  
- Highways  
- Airports  
- Railways  
- Waterways  
- Schools  
- Land Use

**Project Issues**  
Air Quality; Biological Resources; Geologic/Seismic; Landuse; Noise; Other Issues; Public Services; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply

**Reviewing Agencies**  
Resources Agency; California Coastal Commission; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Native American Heritage Commission; Caltrans, District 5; Regional Water Quality Control Board, Region 3

**Date Received:** 07/06/2010  
**Start of Review:** 07/06/2010  
**End of Review:** 08/04/2010

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Note: Blanks in data fields result from insufficient information provided by lead agency.
Regional Water Quality Control Board (RWQCB)

- RWQC 1
  Cathleen Hudson
  North Coast Region (1)

- RWQC 2
  Environmental Document Coordinator
  San Francisco Bay Region (2)

- RWQC 3
  Central Coast Region (3)

- RWQC 4
  Teresa Rodgers
  Los Angeles Region (4)

- RWQC 5
  Central Valley Region (5)

- RWQC 6
  Lahontan Region (6)

- RWQC 7
  Colorado River Basin Region (7)

- RWQC 8
  Santa Ana Region (8)

- RWQC 9
  San Diego Region (9)

- Other

Last Updated on 03/24/10
A-3

Comments from Native American Heritage Commission
Ms. Molly Pearson  
Santa Barbara County Air Pollution Control District  
260 N. San Antonio Road, Suite A  
Santa Barbara, CA 93110  

RE: SCH#2010071014 2010 Clean Air Plan for Santa Barbara County.

Dear Ms. Pearson:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- Contact the Native American Heritage Commission for:
  - A Special Incentive Fee Check, **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez  
Program Analyst  
(916) 653-4040

CC: State Clearinghouse
Native American Contact List
Santa Barbara County
July 13, 2010

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(805) 646-6214
Chumash

Randy Guzman - Folkes
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Moorpark, CA 93021
ndnRandy@yahoo.com
(805) 905-1675 - cell
Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

Lei Lynn Odom
1339 24th Street
Oceano, CA 93445
(805) 489-5390
Chumash

Coastal Band of the Chumash Nation
Vennise Miller, Chairperson
P.O. Box 4464
Santa Barbara, CA 93140
805-964-3447
Chumash

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and
Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed
SCH# 2010071014 20100 Clean Air Plan for Santa Barbara County.
Native American Contact List
Santa Barbara County
July 13, 2010

Mona Olivas Tucker
660 Camino Del Rey
Arroyo Grande CA 93420
(805) 489-1052 Home
(805) 748-2121 Cell
Chumash

Northern Chumash Tribal Council
Fred Collins, Spokesperson
67 South Street
San Luis Obispo CA 93401
(805) 801-0347 (Cell)
Chumash

Matthew Darian Goldman
495 Mentone
Grover Beach CA 93433
805-748-6913
Chumash

Frank Arredondo
PO Box 161
Santa Barbara CA 93102
805-617-6684
ksenSKUmu@yahoo.com
Chumash

Santa Ynez Band of Mission Indians
Sam Cohen, Tribal Administrator
P.O. Box 517
Santa Ynez CA 93460
(805) 688-7997
(805) 686-9578 Fax
Chumash

Salinan-Chumash Nation
Xielolixii
3901 Q Street, Suite 31B
Bakersfield CA 93301
Salinan Chumash

xielolixii@yahoo.com

408-966-8807 - cell

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5997.94 of the Public Resources Code and Section 5997.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2010071014 20100 Clean Air Plan for Santa Barbara County.
A-4

Comments from County of Santa Barbara Executive Office
July 26, 2010

Ms. Molly Pearson  
Community Programs Supervisor  
Santa Barbara County Air Pollution Control District  
260 N. San Antonio Road, Suite A  
Santa Barbara, CA 93110  

Email: mmp@sbcapcd.org  
Fax: (805) 961-8801  

Re: Notice of Preparation for a Draft Environmental Impact Report-2010 Clean Air Plan for Santa Barbara County  

Dear Ms. Pearson:  

Thank you for the opportunity to comment on the Notice of Preparation for a Draft Environmental Impact Report on the 2010 Clean Air Plan for Santa Barbara County. At this time, the County submits comments from the Planning and Development Department for your consideration.  

The County looks forward to continued dialogue on the 2010 Clean Air Plan project and future projects. If you should have further questions, please do not hesitate to contact my office directly, or Peter Imhof, Supervising Planner in the Planning & Development Department, Long Range Planning Division at (805) 568-3543.  

Sincerely,  

Michael F. Brown  
County Executive Officer  

cc: Glenn Russell, Director, Planning and Development Department  
Vicki Parker, Deputy Director, Long Range Planning Division  
Doug Anthony, Deputy Director, Energy Division  
Peter Imhof, Supervising Planner, Long Range Planning Division  

enclosures: Planning and Development Department letter dated July 22, 2010
July 22, 2010

Ms. Molly Pearson  
Community Programs Supervisor  
Santa Barbara County Air Pollution Control District  
260 N. San Antonio Road, Suite A  
Santa Barbara, CA 93110

Re: Notice of Preparation for a Draft Environmental Impact Report-2010 Clean Air Plan for Santa Barbara County

Dear Ms. Pearson:

Thank you for the opportunity to comment on the Notice of Preparation for a Draft Environmental Impact Report (DEIR) on the 2010 Clean Air Plan for Santa Barbara County. The Planning and Development Department offers the following comments for your consideration:

- The Air Pollution Control District has not made available the draft 2010 Clean Air Plan for review as part of this NOP and the NOP itself does not contain a detailed description of the scope of the environmental review. As such, the full scope of the 2010 Clean Air Plan DEIR is unknown and our office is unable to provide comprehensive comments on the NOP in the absence of this information. Based on the information contained in the NOP, it is our understanding that the 2010 Clean Air Plan will apply to Santa Barbara County, the State tidelands and submerged lands, and the outer continental shelf. We request that you consider the following four projects in the DEIR as they relate to a potential change in both new and existing emissions sources in the County:

1. Venoco Ellwood Marine Terminal Lease Renewal (EMT); California State Lands Commission (CSLC) lead CEQA agency, EIR SCH #2004071075, project approved in June 2009. Approval extended the offshore lease of the EMT through February 23, 2013 with the stipulation that in December 2010 the Barge Jovalan must be replaced by a double-hulled barge or the oil must be transported by pipeline. Note that the onshore portion of the EMT lease expires in 2016.

2. Venoco PRC 421 Re-commissioning Project; CSLC lead CEQA agency, EIR SCH #2005061013, final EIR under preparation as of the date of this letter. The proposed project involves the return of the currently idle PRC 421 to either short term pressure testing or longer term oil production.
3. Venoco Full Field Development Project, CSLC CEQA lead agency, EIR SCH #2006061146, final administrative draft of the EIR under preparation as of the date of this letter. The proposed project involves the extension of the oil and gas lease boundaries of PRC 3120 and 3242, drilling up to 40 new wells from Platform Holly, safety improvements and upgrades at the existing Ellwood Onshore Facility (EOF), the elimination of all operations at the Ellwood Marine Terminal (EMT) and the installation of a new onshore pipeline system to re-route and replace the existing Line 96 pipeline.

4. Venoco Line 96 Modification Project, Santa Barbara County lead CEQA agency, EIR SCH #2009111034, administrative draft of the EIR under preparation as of the date of this letter. The proposed project is to re-route the existing Line 96 oil pipeline to the existing Plains Pipeline oil pipeline near Las Flores Canyon and eliminate all operations at the Ellwood Marine Terminal (EMT). Note that his project was also proposed as a component of the Venoco Full Field Project.

5. American Ethanol, Inc. Project, Santa Barbara County lead CEQA agency, application suspended and expected to be resubmitted within a few months. In their earlier submittal, the applicants proposed a corn-based ethanol production facility to be located 5 miles west of the City of Santa Maria. Using a distillation process, the facility would produce 110 million gallons of ethanol per year which would be shipped from the facility by truck and rail to market destinations.

The County will follow this project closely and looks forward to the opportunity to review the draft 2010 Clean Air Plan and associated DEIR. If you should have further questions, please do not hesitate to contact my office directly, or Peter Imhof, Supervising Planner in the Long Range Planning Division at (805) 568-3543.

Sincerely,

[Signature]

Glenn Russell, Ph.D.
Director of Planning and Development

cc: Michael F. Brown, County Executive Officer
    Vicki Parker, Deputy Director, Long Range Planning Division
    Doug Anthony, Deputy Director, Energy Division
    Peter Imhof, Supervising Planner, Long Range Planning Division
A-5

Comments from City of Goleta
July 27, 2010

Molly Pearson
Santa Barbara County Air Pollution Control District
Community Programs Supervisor
260 N. San Antonio Road Suite A
Santa Barbara, CA, 93110

VIA ELECTRONIC MAIL

RE: Notice of Preparation of a DEIR for the 2010 Clean Air Plan for Santa Barbara County

Dear Molly:

Thank you for the Notice of Preparation of a Draft Environmental Impact Report for the 2010 Clean Air Plan for Santa Barbara County. The Clean Air Plan has broad influence over development within the County including the City of Goleta, and we appreciate this opportunity to provide comment. As the Air Pollution Control District proceeds with preparing the Draft Environmental Impact Report (EIR), we request that you provide a detailed analysis of climate change impacts, related significance thresholds, and a range of mitigation despite the fact that the 2010 Clean Air Plan addresses climate change from an informational, not regulatory perspective.

The City looks forward to the opportunity to review and comment on the Draft EIR when it is released to the public. If you have any questions, please contact me at (805) 961-7557 or Laura Vlk at (805) 961-7546.

Sincerely,

Anne Wells, Advance Planning Manager
Planning & Environmental Services Department

cc: Steve Chase, Director, Planning and Environmental Services
Appendix B

Revisions to the Draft Environmental Impact Report
Appendix B: Revisions to the Draft EIR

This appendix shows the text revisions made to the Draft EIR. Text deleted is shown as strikethrough (e.g. strikethrough) and text added is shown as underline (e.g. underlined). Revisions are categorized by sections of the Draft EIR.

TABLE OF CONTENTS

The Table of Contents, Pages i through iv, has been revised. The headings denoting the “Chapters” have been changed to read as “Sections” and the numerals associated with each chapter/section have been changed from a single digit to with a digital followed by “.0”. Changes were made in this fashion:

Chapter Section 1.0.

The listing under “Appendices” on Page iv has been revised as follows:

See Separate Document Entitled “Appendix A” Found at the End of this Document.

The following listings have been added under “Appendices” on Page iv:

Appendix A Notice of Preparation and Comments Received in Response to NOP,
Appendix B Revisions to the Draft Environmental Impact Report,
Appendix C Comments on the Draft Environmental Impact Report and Responses to the Comments,
Appendix D Governor’s Office of Planning and Research State Clearinghouse and Planning Unit Compliance Letter and Database Report.

EXECUTIVE SUMMARY

The text on page E-1 has been revised as follows:

The EIR contains eight Sections and four Appendices; the Sections are as summarized below:

SECTION 2.0 PROJECT DESCRIPTION

The following listing has been added on Page 2-2:

Chapter 11 – Public Participation

Page 2-2 has been revised as follows:

Chapters 1, 2, 3, 5, 6, 7, 8, 9, and 10, and 11

Page 2-2 and Page 2-3 have been revised as follows:

The SBCAG Board is scheduled to adopted the 2010 Plan TCMs in November, 2010. SBCAG’s Vision 2030: 2008 Regional Transportation Plan and the 2008 Santa Barbara County Regional
Transportation Plan Final Environmental Impact Report SCH#: 2004081136 (2008 SBC RTP Final EIR) include discussion of TCMs in the context of Santa Barbara County’s regional and local transportation plans and projects, and both of these documents are incorporated by reference into this EIR (SBCAG RTP, 2008; SBCAG RTP EIR, 2009). Section 4.1 of the 2008 SBC RTP Final EIR includes a discussion of the TCM projects that are included in the 2007 Clean Air Plan, and identifies the TCMs that were implemented as RTP projects. Table 4.1-17 of the 2008 SBC RTP Final EIR identifies the RTP goals and policies that implement TCMs. Table 4.3-8 lists the TCM projects and programs approved by the SBCAG Board, as part of the 101-In-Motion process, for incorporation into the RTP. Table 4.3-9 and the text that follows identify the 2007 Clean Air Plan TCMs and identifies specific projects from the RTP that support those TCMs. Environmental impacts related to implementation of the TCMs were found to be less than significant (Class III) in the 2008 RTP EIR. In summary, the potential environmental impacts related to the adoption of the TCMs were addressed adequately in the 2008 SBC RTP Final EIR, and are therefore not addressed further in this EIR.

SECTION 3.0 ENVIRONMENTAL SETTING

Section 3.4.2 “Regulatory Setting” on Page 3-12, second full paragraph, has been revised to include the following text:

The DTSC develops regulations based on the RCRA and the California Health and Safety Code. The California Health and Safety Code is the collection of state laws that govern, among other things, the handling of hazardous waste. Division 20, Chapter 6.5, of the Code deals with Hazardous Waste Control and Article 6 of this chapter deals with transportation of hazardous waste.

Section 3.10 “Solid Waste” on Page 3-20 has been revised as follows:

Tajiguas Landfill, located on the Gaviota Coast, is the only active landfill in Santa Barbara County. Tajiguas is a County owned and operated facility that receives non-recyclable solid waste from around the County.

Section 3.10 “Solid Waste” on Page 3-20 has been revised to include the following text:

Other active non-County owned and operated landfills within the geographical boundaries of Santa Barbara County include: Santa Maria Regional Landfill, City of Lompoc Sanitary Landfill, and Vandenberg Air Force Base Landfill.

SECTION 4.0 PROJECT IMPACTS AND MITIGATION MEASURES

Section 4.2.2 “Impact Discussion” on Page 4-5 has been revised as follows:

Impacts to Air Quality Biological Resources resulting from implementation of the Group 1 and Group 2 control measures are considered to be Class III, less than significant.

A heading was added in Section 4.8.2. The added heading reads Conclusion and Classification of Impacts. This heading was added for consistency with the other sections within Section 4.0.
REFERENCES

The references in section 8.2 Documents References have been revised as follows:


The following references have been added to section 8.3 References Cited:


The following reference in section 8.3 References Cited has been revised as follows:

Appendix C

Comments on the Draft Environmental Impact Report and Responses to the Comments
### Appendix C: Comments on the Draft EIR and Responses to the Comments

This appendix presents all written and oral comments received on the Draft EIR. It is recommended that reviewers use the Index to Comments to locate comments from specific agencies, individuals, or organizations.

#### INDEX TO COMMENTS

### Comments from Agencies on the Draft EIR

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<td>County of Santa Barbara</td>
<td>Executive Office</td>
<td>Chandra L. Waller</td>
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<td>Planning and Development</td>
<td>Glenn Russell, Ph.D</td>
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<td>Oral</td>
<td>County of Santa Barbara</td>
<td>Second District Supervisor</td>
<td>Supervisor Janet Wolf</td>
</tr>
</tbody>
</table>

### Comments from Organizations on the Draft Environmental Impact Report (EIR)

None received.

### Comments from Individuals on the Draft Environmental Impact Report (EIR)

None received.
Comments and Responses on Draft EIR – Agencies
December 16, 2010

Ms. Molly Pearson
Community Programs Supervisor
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

Email: mmp@sbcapcd.org
Fax: (805) 961-8801

Re: Draft Environmental Impact Report-2010 Clean Air Plan for Santa Barbara County

Dear Ms. Pearson:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the 2010 Clean Air Plan for Santa Barbara County. At this time, the County submits comments from the Fire Department and the Planning and Development Department for your consideration.

The County looks forward to continued dialogue on the 2010 Clean Air Plan project and future projects. If you should have further questions, please do not hesitate to contact my office directly, or Jeff Hunt, Director of Long Range Planning Division, at (805) 568-2072.

Sincerely,

Chandra L. Wallar
County Executive Officer

cc: Glenn Russell, Director, Planning and Development Department
Doug Anthony, Deputy Director, Energy Division
Richard Todd, Division Chief/Fire Marshal, Fire Department

Enclosures: Planning and Development Department letter dated December 9, 2010
County Fire Department letter dated December 3, 2010
Fire Department
December 3, 2010
December 3, 2010

Ms. Susan Curtis  
Senior Planner  
County of Santa Barbara  
Office of Long Range Planning  
123 East Anapamu Street  
Santa Barbara, CA 93101

Dear Ms. Curtis:

SUBJECT: Santa Barbara APCD 2010 Clean Air Plan - DEIR

The above project is located within the jurisdiction of the Santa Barbara County Fire Department. To comply with the established regulations, we submit the following.

1. Section 3.4 Hazardous Materials  
   3.4.2 Regulatory Setting  
   Include – California Health and Safety Code

Please notify the Fire Prevention Division of any changes to the project plan. Further intensification of use or change in the project plan may require additional review.

As always, if you have any questions or require further information, please call 805-681-5523 or 805-681-5500.

In the interest of life and fire safety,

Richard Todd  
Division Chief/Fire Marshal

RJ: mkb

Serving the cities of Buellton, Goleta and Soltang and the Communities of Casmalia, Cuyama, Gaviota, Hope Ranch, Los Alamos, Los Olivos, Mission Canyon, Mission Hills, Orcutt, Santa Maria, Sisquoc, Vandenberg Village
December 9, 2010

Ms. Molly Pearson
Community Programs Supervisor
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

Re: Draft Environmental Impact Report-2010 Clean Air Plan for Santa Barbara County

Dear Ms. Pearson:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the 2010 Clean Air Plan. The Planning and Development Department offers the following comments for your consideration:

1.5 Effects Found Not to be Significant (Agricultural and Forestry Resources)
This section does not analyze agricultural operators in the unincorporated county which utilize large boilers to supply heat to crops grown in greenhouses and to generate steam for sterilizing soils before planting. The DEIR should quantify the number of agricultural operations affected by the proposed control measures and disclose and mitigate for any impacts.

3.10 Environmental Setting/Utilities and Energy (Physical Setting) – Solid Waste
The DEIR states that Tajiguas Landfill is the only active landfill site in the County. However, other active landfill sites, not operated by the County Public Works Department, Resource Recovery and Waste Management Division, should also be named and described in the DEIR. Examples include the Santa Maria landfill, Lompoc landfill and Vandenberg Air Force Base landfill. ¹

6.0 Alternatives to the Proposed Project
The projection of outer continental shelf (OCS) emissions appears not to consider projected decommissioning of offshore oil and gas platforms. A recent study prepared for the California Ocean Science Trust reports that the [former] Minerals Management Service (MMS) estimates that all platforms will reach the end of their useful lives between 2015 and 2030.² This same study qualitatively discusses short-term emissions of decommissioning under two different

¹ Santa Barbara County Air Pollution Control District, Draft Environmental Impact Report for the 2010 Clean Air Plan, November 2010, at page 3-20.
scenarios (full removal versus partial removal). The reduction of the emissions from stationary sources on the OCS merits consideration in the DEIR, as do the added short-term emissions associated with different decommissioning options.

**Draft 2010 Clean Air Plan**
The County recommends the following changes to the Draft 2010 Clean Air Plan. Section 9.2 Greenhouse Effect and Climate Change currently states

> Scientists estimate that emissions of greenhouse gases will need to be reduced by 80 percent by 2050 to avoid a 2°C (3.6°F) increase in global temperatures, which would produce a sharp rise in the risk of dangerous impacts. ³

This document should clarify which emissions are subject to the 80% reduction (both naturally caused and human-caused, or only human-caused); and identify the base year referenced for the 80% reduction.

The County looks forward to continued dialogue on the 2010 Clean Air Plan. If you should have further questions, please do not hesitate to contact my office directly, or Jeff Hunt, Director of Long Range Planning Division, at (805) 568-2072.

Sincerely,

Glenn Russell, Ph.D.
Director of Planning and Development

---

³ Santa Barbara County Air Pollution Control District, Draft 2010 Clean Air Plan, October 2010, at page 9-1.
At the December 16, 2010 District Board Hearing, Supervisor Janet Wolf made the following comment as documented in the recording of the hearing:

**Supervisor Wolf**: Remarked that the county had submitted a letter after reviewing the draft EIR and many of the comments dealt with Venoco-Ellwood Marine Terminal. Were those comments ultimately addressed in the final Plan?
Response to Comments:

1-1  The Santa Barbara Air Pollution Control District appreciates the comments submitted by the County of Santa Barbara on the Draft EIR.

2-1  Section 3.4.2 “Regulatory Setting” on Page 3-12, second full paragraph, has been revised to include the following text:

The DTSC develops regulations based on the RCRA and the California Health and Safety Code. The California Health and Safety Code is the collection of state laws that govern, among other things, the handling of hazardous waste. Division 20, Chapter 6.5, of the Code deals with Hazardous Waste Control and Article 6 of this chapter deals with transportation of hazardous waste.

3-1  The Clean Air Plan suggested control measures that apply to medium and large boilers (rated heat input of 2-5 MMBtu/hr, and greater than 5 MMBtr/hr, respectively) apply only to boilers that are required to have APCD permits (reference: APCD Rule 361, Section B.1.b., and Rule 342, Section B.1.d.). Boilers that are used in agricultural operations are generally not required to have APCD permits unless, in the aggregate, they are very large emitters (e.g., greater than 50 tons of nitrogen oxides per year). Currently, District staff is not aware of any agricultural operations in Santa Barbara County that utilize boilers with this level of pollutant emissions. Therefore, the Clean Air Plan suggested control measures are not anticipated to have any impacts to agricultural operators.

3-2  Thank you for pointing out this oversight; the EIR text has been revised accordingly. Section 3.10 “Solid Waste” on Page 3-20 has been revised as follows:

Tajiguas Landfill, located on the Gaviota Coast, is the only active landfill in Santa Barbara County. Tajiguas is a County owned and operated facility that receives non-recyclable solid waste from around the County.

The following text has also been included:

Other active non-County owned and operated landfills within the geographical boundaries of Santa Barbara County include: Santa Maria Regional Landfill, City of Lompoc Sanitary Landfill, and Vandenberg Air Force Base Landfill.

3-3  The commenter is concerned that the EIR did not consider an alternative that assumes the decommissioning of offshore oil platforms and a decline in emissions associated with oil and gas activities in the outer continental shelf (OCS).
The 2010 Clean Air Plan includes an inventory of onshore and offshore air pollutant emissions countywide, and is based on the best available emissions forecasting information. Decisions to decommission offshore oil platforms will be based on a number of factors, including economic and political considerations, as well as future discretionary decisions by other agencies such as the California State Lands Commission and the U.S. Minerals Management Service. The formulation of an EIR alternative that addresses decommissioning of offshore platforms would be based on a number of assumptions in these issue areas and would be speculative in nature. The alternatives that were included in the EIR analysis were based on decisions and considerations that are more directly controlled by the APCD Board.

When better information becomes available in the future regarding the potential decommissioning of oil platforms in the OCS, this information will be incorporated into the emissions inventory and emissions forecasts and will be considered in the Clean Air Plan process during future updates.

The commenter also states that short-term emissions associated with different decommissioning options should be considered in the Draft EIR. The Clean Air Plan is a program-level document, and the EIR does not analyze the impacts related to specific discretionary projects; such analysis of short-term emissions related to decommissioning of equipment in the OCS would be too speculative to consider in the context of the Clean Air Plan EIR.

This comment pertains to the Draft 2010 Clean Air Plan, and not to the analysis of environmental impacts in the Draft EIR. While this comment does not refer to the environmental impacts of the Clean Air Plan, a response to the comment is provided below:

Chapter 9 of the Clean Air Plan, titled *Greenhouse Gases and Climate Change*, is provided for informational purposes only, and is not regulatory in nature. The text of Chapter 9, Section 9.2, has been revised as indicated below:

> Scientists estimate that human-caused emissions of greenhouse gases will need to be reduced by to 80 percent below 1990 levels by 2050 to avoid a 2°C (3.6°F) increase in global temperatures, which would produce a sharp rise in the risk of dangerous impacts.

Supervisor Wolf’s comments expressed concern over whether Santa Barbara County’s comments were received and were addressed. Aside from the comments received on the Draft EIR (and addressed in this letter), the only other County comments received were from the Santa Barbara County Planning & Development Department (dated July 22, 2010). The July 22 comments were specifically in response to the Notice of Preparation of an Environmental Impact Report and are included in Appendix A of the Draft EIR. These comments relate to a number of specific oil and gas-related projects (Venoco projects in the Goleta area) as well as a proposed ethanol production facility in the unincorporated county near Santa Maria. The Draft EIR project description, on Page 2-3, states the following:

> This EIR does not identify the potential environmental impacts that will result from discretionary decisions made by land use agencies on individual projects. The CEQA analysis for an individual land use project is addressed at the time that the land use decision is made, and this is done by the agency or jurisdiction that is making the land
This language was included in the EIR project description, and was bolded for emphasis, to specifically address the comments from Santa Barbara County, requesting that the Clean Air Plan EIR consider impacts from individual projects that are outside of the District’s discretionary authority. As stated in response to comment 3-3 above, the 2010 Clean Air Plan includes an inventory of onshore and offshore air pollutant emissions countywide, and is based on the best available emissions forecasting information. When information becomes available in the future regarding new and modified facilities within the county, this information will be incorporated into the emissions inventory and emissions forecasts and will be considered in the Clean Air Plan process during future updates.
Appendix D

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit
Compliance Letter and Database Report
December 23, 2010

Molly Pearson
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

Subject: 2010 Clean Air Plan for Santa Barbara County
SCH#: 2010071014

Dear Molly Pearson:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 22, 2010, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse
SCH# 2010071014
Project Title 2010 Clean Air Plan for Santa Barbara County
Lead Agency Santa Barbara County Air Pollution Control District

Type EIR Draft EIR
Description The 2010 Clean Air Plan (Plan) is a three-year update required by the State of California to show how the District plans to meet the state 8-hour ozone standard. The Plan was developed to support and guide the District's effort to control air pollutant emissions and reduce ambient air pollutant concentration within Santa Barbara County. Through adoption of source-specific regulations for the control of ozone precursor pollutants, the Plan is designed to bring the region into attainment of the state 8-hour zone standard. In addition to planning for attainment of the state ozone standard, the Plan contains two chapters that are provided for informational purposes, and are not regulatory in nature: a climate protection chapter with an inventory of carbon dioxide (CO2) emissions in the County, and a transportation and land use planning chapter.

Lead Agency Contact
Name Molly Pearson
Agency Santa Barbara County Air Pollution Control District
Phone 805-961-8838
Fax
Address 260 N. San Antonio Road, Suite A
City Santa Barbara
State CA Zip 93110

Project Location
County Santa Barbara
City
Region
Lat / Long
Cross Streets Countywide
Parcel No.
Township
Range
Section
Base

Proximity to:
Highways
Airports
Railways
Waterways
Schools
Land Use

Project Issues Air Quality; Biological Resources; Noise; Public Services; Toxic/Hazardous; Traffic/Circulation; Water Supply; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Game, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 5; Air Resources Board, Transportation Projects; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 11/08/2010 Start of Review 11/08/2010 End of Review 12/22/2010

Note: Blanks in data fields result from insufficient information provided by lead agency.
Resolution in the Matter of
Revising the Schedule for Implementing the
2016 Ozone Plan Stationary Source Control Measures

ATTACHMENT #E

California Environmental Quality Act Findings
CEQA FINDINGS

The potential environmental impacts associated with implementation of the 2016 Ozone Plan were evaluated in the 2010 Clean Air Plan Environmental Impact Report (EIR), certified by the Board in January, 2011. An Addendum to the 2010 Clean Air Plan EIR was prepared to document that revising the schedule for implementing stationary source control measures in the 2016 Ozone Plan would not result in environmental impacts that were not analyzed in the 2010 Clean Air Plan EIR. No significant environmental impacts are anticipated to result from the August 2017 revisions to the control measure implementation schedule in the 2016 Ozone Plan.

The Board finds that:

- The Board has considered the Addendum dated August 10, 2017, together with the previously certified Final EIR, for the 2010 Clean Air Plan (SCH #2010071014). The Addendum reflects the independent judgment of the Board and has been completed in compliance with CEQA.

- The Addendum, together with the 2010 Clean Air Plan EIR, is adequate for this proposal. On the basis of the whole record, including the Addendum, the previously certified EIR, and any public comments received, the Board finds that the project changes described in the Addendum do not introduce new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

- Since none of the following have occurred, as discussed in the Addendum dated August 10, 2017, herein incorporated by reference, no subsequent environmental review shall be prepared according to CEQA Guidelines Section 15162 and 15164; there are no substantial changes proposed in the project which will require major revisions to the EIR; no substantial changes have occurred with respect to the circumstances under which the project is undertaken; and there is no new information of substantial importance.