DRAFT

ENVIRONMENTAL IMPACT REPORT

FOR THE

PROPOSED AMENDMENTS TO REGULATION VIII (New Source Review) AND OTHER ASSOCIATED RULES

STATE CLEARING HOUSE NUMBER 2015091030

April 22, 2016

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

THIS PAGE INTENTIONALLY LEFT BLANK

SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT

Draft Environmental Impact Report for the Proposed Amendments to Regulation VIII (New Source Review) and Other Associated Rules

State Clearinghouse No: 2015091030

Director/Air Pollution Control Officer:
Aeron Arlin Genet

Prepared by:
Santa Barbara County Air Pollution Control District

THIS PAGE INTENTIONALLY LEFT BLANK

DRAFT ENVIRONMENTAL IMPACT REPORT
Proposed Amendments to Regulation VIII (New Source Review) and Other Associated Rules

TABLE OF CONTENTS

FIGURES:

TABLES:

APPENDICES:

EXECUTIVE SUMMARY

Pursuant to the requirements of the California Environmental Quality Act (CEQA), this Program Environmental Impact Report (EIR) has been prepared by the Santa Barbara County Air Pollution Control District (District) to evaluate the potential adverse environmental impacts of the proposed amendments to the District's Regulation VIII (New Source Review) and other associated rules. Ten rules would be amended: Rules 102, 105, 202, 204, 801, 802, 804, 805, 806 and 1301. New Rule 809, Federal Minor Source New Source Review, would be adopted. Rule 803, Prevention of Significant Deterioration, would be repealed. Table 2-1, in Section 2.3.1, summarizes all of the affected rules.

This EIR contains a description of the proposed project, a summary of the existing environmental setting for the project, an assessment of the potential environmental impacts related to the project and a comparison of the impacts of the alternatives to the proposed project. A summary of the potential impacts of implementing the proposed project is presented in Table ES-1.

The New Source Review (NSR) permitting program is an important tool to help the District meet our Clean Air Plan goal of attaining all State and Federal ambient air quality standards. The NSR rules require the District to evaluate proposed emission controls, offset mitigation and ambient air quality analyses when permitting new or modified stationary sources of air pollution. The current NSR rules have safeguarded our air quality since 1997, but they have recently become more difficult and costly to implement due to circumstances that were unforeseen at the time of adoption.

We are proposing to address these issues by amending ten rules, adopting one new rule and repealing one rule. The main changes include:

- Revising the rule text to be clearer and to eliminate redundancies,
- Reorganizing the rules for easier implementation,
- Updating the calculation methodologies,
- Updating the offsets program and adding new offsets exemptions,
- Updating our ambient air quality/increment analysis procedures,
- Adding particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) as an affected pollutant, and
- Adding a new Federal Minor Source NSR rule, as mandated by United States Environmental Protection Agency (EPA).

All of these changes are focused towards meeting the twin objectives of:

1) Safeguarding the region's air quality, and
2) Providing more flexibility and simplicity in the permitting process without compromising air quality.

These objectives, as well as all State and Federal mandates, will be met under the proposed revisions. In addition, we are required to comply with Senate Bill 288 - the Protect California Air Act of 2003, Health and Safety Code section 42500 et seq. SB 288 prevents the District from relaxing NSR permitting rules to be less stringent than those that existed on December 30, 2002. The District may adopt NSR rule amendments that are equivalent to or more stringent than prior rules. The California Air Resources Board makes the final determination of whether any revisions to a District's NSR program is in compliance with SB 288. The District proposes to move forward with these changes while ensuring that it is on a path to attaining and maintaining state and federal air quality standards for the region's air quality.

An EIR, pursuant to CEQA Guidelines section 15060, is required for the proposed project since the District has determined, based on substantial evidence, that there is a fair argument that the proposed project may have a significant adverse effect on the environment. The EIR examines the potential adverse environmental effects that may occur as the result of implementation of the proposed amendments to District Regulation VIII (New Source Review) and other associated rules.

The District reviewed the revisions to determine if environmental resources may be adversely impacted by the proposed project. Except for air quality and greenhouse gases/climate change, there is no evidence that there are any impacts to other environmental resources. Thus, the impacts to all resources besides air quality and greenhouse gases/climate change were determined not to require further environmental analysis. As the proposed rules are applied, the CEQA analysis for each individual project would determine if there are potential impacts to other environmental resources on a case-by-case basis. This EIR addresses only impacts to air quality resources in Santa Barbara County and on those areas of the Outer Continental Shelf ("OCS") offshore of Santa Barbara County for which the District has been designated as the Corresponding Onshore Area by EPA.

ENVIRONMENTAL EFFECTS

The proposed revisions to current rules and procedures that have the potential to cause significant adverse environmental impacts are as follows:

1. Revising rule text to be clearer and to eliminate redundancies.

The text of the affected rules would be revised to eliminate redundant requirements, to reorganize text in a more logical fashion and to re-write text to be clearer and more to the point.

These proposed textual changes would not, by themselves, be a project under CEQA as they are administrative in nature. Thus, these changes have no potential to cause significant adverse environmental impacts.

2. Replacing the NEI calculation methodology with the PTE methodology.

The District is proposing to move away from the Net Emissions Increase (NEI) calculation methodology for its NSR rule threshold determinations. The NEI calculation methodology is used in the current rules to determine whether proposed emissions in an application for an Authority to Construct permit exceed the offsets and Air Quality Impact Analysis (AQIA) thresholds in Rule 802 and the offsets, AQIA and Best Available Control Technology (BACT) thresholds in Rule 803.

Under the State program, Santa Barbara was designated a “moderate” nonattainment area for ozone pollution and had to meet the requirements of Health and Safety Code section 40918 which, among other things, required the District to achieve a “no net increase” in nonattainment pollutants or their precursors from new or modified stationary sources that have a Potential to Emit (PTE) of 25 tons per year of such pollutants. Instead of using the PTE approach to meet this mandate, the District elected to use an NEI methodology as an equivalent system to the PTE methodology.

All other California air districts elected to use a PTE approach, which is considered a simpler and more straightforward approach for permitting sources of air pollution. Under the NEI approach, the District must document as part of every permit action all of the emission increases and decreases at a permitted source since 1990. The record keeping and calculations for the NEI approach can be quite complicated. Under the PTE approach, the District need only track whether a source is over 25 tons PTE and, if it is, ensure that the “no net increase” mandate of State law is met.

The proposed Rule 801 includes a modified calculation methodology for NSR rule threshold determinations. The NEI calculation methodology would be deleted and replaced with a PTE methodology**.**

The proposed change to a PTE methodology, combined with revisions to the offset program thresholds (see next revision (3) below) would be equivalent in protecting air quality to the current new source review rules. While the proposed rules could result in a small net increase in emissions, this increase is minor. Therefore, the proposed NSR rules would not result in significant adverse impacts to air quality and will not interfere with the District's demonstration of attainment of state ambient air quality standards and maintenance of federal ambient air quality standards. In particular, the proposed revisions will be consistent with the District's most recent 2013 Clean Air Plan (addressing state standards) and the 2001 Clean Air Plan (addressing federal air quality standards).

3. Revising the offset program thresholds and calculation basis.

The District is proposing to revise the way the NSR offsets program works. Currently, Rule 802 contains our nonattainment offset program requirements.

The current offset program includes the following elements:

- Net Emissions Increase (NEI)-based calculations of emission increases and decreases of affected pollutants at a stationary source since 1990,
- Offset thresholds set at 55 pounds per day and 10 tons per year for ROC, NO_X, SO_X, and at 80 pounds per day and 15 tons per year for PM_{10} (NEI),
- An offset obligation for all NEI down to zero, and
- A baseline date of 1990.

The proposed revisions to the offsets program are contained in Section E of Rule 802 as well as Rule 804. The elements of the proposed revisions to the offsets program include:

- Potential to Emit (PTE)-based calculations,
- Offset thresholds set at 240 pounds per day and 25 tons per year (PTE), and
- An offset obligation for PTE increases above the annual offset threshold.

The revision to the offset program thresholds, combined with the change to the calculation methodology (see revision (2) above) would be equivalent in protecting air quality to the current new source review rules. While the proposed rules could result in a small net increase in emissions, this increase is minor. Therefore, the proposed NSR rules would not result in significant adverse impacts to air quality and will not interfere with the District's demonstration of attainment of state ambient air quality standards and maintenance of federal ambient air quality standards. In particular, the proposed revisions will be consistent with the District's most recent 2013 Clean Air Plan (addressing state standards) and the 2001 Clean Air Plan (addressing federal air quality standards).

4. Revising the offset trading ratios, changing to a single trading zone, and allowing inter-district trades.

For sources that require offsets, the District is proposing to revise the ratio at which they must be provided and from where they can be provided.

The current offset program includes the following elements:

- A minimum offset trading ratio of 1.2:1 and up to 6:1 depending on the distance between the source and the mitigation, and
- Three offset zones for determining offset trading ratios (South, North, Cuyama).

The proposed revisions to the offsets program are contained in Section E of Rule 802 as well as Rule 804. The elements of the proposed revisions to the offsets program include:

- Offset trading ratios of 1.1:1 and 1.3:1,
- A single offset zone for the County, and
- Allowance of inter-District trades with Ventura and San Luis Obispo Counties.

Ozone is a regional pollutant; hence, the use of offset "zones" is not necessary to ensure the effectiveness of mitigation. Additionally, San Luis Obispo and Ventura counties are part of the same Central Coast Air Basin; hence, offsets located in those counties can be effective mitigation for regional pollutants such as ozone.

While fewer emission reduction credits (ERCs) could be required per project when compared to the current rules, the new ratios still provide a net air quality benefit. New and modified projects will continue to be offset at a ratio greater than one-to-one, meaning mitigation in the form of emission reductions will continue to exceed the amount of new pollution generated, albeit at a reduced level. Therefore, the impact of the revised offset ratio, zones, and trades—although not as stringent as the current rules—should not result in any potentially significant adverse air quality impacts as each project that triggers offsets will still be mitigated.

5. Adding offset exemptions for equipment replacements.

Due to the way the current permitting process works, there were a number of instances where projects to replace/modernize existing equipment required offsets. Typically, the potential emissions for a new project (which is required for permitting) are greater than the actual emissions baseline for the existing equipment being replaced (which is required for documenting emission reductions). Offsets are required for this difference even if the new equipment is cleaner and actual emissions will be reduced, which is typically the case. The District is proposing a new offsets exemption to address this situation. Essentially, if the replacement project is functionally equivalent, uses Best Available Control Technology, does not increase the Potential to Emit and does not cause other emission increases by de-bottlenecking a process, then offsets would not be required.

This exemption would not result in an increase in emissions but would potentially result in lost opportunities to achieve emission reductions through offset requirements for equipment replacements. Additionally, since BACT will be required for the replacement equipment, the net result of this proposed exemption would be in less actual air emissions. Therefore, this change will have a beneficial impact on air quality.

6. Adding offset exemption for emergency standby generators/flood/firewater pumps.

Up until 2005, emergency generators and flood and firewater pumps were exempt from District permits, and thus were not subject to NSR requirements such as offsets. These emergency engines are subject to the State Airborne Toxic Control Measures for diesel engines and have limits on the amount of time that they may be used for non-emergency use (typically less than 50 hours per year

for new engines). During the rulemaking for removing the exemption, it was not the District's intent for these engines to trigger the offset thresholds. Once the permit system was established for these equipment, the District has found that some of the larger engines in this category exceed the daily offsets thresholds or were located at sources that already exceed the offsets thresholds. This proposal would exempt new emergency standby engines from offset requirements.

This exemption could result in an increase in emissions since offsets are no longer required for emergency standby generators/flood/firewater pumps engine installations. However, the emissions from these sources are not substantial and the proposed offset exemption would not result in significant impacts to air quality.

7. Merging the requirements of Rule 803 into Rules 802, 804, and 805.

The District is proposing to consolidate and simplify its NSR rules in Regulation VIII. Currently, Rule 803 covers permitting requirements for pollutants that attain State/Federal ambient air quality standards and Rule 802 covers pollutants that do not attain State/Federal ambient air quality standards.

The proposed rule revisions would apply Rule 802 to both attainment and nonattainment pollutants by merging in the attainment pollutant requirements of Rule 803. Further, specific administrative requirements related to offsets would be moved to existing Rule 804. The offset thresholds and exemptions would remain in Rule 802, but the administrative aspects of offsets would be moved to existing Rule 804. Similarly, the AQIA/Modeling thresholds will be kept in Rule 802 and the administrative requirements related to AQIAs, Modeling, Monitoring and Increments will be moved to existing Rule 805. Since all the Rule 803 requirements would be moved into Rules 802, 804 and 805, the District is proposing to repeal the rule.

The proposed reorganization of these rules is administrative in nature and standing alone would not be a project under CEQA. These changes do not impact regulatory requirements nor relax any requirement. Although this will involve major changes to the language and structure of the regulations, there is no substantive changes to the way these programs work. The reorganization of the rule requirements will make the regulations easier to understand and easier to use, but will not make any changes to the substance of the regulatory requirements. Because there will be no substantive change to the regulations and what they require, the changes have no potential to cause significant adverse environmental impacts. Therefore, no further discussion is included in the environmental impact analysis.

8. Adding $PM_{2.5}$ to the attainment pollutant permitting requirements.

The District is required to add $PM_{2.5}$ to the list of pollutants it permits. This requirement is codified in the Federal Clean Air Act, which mandates that each New Source Review program include enforceable procedures to prevent the construction of any new source or modification that will interfere with the attainment or maintenance of any National Ambient Air Quality Standard (NAAQS).

Adding $PM_{2.5}$ to the attainment pollutant permitting requirements will not have a potentially significant impact as it now subjects increases of $PM_{2.5}$ emissions to review under our New Source Review rule requirements for the first time. Large increases of $PM_{2.5}$ will now be subject to requirements such as Best Available Control Technology. This revision is expected to have beneficial impacts on air quality.

9. Revising the AQIA and Increment Consumption Analyses procedures.

When Rule 803 was adopted in 1997, EPA determined that the rule was equivalent to the federal Prevention of Significant Deterioration (PSD) regulations and delegated the District authority to implement permitting for the federal PSD program. Two key features of a PSD program are Air Quality Impact Analyses (AQIA) and Increment Consumption Analyses. Rule 803 was written to satisfy federal PSD standards for major sources, but also applied to smaller non-major sources. On March 3, 2003, EPA revoked the District's delegation authority to implement the federal PSD program because the District could not implement the 2001 federal NSR Reforms promulgated by EPA. This was in response to the State's adoption of Senate Bill 288 and California Health and Safety Code, Section 42504(a), which prohibited Districts from relaxing their local New Source Review rules. With the revocation of EPA's delegation and the District's subsequent adoption of Rule 810 (which applies only to major sources), the District now has rule language for AQIA and Increment Consumption Analyses that apply only to non-major sources.

The District proposes to streamline these analyses for non-major sources. Key changes would include eliminating the baseline dates and the requirement to model additional sources. Additional changes would include streamlining the alternative mitigation approach for pollutants with increment ranges to remove the monitoring based option language and to provide a single approach: the 10-year mitigation option, required by the current rule. In all historical cases where this requirement applied, the 10-year mitigation option was used. Table 1 of Rule 805 would also be revised to reflect updates to State and Federal ambient air quality standards and increments since 1997.

The proposed revisions to the calculation procedures are administrative and procedural and by themselves would not be a project under CEQA. The revisions do not relax any regulatory requirement. Thus, the changes have no potential to cause significant adverse environmental impacts.

10. New Rule 809 for Federal Minor Source NSR.

EPA has requested that the District revise its permitting rules to meet federal mandates to include a permitting program for minor sources. EPA defines minor sources as any new or modified stationary source that emits an air pollutant (or its precursors) subject to any national ambient air quality standard, and the source is not a new major stationary source or a major modified stationary source. As such, a minor source would be any stationary source with a potential to emit less than 100 tons per year of any air pollutant subject to any national ambient air quality standard. This is called a Federal Minor Source New Source Review program and it is required pursuant to the Federal Clean Air Act Title I, Part A, Section 110(a)(2)(C). While the current rules contain many of the aspects of what EPA has mandated, not all the provisions are met. One of the options that EPA presented to the District was to create a stand-alone rule. This approach limits the number of rules submitted to the State Implementation Plan for EPA approval. Rule 809 would satisfy EPA's requirements and be consistent with the proposed modifications to Regulation VIII. Rule 809 would not add additional requirements to what is proposed for Rules 801-806. The District would be required to submit Rule 809 to EPA for inclusion in the state implementation plan and any permits issued pursuant to this Rule would be federally enforceable.

This rule was designed such that compliance with other existing District rules (as proposed for amendment) will automatically ensure compliance with this federally mandated requirement. It does not require any substantive changes to the requirements that are currently applicable to emissions sources in the County. Thus, the changes have no potential to cause significant adverse environmental impacts.

AREAS OF CONTROVERSY

In accordance to CEQA Guidelines section 15123(b)(2), the areas of controversy known to the lead agency including issues raised by agencies and the public shall be identified in the EIR.

The District sent out the Notice of Preparation of an EIR in September, 2015 (see Appendix D). The District received one comment letter from the Department of Fish and Wildlife in response to this notice (attached as Appendix E), however the comments did not apply to the proposed project as the project will not result in any physical change to the environment. The project does not propose any earth-moving activities, grading, development, construction, land use change, etc. that could affect biological resources such as fish and wildlife. Therefore, there is no evidence of any potential adverse impacts or areas of known controversy with respect to the NOP response letter from the Department of Fish and Wildlife.

The District held Public Workshops and a Community Advisory Council (CAC) meeting for the proposed project on December 9, 2015 and received comments from the public and from CAC members. Issues that were raised included:

- A comment questioning the impacts of the rule changes to specific projects and industries (i.e., looking beyond the impacts assessed as part of the programmatic analysis).

- Concerns over the SB 288 analysis shown in the staff report, specifically that:

  (1) the data set used in the analyses is more relevant looking back than looking forward, and that older companies may not grow much in future.

  (2) the analysis doesn't take into account the additional pollution resulting from existing and new sources subject to less stringent standards and that removing a constraint on growth will result in more pollution.

These areas of known controversy are addressed in the EIR.

ISSUES TO BE RESOLVED

In accordance to CEQA Guidelines section 15123(b)(3), this document will discuss issues to be resolved including the choice among alternatives and whether there are significant impacts from the project. If any significant impacts are identified, this document will discuss how to mitigate them.

Three alternatives were analyzed and compared to the proposed project, as well as to the existing rules. An additional alternative was eliminated from consideration because it does not meet the project objectives and is infeasible. The three feasible alternatives to the proposed project are:

Alternative 1. No Project Alternative

The "No Project" Alternative analysis is required by CEQA and would indicate the results of not implementing any change to the current Regulation VIII and other associated rules. Thus, the "No Project" Alternative would not address any changes to the District rules, including those revisions mandated by Federal law.

Alternative 2. Proposed project with offset threshold set at 10 tons per year

This Alternative is similar to the proposed action, but with more restrictive offset thresholds. In this Alternative, more sources would be subject to the requirements to offset their emission increases. This would include many smaller and medium sized sources.

Alternative 3. Proposed project with offsets required for entire project PTE

This Alternative would require sources that trigger the annual offset threshold for the first time to provide offsets for their entire project PTE (e.g., down to zero for a new source) instead of offsetting their project down to annual offset threshold (25 tons per year). It also would require existing sources that grow beyond the 25 tons per year PTE level to offset the entire project PTE that pushed the source over the annual threshold, not just the amount over the 25 tons per year level. This Alternative would obtain additional mitigation, however it moves the project away from the goal of simplifying the NSR program and making the NSR permit process more predictable for sources for their future planning

No significant (Class 1 or Class 2) environmental impacts were identified for the proposed project, therefore, no mitigation measures are included in the EIR.

TABLE ES-1: Summary of Potential Project Impacts and Mitigation Measures

Issue Area	Potential Impacts	Level of Significance*	Mitigation Measures	Residual Impacts
AIR QUALITY	The proposed revisions to the NSR Program may increase affected pollutant emissions throughout Santa Barbara County.	Class III[1]	None required	Insignificant
GREENHOUSE GASES	The proposed revisions to the NSR Program may increase greenhouse gas emissions throughout Santa Barbara County.	Class III[2]	None required	Insignificant

* Level of Significance:

Class I – Significant unavoidable adverse impacts for which the District Board must adopt a statement of overriding consideration

Class II – Significant adverse impacts that can be feasibly mitigated or avoided for which the District Board must adopt CEQA findings and mitigation measures as conditions of approval.

Class III – Adverse impacts found not to be significant for which the District Board does not have to adopt findings under CEQA.

Class IV – Beneficial impacts of the project.

[1] Although this impact is classified as Class III, as described in Chapter 4, Section 4.1.3, this impact could very likely be classified as Class IV if there are slight changes to the assumptions of the analysis that lower the emission profile of the sources analyzed.

[2] Although this impact is classified as Class III, as described in Chapter 4, Section 4.2.2, this impact could very likely be classified as Class IV if there are slight changes to the assumptions of the analysis that lower the emission profile of the sources analyzed.

THIS PAGE INTENTIONALLY LEFT BLANK

1. INTRODUCTION

The permitting of new or modified sources of air pollution is one of the most important responsibilities of an air pollution control district. An air pollution control district has two basic strategies for reducing air pollution from stationary sources: a New Source Review program (i.e., new sources are built as cleanly as possible) and a clean air plan and rule making process that requires existing sources of emissions to retrofit their operations to comply with adopted rules. Without adequate new source regulation, air pollution emissions from new or modified facilities degrade air quality and thereby jeopardize attainment of health-based air quality standards. This can undermine efforts to reduce emissions as required by state and federal law and require stricter regulation of existing sources. Thus, effective rules governing the issuance of air quality permits can ensure that new and modified sources of air pollution do not adversely affect public health or undermine air quality planning efforts.

The proposed project would primarily modify Regulation VIII - New Source Review, which implements the Santa Barbara County Air Pollution Control District's New Source Review (NSR) permitting program. Ten rules would be amended: Rules 102, 105, 202, 204, 801, 802, 804, 805, 806 and 1301 would be amended. New Rule 809, Federal Minor Source New Source Review, would be adopted. Rule 803, Prevention of Significant Deterioration, would be repealed.

Pursuant to the requirements of the California Environmental Quality Act (CEQA), this document has been prepared to evaluate the potential adverse environmental impacts of the proposed project.

1.1. PURPOSE AND NEED

An Environmental Impact Report (EIR), pursuant to CEQA Guidelines Section 15060, is required for the proposed project since the Santa Barbara County Air Pollution Control District (District) has determined that a fair argument could be made that the proposed project may have a significant effect on the environment. The EIR will examine the potential adverse environmental effects that may occur as the result of proposed amendments to Regulation VIII, and other associated rules. The purpose of this EIR is to describe for the public and decision-makers the potential environmental consequences of implementing the proposed project. CEQA requires that projects that may significantly affect the quality of the environment be analyzed and disclosed in an EIR so that significant adverse effects may be reduced or eliminated.

Permitting programs are primarily intended to provide a mechanism for air pollution control agencies to ensure stationary sources of air pollution comply with applicable local, state and federal air quality requirements. The permitting process allows the District to review a source's plan to construct a source of air pollution, analyze the potential air pollutants that the proposed facility may emit and impose emission limits. The District permit contains conditions that stipulate the parameters under which the source must operate in order to remain in compliance with the rules. Also, the permit enables the District to keep track of the location, number and size of air pollution sources so that pollution control strategies of the Clean Air Plan are based on sound information.

Regulation II – Permits establishes the permitting system that applies to all stationary sources of pollution in the County. This regulation specifies the content of applications, timelines for processing permit applications and which equipment is exempt from permitting. In addition to complying with Regulation II, new or modified stationary sources must also comply with Regulation VIII - New Source Review.

The objectives of Regulation VIII are to:

- Prevent the degradation of air quality from air pollution generated by both new stationary sources of air pollution and modifications of existing stationary sources of air pollution, and to ensure that the source does not interfere with the attainment or maintenance of air quality standards;

- Establish air pollution emission thresholds which, if exceeded, may require the installation of Best Available Control Technology, the surrender of offsets and/or the completion of an Air Quality Impact Analysis;

- Specify how increases in both nonattainment and attainment pollutants are permitted; and

- Establish provisions that allow for the banking of emission reductions to offset future emissions growth.

The proposed amendments to Regulation VIII and other associated rules are intended to satisfy federal and state permitting requirements, ensure compliance with state law requirements and provide more flexibility and simplicity in the NSR permitting process.

1.2. INTENDED USES OF THIS DOCUMENT

The District is the lead agency for the proposed project pursuant to the *Guidelines for Implementation of the California Environmental Quality Act* (California Code of Regulations, Title 14, Division 6, Chapter 3). As lead agency, the District has the principal responsibility for carrying out the proposed project and for preparing CEQA documents.[3] The District Board is the decision-making body for approval or denial of this project.

In general, a CEQA document is a document that informs a public agency's decision-makers and the public of the potential for significant adverse environmental effects of a project. Where a project will result in significant adverse environmental impacts, the CEQA document also identifies possible ways to avoid or minimize the significant effects, and describes reasonable alternatives to the project (CEQA Guidelines §15121). A public agency's decision-makers must consider the information in a CEQA document prior to making a decision on the project. Accordingly, this EIR is intended to provide the District Board and the public with information on the environmental effects of the proposed revisions, and facilitate decision making by the District Board on the adoption of the proposed revisions.

The District is the only agency that will be making permitting decisions using the NSR rules that are the subject of the proposed revisions. Other governmental agencies may have decisions that tangentially relate to this program (for example, decisions on how a governmental agency will construct or use some piece of equipment that emits air pollution subject to the program's permitting requirements). But, no other agencies will make any discretionary decision subject to CEQA that relies on this EIR to evaluate the potential environmental impacts of such a decision.

The District's NSR program revisions will be reviewed by the California Air Resources Board (ARB) and by the United States Environmental Protection Agency (EPA) to ensure that the program adequately contains all elements required under state and federal law. These agencies have the power to demand that the District adopt additional requirements to the extent that the District's programs are deficient in federal or state air quality requirements. Review by these agencies is therefore very important for the District's

[3] CEQA Guidelines §15051.

programs and the District will be circulating this EIR to those agencies for review and comment. Technically, however, those agencies do not need to grant the District's Board any permit or authorization to adopt regulations. Similarly, there are no other formal environmental review and consultation requirements that must be satisfied before the District Board can adopt the proposed revisions.

1.3. RESOURCES AFFECTED BY THE PROPOSED PROJECT

The proposed project was analyzed to determine which environmental resources may be adversely impacted by the proposed project. Except for air quality and greenhouse gases/climate change, there is no evidence that there are any impacts to other environmental resources. Thus, the impacts to all resources besides air quality and greenhouse gases/climate change were determined not to require further environmental analysis. Potential adverse impacts to other resources, as well as project-specific air quality and greenhouse gases/climate change impacts, should be examined in the required project-level CEQA analyses prepared for specific development projects that occur in the future.

1.4. CONTENTS OF THE EIR

- The Executive Summary provides a synopsis of the EIR and lists the classification of impacts in the Impact Summary Table.

- Section 1 provides the introduction and background, the purpose, and describes the contents of this EIR.

- Section 2 contains the project description, including the project location, project objectives, and a listing of the alternatives analyzed in the EIR.

- Section 3 provides a discussion of the environmental setting in the project area. The environmental setting defines the baseline for the analysis of potential impacts. Consistency with adopted air quality plans is also discussed here and in Section 4.

- Section 4 analyzes the environmental impacts resulting from the implementation of the proposed amendments to Regulation VIII, and other associated rules. Criteria for determining significance are discussed and an analysis of proposed mitigation measures and residual impacts is included**.**

- Section 5 discusses the cumulative impacts associated with the implementation of the proposed project.

- Section 6 discusses the environmental impacts of alternatives to the project, including the "No Project" alternative. The impacts of these alternatives are evaluated in comparison to the proposed project and to the current rules and procedures. The environmentally superior alternative is also identified in this section.

- Section 7 includes the following CEQA topics:

    - Growth-Inducing Impacts of the Proposed Project
    - Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented

- Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented
- Economic and Social Effects
- Energy Effects
- Environmental Effects Not Found to be Significant

- The Appendices include:

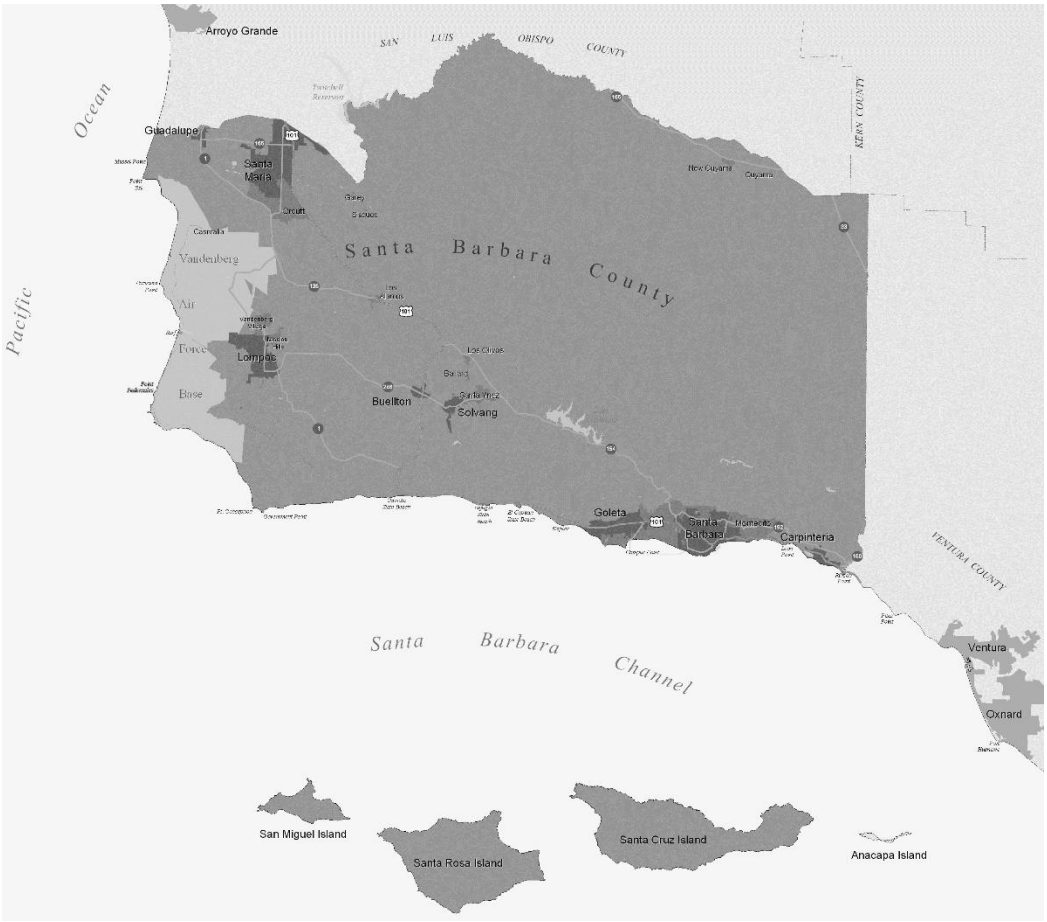
  - Technical appendices containing calculations details (Appendix A) and assumptions of the impact analysis and (Appendix B)
  - Technical memo on the analysis of greenhouse gas emissions (Appendix C)
  - A copy of the Notice of Preparation (Appendix D)
  - The comments received on the NOP (Appendix E)

2. PROJECT DESCRIPTION

2.1. PROJECT LOCATION

Geographically, the area directly affected by the proposed amendments to Regulation VIII, and other associated rules, consists of the entire geographical region defined as Santa Barbara County, the state tidelands, and the federal outer continental shelf (OCS) adjacent to the County. 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 delegated to the District by the EPA pursuant to 40 CFR Part 55. (Figure 1).

FIGURE 2-1: Map of Project Area – Santa Barbara County



2.2. PROJECT OBJECTIVE

Both state and federal laws require that the District implement a permitting program for stationary sources of air pollution. These laws stipulate the minimum elements of the permitting system to be implemented by the District but allow flexibility for the District to design a program that meets its own unique air pollution challenges. The permitting system must include a control program for new or modified stationary sources, as well as reasonably available control technology for existing stationary sources. This project would revise the District's local control program for new or modified stationary sources. It would not change the District's implementation of the federal Prevention of Significant Deterioration requirements for new major stationary sources or major modifications to existing major stationary sources, nor would it change the District's reasonably available control technology requirements for existing stationary sources.

The proposed rule revisions are intended to incorporate state and federal New Source Review (NSR) requirements, ensure compliance with state law, and provide more flexibility and simplicity in the NSR permitting process by a) incorporating rule text that is easier to follow and understand by the regulated community, b) replacing an outdated and cumbersome method with the simplified calculation procedure that is used by most air districts in the state, c) concentrating the effect of the offsets program on the largest sources, which have the means to buy and/or create Emission Reductions Credits (ERCs), and d) making more ERCs available for use in the South County. The District believes the proposed revisions will strengthen the NSR permitting program and thereby enhance the District's ability to implement its regulatory program and to achieve Santa Barbara County's clean air goals.

The overall goal of the proposed revisions is to maintain an effective program while at the same time addressing many of the implementation issues that currently exist. The proposed revisions incorporate comments made by members of the District Board in previous public hearings, by the District Community Advisory Council, by stakeholders in public workshops and staff.

More specifically the following aspects of the project fulfill the objectives:

1. Incorporate Federal NSR Requirements

   Federal Minor Source NSR:
   Air districts are mandated to maintain a federally approved Minor Source New Source Review permit program (Federal Clean Air Act Title I, Part A, Section 110(a)(2)(C)). The District's current rules do not fully comply with the federal requirements; thus the District has proposed a new Rule 809, Federal Minor Source New Source Review, to address this deficiency. EPA requirements for a Federal Minor Source New Source Review permit program are detailed in 40 CFR part 51, Subpart I – Review of New Sources and Modifications, Sections 51.160-164.

2. Ensure Compliance with State Law Requirements

   California Health & Safety Code Section 40918:
   The District is classified as moderate nonattainment for the ozone standard. California Health & Safety Code Section 40918 requires the District to implement Best Available Control Technology for all new or modified stationary sources that have a Potential to Emit of 25 pounds per day or more of any nonattainment pollutant and no net increase in emissions of nonattainment pollutants from all sources with a potential to emit more than 25 tons per year.

Senate Bill 288:
Senate Bill 288, the Protect California Air Act of 2003, in set forth in Health and Safety Code section 42500 *et seq*., prohibits districts from amending their New Source Review (NSR) programs to be less stringent than they were as of December 30, 2002. As detailed in its NSR Staff Report, the District has shown that the proposed rules, *on a programmatic basis*, provide equivalent or better emissions reductions than the NSR rules that were in effect on December 30, 2002.

3. Provide More Flexibility and Simplicity in the NSR Permitting Process

As a whole, the revisions would resolve issues related to format, organization, clarity, and consistency with other District rules and regulations. They would simplify the permit process for the regulated community, ease the workload for District staff and satisfy the mandates from EPA and ARB. The revisions would result in a far less complex permitting program, which will provide a more accurate analysis and a less time-consuming process, making it easier for the regulated community and District staff to implement the NSR program.

Switching from NEI-based thresholds to PTE-based thresholds: The NEI methodology has become very complicated for both the regulated community and the District. It involves a convoluted system of tracking emission increases and decreases for every stationary source since 1990. Over the years, there have been many times where there have been disagreements and confusion as to how the NEI calculation works and how it pertains to a specific stationary source. The result can be a time-consuming permit process that can result in regulated entities having to revise their projects at the last minute.

Use of the PTE methodology for the regulated community will result in less complexity when permitting new or modified projects and will provide more certainty in planning future projects. The proposal to use the PTE calculation methodology in lieu of the NEI calculation should simplify the Regulation VIII threshold determinations.

4. Address Scarcity of Emission Reduction Credits

Revising the offset program thresholds, ratios and calculation basis: Considerable difficulties have arisen in the offsets program, most notably the scarcity of Emission Reductions Credits (ERC) and the high cost of any available ERCs. An ERC is defined as an actual emission reduction of specific type and quantity that is registered with the District in accordance with Rule 806. ERCs are provided as mitigation when offset requirements are triggered by exceeding a program threshold. The NEI-based offsets program's thresholds are low and this is proving to be an impediment for medium-sized companies that need to make modifications or open new businesses in the County. The offset zones have had the unintended effect of further segmenting the offset program, limiting access and participation.

The proposed revisions to the thresholds and calculation basis will limit the number of stationary sources that would be subject the offset requirement to only the largest emitters of air pollution that have the resources to either buy ERCs or create their own onsite. A single offset zone will eliminate the fragmentation that the current 3-zone system creates. Allowing the possibility of trading with Ventura and San Luis Obispo counties may also help to increase the availability of ERCs.

2.3. PROJECT CHARACTERISTICS

2.3.1. Existing Rules

The current District Rules and Regulations are organized as individual regulations. The thirteen current regulations are:

Regulation I	-	General Provisions
Regulation II	-	Permits
Regulation III	-	Prohibitions
Regulation IV	-	Agricultural Burning
Regulation V	-	Hearing Board
Regulation VI	-	Emergencies
Regulation VII	-	Registration Programs
Regulation VII	-	Conformity
Regulation VIII	-	New Source Review
Regulation IX	-	New Source Performance Standards (NSPS)
Regulation X	-	National Emission Standards for Hazardous Air Pollutants
Regulation XI	-	Public Notification
Regulation XII	-	Registration Programs
Regulation XIII	-	Part 70 Operating Permit Program

As stated, the proposed project would mainly revise Regulation VIII (Rules 801, 802, 803, 804, 805 and 806). Also proposed are amendments to Rules 102, 105, 202, 204, and 1301. One new rule is proposed - Rule 809. One of the main changes was to move the requirements of Rule 803 into Rules 802, 804 and 805. The project will impact new proposed stationary sources and modifications to existing stationary sources.

Regulation VIII is comprised of rules describing the New Source Review requirements of the Santa Barbara County Air Pollution Control District. Most of the rules in Regulation VIII have existed since 1997. The rules included in Regulation VIII are:

Rule 801	-	New Source Review (Adopted 04/17/1997)
Rule 802	-	Nonattainment Review (Adopted 04/17/1997)
Rule 803	-	Prevention of Significant Deterioration (Adopted 04/17/1997)
Rule 804	-	Emission Offsets (Adopted 04/17/1997)
Rule 805	-	Air Quality Impact and Modeling (Adopted 04/17/1997)
Rule 806	-	Emission Reduction Credits (Adopted 04/17/1997)
Rule 807	-	Reserved
Rule 808	-	New Source Review for Major Sources of Hazardous Air Pollutants (Adopted 05/20/1999)
Rule 809	-	Reserved
Rule 810	-	Federal Prevention of Significant Deterioration (PSD) (Revised 06/20/2013)

TABLE 2-1: Rules Affected by the Proposed Revisions

Rule No.	Current Rule Name	Proposed Rule Name	Proposed Actions
102	Definitions	Definitions	Amendments
105	Applicability	Applicability	Amendments
202	Exemptions to Rule 201	Exemptions to Rule 201	Amendments
204	Applications	Applications	Amendments
801	New Source Review	New Source Review – Definitions and General Requirements	Amendments
802	Nonattainment Review	New Source Review	Amendments
803	Prevention of Significant Deterioration	n/a	Repeal
804	Emission Offsets	Offsets	Amendments
805	Air Quality Impact Analysis and Modeling	Air Quality Impact Analysis, Modeling, Monitoring, and Air Quality Increment Consumption	Amendments
806	Emission Reduction Credits	Emission Reduction Credits	Amendments
809	n/a	Federal Minor Source New Source Review	New
1301	Part 70 Operating Permits – General Information	Part 70 Operating Permits – General Information	Amendments

2.3.2. Project Description

The Santa Barbara County Air Pollution Control District (District) is proposing to modify Regulation VIII - New Source Review, which implements the District's New Source Review (NSR) permitting program. This is the first revision to the District's NSR rules in more than 17 years.

The proposed changes to Regulation VIII, and other associated rules, are many, and in sum, amount to major revisions of the permitting rules. For a detailed explanation of all proposed changes, please see Chapter 2 of the NSR Staff Report (the entire NSR Staff Report is herein incorporated by reference; SBCAPCD, 2015c). The primary proposed revisions are as follows:

1. Revising rule text to be clearer and to eliminate redundancies.

During the process of revising the rules, the District found numerous issues with the existing rule language, and made multiple revisions to improve clarity, organization and readability. These include changes such as: revising rule/section/table titles, adding complete rule names when a rule number is referenced, revising text to be clearer, fixing grammatical errors, reorganizing text and section layout to be presented in a more logical format, and eliminating redundancies within the rules.

2. Replacing the NEI calculation methodology with the PTE methodology.

The District is proposing to move away from the Net Emissions Increase (NEI) calculation methodology for its New Source Review (NSR) rule threshold determinations. Instead, the District would use a Potential to Emit (PTE) methodology for NSR rule threshold determinations. The NEI methodology was

used by the District as an equivalent system to the PTE methodology required by the California Health and Safety Code.

The NEI calculation methodology is used in the current rules to determine whether a proposed project exceeds the thresholds for offsets and Air Quality Impact Analysis (AQIA) for nonattainment pollutants, and the thresholds for offsets, AQIA and Best Available Control Technology (BACT) for attainment pollutants. The NEI calculation tracks all increases and decreases at a stationary source since the baseline date of November 15, 1990. Emissions increases that occurred before November 15, 1990 are excluded from the calculation methodology. In contrast, the PTE is simply the maximum capacity of the stationary source to emit a pollutant, based on its physical and operational design.

3. Revising the offset program thresholds and calculation basis.

The District is proposing to revise the way the New Source Review (NSR) offsets program works. Currently, Rule 802 contains our nonattainment offset program requirements.

The current offset program includes the following elements:

- Net Emissions Increase (NEI) based emission calculations of emission increases and decreases of criteria pollutants at the stationary source since 1990,
- Offset thresholds set at 55 pounds per day and 10 tons per year for ROC, NO_X, SO_X, and at 80 pounds per day and 15 tons per year for PM_{10} (NEI),
- An offset obligation for all NEI down to zero, and
- A baseline date of 1990.

The proposed revisions to the offsets program are contained in Section E of Rule 802 as well as Rule 804. The elements of the proposed revisions to the offsets program include:

- Potential to Emit (PTE) based emission calculations,
- Offset thresholds set at 240 pounds per day and 25 tons per year (PTE), and
- An offset obligation for PTE increases above the annual offset threshold.

TABLE 2-2: Comparison of Offset Thresholds for Criteria Pollutants

Pollutants	Existing	Proposed
Basis for Threshold	NEI	PTE
ROC, NO_x, SO_x	55 lbs/day & 10 tons/yr	240 lbs/day & 25 tons/yr
PM_{10}	80 lbs/day & 15 tons/yr	240 lbs/day & 25 tons/yr
CO	--	--

4. Revising the offset trading ratios, changing to a single trading zone, and allowing inter-district trades.

For sources that require offsets, the District is proposing to revise the ratio at which they must be provided and from where they can be provided. An "offset" is the mitigation required for any new pollution permitted at a stationary source that will exceed the offset threshold. If a source is over the offset threshold (currently an NEI of 10 tons per year), then for every ton of emissions growth over the threshold, the permittee must provide the same amount of emission reductions at other sources, plus an additional reduction to ensure a net air quality benefit. Currently, the minimum trading ratio is 1.2:1,

which means that 1.2 tons of mitigation (i.e., offsets) must be provided for every 1 ton of emissions growth. Under the current rules, offsets are also encouraged to be located in the same general zone to ensure the offsets are effective in mitigating the new air pollution.

The current offset program includes the following elements:

- A minimum offset trading ratio of 1.2:1 and up to to 6:1 depending on the distance between the source and the mitigation, and
- Three offset zones for determining offset trading ratios (South, North, Cuyama)

The proposed revisions to the offsets program are contained in Section E of Rule 802 as well as Rule 804. The elements of the proposed revisions to the offsets program include:

- Offset trading ratios of 1.1:1 and 1.3:1
- A single offset zone for the County
- Allow for inter-District trades with Ventura and San Luis Obispo counties

The current and proposed ratios are listed below:

TABLE 2-3: Current Rule Offset Ratios

Location of Source	Location of Offsets	Ratio
North Zone	North Zone (within 7.5 miles)	1.2 to 1
North Zone	North Zone	1.5 to 1
South Zone	South Zone (Within 7.5 miles)	1.2 to 1
South Zone	South Zone	1.5 to 1
North Zone	South Zone	6.0 to 1
South Zone	North Zone	6.0 to 1
South Zone	Adjacent Areas of Ventura County	6.0 to 1
South Zone	Cuyama	No Trades
Cuyama	South Zone	No Trades

TABLE 2-4: Proposed Rule Offset Ratios

Location of Offsets	Ratio
Same Stationary Source as the Emission Increase	1.1 to 1
Different Stationary Source as the Emission Increase	1.3 to 1
Ventura County or San Luis Obispo County *	At Least 1.5 to 1

* Each use of offsets from Ventura or San Luis Obispo counties must be approved by the governing board of the District where the offset was generated and the governing board of the District where the offset will be used. A ratio higher than 1.5 to 1 may be established on a case-by-case basis. This review on a project-by-project basis will ensure the mitigation is effective and appropriate.

5. Adding offset exemptions for equipment replacements.

Due to the way the current permitting process works, there were a number of instances where projects to replace/modernize existing equipment required offsets. Typically, the PTE of a new project (which is required for permitting) is greater than the actual emissions baseline for the existing equipment being replaced (which is required for documenting emission reductions). Offsets are required for this difference even if the new equipment has a lower emission rate and actual emissions will be reduced, which is typically the case. The District is proposing a new offsets exemption to address this situation. Essentially, if the replacement project is functionally equivalent, uses Best Available Control Technology, does not increase the Potential to Emit and does not cause other emission increases by de-bottlenecking a process, then offsets would not be required.

6. Adding offset exemption for emergency standby generators/flood/firewater pumps.

Up until 2005, emergency generators and flood and firewater pumps were exempt from District permits, and thus were not subject to NSR requirements such as offsets. These emergency engines are subject to the State Airborne Toxic Control Measure for diesel engines and have limits on the amount of time that they may be used for non-emergency use (typically less than 50 hours per year for new engines). During the rulemaking for removing the permit exemption, it was not the District's intent for these engines to trigger the offset thresholds. Once the permit system was established for these equipment, the District has found that some of the larger engines in this category exceed the daily offsets thresholds or were located at sources that already exceed the offsets thresholds. This proposal would exempt new emergency standby engines from offset requirements.

7. Merging the requirements of Rule 803 into Rules 802, 804, and 805.

The District is proposing to consolidate and simplify its NSR rules in Regulation VIII. Currently, Rule 803 covers permitting requirements for pollutants that attain State/Federal ambient air quality standards and Rule 802 covers pollutants that do not attain State/Federal ambient air quality standards.

Rule 803 was originally designed to serve as the District's federally delegated Prevention of Significant Deterioration (PSD) rule for attainment pollutants. However, on March 3, 2003, EPA revoked its delegation to the District to administer the federal PSD program because the District could not implement the 2001 federal NSR Reforms promulgated by EPA. This was in response to the State's adoption of Senate Bill 288 and California Health and Safety Code, Section 42504(a), which prohibited Districts from relaxing their local New Source Review rules. Since then, the District pursued the ability to implement federal PSD requirements and on January 20, 2011, Rule 810 (Federal Prevention of Significant Deterioration), which incorporated federal PSD regulations by reference, was adopted. Rule 810 was subsequently revised on June 20, 2013. Rule 810 only applies to very large projects, i.e. "major stationary sources"[4] (over 100 tons per year for new stationary sources). Rule 803 still remains an active NSR rule that applies to stationary sources in the District. SB 288 requires the District to maintain the requirements of Rule 803.

The proposed rule revisions would apply Rule 802 to both attainment and nonattainment pollutants by merging in the attainment pollutant requirements of Rule 803. This would place all NSR requirements in a single rule. Further, specific administrative requirements related to offsets would be moved to existing Rule 804. The offset thresholds and exemptions would remain in Rule 802 but the administrative aspects of offsets would be moved to existing Rule 804. Similarly, the AQIA/Modeling thresholds will be kept in

[4] As defined by 40 Code of Federal Regulations, Part 52, Section 52.21 (40 CFR 52.21).

Rule 802 and the administrative requirements related to AQIAs, Modeling, Monitoring and Increments will be moved to existing Rule 805.

Since all the Rule 803 requirements would be moved into Rules 802, 804 and 805, the District is proposing to repeal the rule.

8. Adding $PM_{2.5}$ to the attainment pollutant permitting requirements.

The District is required to add $PM_{2.5}$ to the list of pollutants it permits. This requirement is codified in the Federal Clean Air Act, which mandates that each New Source Review program include enforceable procedures to prevent the construction of any new source or modification that will interfere with the attainment or maintenance of any National Ambient Air Quality Standard (NAAQS). The District is currently designated as "Unclassified" for this pollutant by both the State and EPA. As such, $PM_{2.5}$ would be considered an attainment pollutant under Rule 802. PM and PM_{10} are currently regulated in Rule 803 as attainment pollutants and PM_{10} is regulated under Rule 802 as a nonattainment pollutant for the State ambient air quality standard. The proposal includes establishing a 55 pound per day BACT and AQIA modeling requirement. The value is based on the federal significance thresholds of 10 tons per year. No additional offset requirements are proposed for $PM_{2.5}$, as it is already a "component" of PM_{10} for which offset requirements already exist. It should be noted that because EPA has established an air quality standard for $PM_{2.5}$, the pollutant is therefore by definition an "affected pollutant" under District Rule 102 and subject to District NSR.

9. Revising the AQIA and Increment Consumption Analyses procedures.

When Rule 803 was adopted in 1997, EPA determined that the rule was equivalent to the federal Prevention of Significant Deterioration (PSD) regulations and delegated the District authority to implement the federal PSD program. Two key features of a PSD program are Air Quality Impact Analyses (AQIA) and Increment Consumption Analyses. Rule 803 was written to satisfy federal PSD standards for major sources, but also applied to smaller non-major sources. With the revocation of EPA's delegation and the District's subsequent adoption of Rule 810 (which applies only to major sources), the District now has rule language for AQIA and Increment Consumption Analyses that apply only to non-major sources.

The District proposes to streamline these analyses for non-major sources. Key changes would include eliminating the baseline dates and the requirement to model additional sources. Baseline dates are a federal PSD requirement that define how the increment is calculated and when additional sources must be added to the modeling analyses. The District proposes to use actual monitored background data in the modeling analyses. This does not eliminate the required modeling, but rather simplifies the process.

Additional changes would include streamlining the alternative mitigation approach for pollutants with increment ranges to remove the monitoring based option language and to provide a single approach: the 10-year mitigation option, which is detailed in existing rule text. In all historical cases where this requirement applied, the 10-year mitigation option was used. Table 1 of Rule 805 would also be revised to reflect updates to State and Federal ambient air quality standards and increments since 1997.

10. New Rule 809 for Federal Minor Source NSR.

EPA has required that the District revise its permitting rules to meet federal mandates to include a permitting program for minor sources. This is called a Federal Minor Source New Source Review program and it is required pursuant to the Federal Clean Air Act Title I, Part A, Section 110(a)(2)(C).

While the current rules contain many of the aspects of what EPA has mandated, not all the EPA provisions are met. One of the options that EPA presented to the District was to create a stand-alone rule. Thus, the District is proposing to adopt Rule 809 to meet Federal Minor Source Review requirements.

2.3.3. CEQA Issues

The following proposed revisions have no potential to cause adverse environmental impacts, and therefore no further discussion is included in the environmental impact analysis:

1. **Revising rule text to be clearer and to eliminate redundancies.**

   These proposed textual changes would not, by themselves, be a project under CEQA as they are administrative in nature. Thus, the changes have no potential to cause significant adverse environmental impacts.

2. **Merging the requirements of Rule 803 into Rules 802, 804, and 805.**

   The proposed reorganization of these rules is administrative in nature and standing alone would not be a project under CEQA. These changes do not impact regulatory requirements nor relax any requirement. Although this will involve major changes to the language and structure of the regulations, there is no substantive changes to the way these programs work. The reorganization of the rule requirements will make the regulations easier to understand and easier to use, but will not make any changes to the substance of the regulatory requirements. Because there will be no substantive change to the regulations and what they require, the changes have no potential to cause significant adverse environmental impacts.

3. **Adding $PM_{2.5}$ to the attainment pollutant permitting requirements.**

   Adding $PM_{2.5}$ to the list of affected pollutants in amended Rule 802 is an administrative change to our rules as $PM_{2.5}$ is an "affected pollutant" as defined under Rule 102. It is also consistent with past Board actions to regulate attainment pollutants and it aligns the District's rule set with proposed Rule 809 (Federal Minor Source New Source Review). Adding $PM_{2.5}$ to the attainment pollutant permitting requirements will allow the District to continue to obtain EPA's approval to implement the federal aspects of these programs for sources in County.

   Regulating $PM_{2.5}$ as an attainment pollutant will have beneficial impacts on air quality as increases of $PM_{2.5}$ emissions will be reviewed under New Source Review for compliance with the Best Available Control Technology (BACT) and Air Quality Impact Analysis (AQIA) requirements of Rules 802 and 805, respectively.

   The $PM_{2.5}$ BACT would not result in any increase in any secondary pollutants associated with any control devices, techniques or strategies that may be implemented to comply with the requirement. It is likely that whatever control technology a source implements to satisfy this current District BACT requirement for PM_{10} will also be effective to control $PM_{2.5}$ emissions and satisfy BACT. If anything, the addition of the $PM_{2.5}$ BACT requirement in District regulations will have a beneficial impact on $PM_{2.5}$ emission rates, not an adverse impact. Even if some new add-on control technology were required, there is no evidence to suggest this would have any adverse environmental impacts or result in an increase in air emissions as typical add-on control technologies for PM, such as baghouses or electrostatic precipitators (ESPs) do not involve

secondary emissions of other pollutants. Any such add-on control equipment would result in a decrease in air emissions, not an increase in emissions.

For all of these reasons, adding $PM_{2.5}$ to the list of regulated pollutants in amended Rule 802 and establishing a BACT and AQIA modeling requirement for $PM_{2.5}$ has no potential to cause significant adverse environment impacts, and is in fact, expected to have beneficial impacts.

4. **Revising the AQIA and Increment Consumption Analyses procedures.**

   The proposed revisions to the calculation procedures are administrative and procedural in nature, and, by themselves, would not be a project under CEQA. The revisions do not relax any regulatory requirement. Thus, the changes have no potential to cause significant adverse environmental impacts.

5. **New Rule 809 for Federal Minor Source NSR.**

   This rule was designed such that compliance with other District rules (as proposed for amendment) will automatically ensure compliance with this federally mandated requirement. It does not require any substantive changes to the requirements that are currently applicable to emissions sources in the County. Thus, the changes have no potential to cause significant adverse environmental impacts.

The EIR addresses the following proposed revisions that <u>have the potential</u> to cause adverse environmental impacts:

1. **Replacing the NEI calculation methodology with the PTE methodology.**

   The revision to a PTE methodology, combined with the revisions to the offset program thresholds (below), has the potential for unmitigated emissions from new sources and modifications to existing sources permitted by the District.

2. **Revising the offset program thresholds and calculation basis.**

   The revision to the offset program thresholds, combined with the change to the calculation methodology (above), has the potential for unmitigated emissions from new sources and modifications to existing sources permitted by the District.

3. **Revising the offset trading ratios, changing to a single trading zone, and allowing inter-district trades.**

   The revisions to the offset ratios, zones, and trades could result in an adverse impact if the program overall no longer achieves sufficient mitigation as compared to the existing rules.

4. **Adding an offset exemption for equipment replacements.**

   This exemption would not result in an increase in emissions but would potentially result in lost opportunities to achieve emission reductions through offset requirements for equipment replacements.

5. Adding an offset exemption for emergency standby generators/flood/firewater pumps.

This exemption would not result in an increase in emissions but would potentially result in lost opportunities to achieve emission reductions through offset requirements for emergency standby generators/flood/firewater pumps engine installations.

3. 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 District, 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. 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.

3.1.2. Local Air Quality

The State of California has established ambient air quality standards to protect human health. The federal government has also established health-based standards, which are generally less protective of public health than state standards. State and federal standards have been established for the following criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb). In addition, California has standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. Both state and federal standards are shown in Table 3-1. Ambient air quality in a given location is described by the concentration of various pollutants in the atmosphere, which are expressed in units of concentration, generally parts per million ("ppm") or micrograms per cubic meter ("ug/m3"). The significance of a pollutant concentration is determined by comparing it with an appropriate federal and/or state ambient air quality standard.

TABLE 3-1: Ambient Air Quality Standards and Attainment Status

		CALIFORNIA STANDARDS		NATIONAL STANDARDS	
Pollutant	**Averaging Time**	**Concentration**	**Attainment Status**	**Concentration**	**Attainment Status**
Ozone	8 Hour	0.070 ppm	**N**	0.070 ppm**	***
	1 Hour	0.09 ppm (180 ug/m^3)	**N***	--	--
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg /m^3	**N**	Revoked	A
	24 Hour	50 µg /m^3	**N**	150 µg /m^3	A
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg /m^3	U	12 µg /m^3	U/A
	24 Hour	--	--	35 µg /m^3	U/A
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m^3)	A	9.0 ppm (10 mg/m^3)	A
	1 Hour	20.0 ppm (23 mg/m^3)	A	35.0 ppm (40 mg/m^3)	A
Nitrogen Dioxide	Annual Average	0.03 ppm (56 µg/m^3)	A	0.053 ppm	U/A
	1 Hour	0.18 ppm (339 µg/m^3)	A	0.100 ppm	U/A
Sulfur Dioxide	Annual Average	--	-	Revoked	--
	24 Hour	0.04 ppm (105 µg /m^3)	A	Revoked	--
	1 Hour	0.25 ppm (655 µg /m^3)	A	0.075 ppm	***
Lead	Calendar Quarter	--	--	1.5 µg /m^3	A
	30 Day Average	1.5 µg /m^3	A	--	--
	Rolling 3-month Average	--	--	0.15 µg /m^3	U
Visibility Reducing Particles	8 Hour (1000 to 1800 PST)		A	--	--
Sulfates	24 Hour	25 µg /m^3	A		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg /m^3)	A	--	--
Vinyl Chloride (Chloroethene)	24 Hour	0.010 ppm (26 µg /m^3)		--	--
A = Attainment, N = Nonattainment, U= Unclassified					

* Monitored concentrations of ozone in the County demonstrate attainment of the 1-hour standard, however the District will not be officially re-designated until after attainment is demonstrated for both the 1-hour and 8-hour standards.
** On October 1, 2015, the EPA revised the federal ozone (8-hour) standard from 0.075 ppm to 0.070 ppm.
*** EPA has not yet made final designations on attainment status, however if current air quality trends continue through 2017, the District will be able to demonstrate attainment of the new standard.

Monitoring of ambient air pollutant concentrations is conducted by the California Air Resources Board (ARB), the District, and industry. Monitors operated by the ARB and the District are part of the State and Local Air Monitoring System (SLAMS). The SLAMS monitors are located to provide local and regional air quality information. Monitors operated by industry, at the direction of the District, are called Prevention of Significant Deterioration (PSD) stations. PSD stations are required by the District to ensure that new and modified sources under permit do not interfere with the County's ability to attain and maintain air quality standards. Methods and procedures used in monitoring follow guidelines prescribed by the ARB and the United States Environmental Protection Agency (EPA) to ensure consistency with the standards.

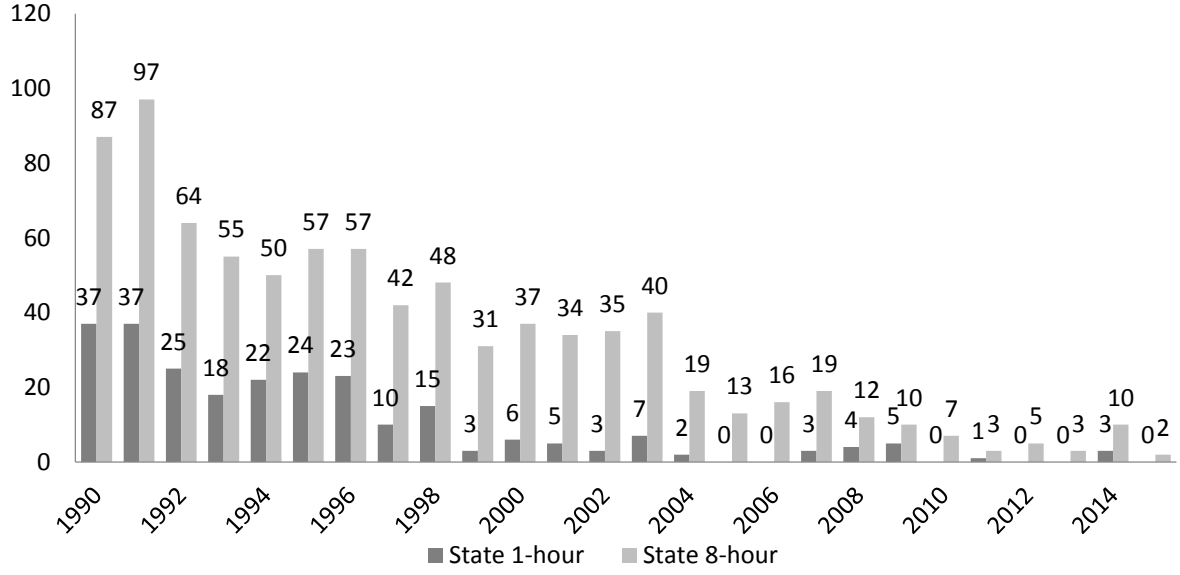
The District has a network of 18 monitoring stations. Twelve stations continuously measure concentrations of ozone. PM_{10} and $PM_{2.5}$ are measured continuously at four stations: Santa Barbara, Goleta, Lompoc and Santa Maria. Data are recorded in real time by the District's Data Acquisition System and posted on the District's website.

Ambient air quality in Santa Barbara County is generally good, with the exception of ozone and PM_{10}. Santa Barbara County is currently in "attainment" or "unclassified" status for all federal (EPA) ambient air quality standards. The County violates the state 8-hour ozone standard and the state standard for PM_{10}; it is unclassified for the state $PM_{2.5}$ standard (based on monitored data from 2007 – 2009).

Figure 3-1 presents the number of state ozone exceedances in Santa Barbara County during the period of 1990 to 2015. As shown in the figure, Santa Barbara County experienced 37 days of exceedances of the state 1-hour ozone standard in 1990 and 1991, but no exceedance days in 2015. The number of state 8-hour ozone standard exceedance days ranges from 97 in 1991 to 2 in 2015. The County experienced 15 days of PM_{10} exceedances in 2015.

The major onshore sources of ozone precursor emissions in Santa Barbara County are motor vehicles, the petroleum industry and solvent usage (paints, consumer products and certain industrial processes). Sources of particulate matter (PM_{10} and $PM_{2.5}$) include mineral quarries, grading, demolition, agricultural tilling, road dust, and vehicle exhaust.

FIGURE 3-1:
Number of Days Exceeding State 1-Hour and 8-Hour Ozone Standards
Santa Barbara County 1990-2015



3.1.3. Regulatory Framework

Federal: 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 the District's rules and regulations and are implemented and enforced as part of the District's stationary source permitting and compliance programs.

State: The ARB also 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.

ARB regulates mobile sources of air pollution, including motor vehicles and heavy-duty diesel trucks. ARB 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, ARB has implemented airborne toxic control measures (ATCMs) that apply to a variety of industries. As part of its Diesel Risk Reduction Plan, ARB 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.

Local: The Santa Barbara County Air Pollution Control District is the air pollution control agency in the County. The District jurisdiction covers the entire County including the incorporated cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The District also has jurisdiction over Vandenberg Air Force Base pursuant to the waiver of sovereign immunity under Section 116 of the Clean Air Act. Under Section 328 of the Act, EPA adopted 40 CFR Part 55 that delegated authority to the District to regulate and permit stationary sources on the Outer Continental Shelf for which the District has been designated the corresponding onshore area.

The District has regulatory authority over air pollutant emissions from stationary sources. The District'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.

New Source Review:

NSR is a pre-construction permitting review requirement that ensures that when a new source of air pollution is built, or when an existing source of air pollution is modified, the project will implement and comply with all current regulatory standards governing air emissions. It focuses on projects at the design stage, before construction on the source begins, where it is easiest and most appropriate to incorporate the most effective pollution control technology (i.e., as opposed to having to retrofit a source after it is built). Based upon this pre-construction review, the District issues an "Authority to Construct" permit for the source that authorizes construction and imposes permit conditions to ensure that the source satisfies all applicable air quality-related regulatory requirements. The District's NSR permitting program is contained in Regulation VIII, Rules 801-810.

The objectives of Regulation VIII are to:

- Prevent the degradation of air quality from air pollution generated by both new stationary sources of air pollution and modifications of existing stationary sources of air pollution, and to ensure that the source does not interfere with the attainment or maintenance of air quality standards;

- Establish air pollution emission thresholds which, if exceeded, may require the installation of Best Available Control Technology (BACT), the surrender of offsets and/or the completion of an Air Quality Impact Analysis (AQIA);

- Specify how increases in both nonattainment and attainment pollutants are permitted; and

- Establish provisions that allow for the banking of emission reductions to offset future emissions growth.

One of the principal purposes of NSR permitting is to help ensure that Santa Barbara County's air quality complies with EPA's National Ambient Air Quality Standards (NAAQS) and ARB's California Ambient Air Quality Standards (CAAQS). The NSR permitting program is designed to help implement these efforts to get ambient air quality into compliance, and to stay in compliance, with the NAAQS and CAAQS.

The principal requirements of the District's NSR permitting program include:

- Best Available Control Technology: NSR requires that new and modified sources use Best Available Control Technology (BACT) to control emissions. BACT is the most effective type of control technology that is technically feasible for the source to implement.

- Emission Offsets: NSR also requires that the new and modified sources offset their emission increase by obtaining emission reductions from existing sources. These emission reductions are called Emission Reduction Credits (ERCs).

- Air Quality Impact Analysis: An Air Quality Impact Analysis (AQIA) is required for large new or modified sources to ensure they do not cause a violation of ambient air quality standards or prevent reasonable progress towards attainment of standards. To conduct an AQIA, the existing pollutant concentrations at the site are determined either from existing monitoring data, or if necessary from additional monitoring conducted from the site. Then the impacts from the proposed project are modeled consistent with guidelines approved by the EPA. If the analysis shows that the project will lead to a violation of an ambient air quality standard, the application will be denied.

- Public Notice and Comment Opportunities: Prior to approving or denying an application for a large project, NSR requires a public notice and comment period. The notice provides an opportunity for the public to review and comment on the proposed project. It also allows for a public hearing if sufficient interest is generated by the project.

California Health & Safety Code Section 40910 states that: *"It is the intent of the Legislature in enacting this chapter that districts shall endeavor to achieve and maintain state ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide by the earliest practicable date."*

California Health & Safety Code Section 40918 requires Districts with moderate air pollution to have an offsets program that achieves no net increase in emissions of nonattainment pollutants or their precursors from new or modified stationary sources, which emit or have the potential to emit 25 tons per year or

more of any nonattainment pollutant or its precursors. The District has been classified as Moderate. As such, Emission Reduction Credits (ERCs) are required as mitigation for any emission increases at a source with a Potential to Emit (PTE) at or over 25 tons per year. In addition, BACT is required for any new or modified source that has the PTE of 25 pounds/day or more.

The BACT requirements of the NSR program are determined on a case-by-case basis, but must always be at least as stringent as the most effective controls that are achieved in practice for a given type of equipment. BACT consists of both a technology and a specific emission limit on each piece of equipment, operating parameters to ensure that the equipment will not exceed the limits, and specific monitoring equipment and procedures to ensure that the equipment is operated within the specified emission limits and operating parameters on an ongoing basis. These controls are typically much more stringent than the controls required for existing emission sources. For example, new boilers subject to BACT can be up to 83 percent cleaner than boilers that meet prohibitory rule standards.[5] Valves and flanges at new oil and gas facilities subject to BACT are 50 percent lower emitting than similar equipment at existing facilities.[6] Solvent facilities subject to BACT must install equipment that reduces emissions by up to 98 percent.[7] So, newly constructed sources tend to have emissions much lower than existing sources of similar size and production capacity.

The District's current offsets program is actually an ARB-approved "alternative" program to the state's mandate that was approved in 1997. In 1997, the District Board adopted major revisions to the NSR rules in the form of Regulation VIII. Rule 802 covered nonattainment pollutants and implemented the new Health & Safety Code requirements for Best Available Control Technology (BACT) and offsets. The BACT requirements mandated by the Health & Safety Code were adopted as is, however the Board elected to adopt an alternative offsets program in lieu of the specific Health & Safety Code language. Since the program elements did not adhere to the Health & Safety Code requirement, the District was required to obtain Air Resources Board approval for this alternative program. The District was required to track the effectiveness of our program against what the Health & Safety Code requirement would have achieved.

Reporting has shown that the District is exceeding state mandated requirements for offsetting ozone precursors. At the same time, considerable difficulties have arisen in the offsets problem, most notably the scarcity of ERC credits and high cost of any available ERC credits. The District believes that revising the offsets program to be more aligned with the State mandated approach will help deal with the issues noted above and still safeguard air quality.

Air Toxics Program:

The District's air toxics program implements state and federal regulations regarding air toxics from stationary sources of air pollution. State and federal regulations are designed to control exposure to air toxics, and reduce the health risk. Sources operating in the District are subject to the California Air Toxics "Hot Spots" legislation (AB 2588 program), the California Air Toxic Control Measures (ATCMs), and federal Maximum Achievable Control Technology (MACT) requirements.

California rules refer to air toxics as "toxic air contaminants," and identify 729 chemicals as toxic air contaminants, or TACs. The District implements and enforces California's Toxic Air Contaminant Identification and Control Act (AB 1807, passed in 1983), which created California's program to reduce

[5] Rule 342 requires 30 ppm for a boiler. A boiler > 26 MMBtu must meet 5 ppm (83% reduction in emissions).
[6] Rule 331 requires 80% control on valves and flanges. BACT would require 90% control (which equates to an approximately 50% reduction in emissions).
[7] Several permitted solvent facilities saw 98% control with installation of regenerative thermal oxidizers.

exposure to air toxics. Under this legislation, the California Air Resources Board issues Airborne Toxic Control Measures (ATCMs).

The District also implements and enforces the California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, passed in 1987). The main goals of the Hot Spots Act are to:

- identify the amount of air toxics emitted into the air by businesses
- estimate potential health risk for members of the public exposed to these air toxics
- inform individuals exposed to significant health risk of the air toxic emissions and their associated health risk
- protect the public health by reducing air toxic emissions from businesses to acceptable levels.

Through this program, affected facilities, with assistance from the District, determine air toxic emissions. Facilities that release considerable amounts of toxic air pollutants are required to perform a risk assessment to estimate public health risks associated with these emissions. The District then oversees public notification and risk reduction programs required for facilities that pose a significant risk.

The current thresholds that define a significant risk from air toxics in Santa Barbara County, set and approved by the District's Board of Directors, are: for cancer risk, a risk of equal to or greater than 10 in a million; and for non-cancer acute and chronic risk, a hazard index greater than 1.0. A significant risk facility is a facility operation that releases toxic substances into the air that pose health risks at levels that exceed the District's thresholds. Currently, there are no significant risk facilities in Santa Barbara County. Over time, the District has worked with businesses through the Hot Spots program to reduce risk from air toxics. Since 1991, the number of significant risk facilities in Santa Barbara County has been reduced by 100 percent. In 1991 there were 51 significant risk facilities and now there are zero.

In addition to evaluating existing facilities under AB 2588, the District evaluates health risk associated with new or modified facilities during the permit process when issuing new Authority to Construct permits. The goal for the District's new source review health risk program is to prevent a new or modified facility from creating a significant risk to the community (using the significance criteria established by the AB 2588 program). With this program no additional significant risk facilities have been created since 1991.

The federal Clean Air Act, as amended in 1990, refers to air toxics as "hazardous air pollutants." The Act lists 188 hazardous air pollutants, or HAPs, and establishes Maximum Achievable Control Technology (MACT) standards for control of these chemicals. States and local agencies such as the District are responsible for implementing and enforcing the MACT standards, which require the use of control technologies to achieve emission reductions in industries that are major sources of HAPs (such as the aerospace or oil and gas industries), as well as in facilities that make up area sources of HAPs (such as dry cleaners).

The proposed project will not change the way the District's air toxics program is implemented; the potential for health risk will continue to be evaluated for each source operating under the District's permitting authority. The proposed revisions do not change the District's health risk thresholds or methodology for conducting health risk assessments.

Clean Air Planning:

The California Clean Air Act requires the ARB to evaluate and identify air quality related indicators for the District to use in assessing their progress toward attainment of the state standards. The District

prepares 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. This District is required to assess their progress triennially and report to the ARB as part of the triennial plan revision.

The most recent Clean Air Plan is the 2013 Clean Air Plan (SBCAPCD, 2015b). The 2013 Clean Air Plan is the seventh triennial update to the initial State Clean Air Plan adopted by the Santa Barbara County Air Pollution Control District Board of Directors in 1991, also known as the 1991 Air Quality Attainment Plan (AQAP) (SBCAPCD, 1991). The 1991 AQAP was required by the State Act to bring the entire county into attainment of the California ozone standard.

The California Clean Air Act requires that we report our progress toward meeting state mandates and revise our 1991 Air Quality Attainment Plan to reflect changing conditions on a triennial basis. There are two major items required to be in the triennial update (Sections 40924 and 40925 of the California Health and Safety Code): a triennial progress report and a triennial plan revision. The triennial progress report must assess the overall effectiveness of an air quality program and the extent of air quality improvement resulting from the Clean Air Plan. Progress is based upon ambient pollutant measurements, best available modeling techniques, and air quality indicators. The triennial plan revision must also incorporate new data or projections into the Clean Air Plan, specifically, the expected and revised emission reductions for each measure scheduled for adoption in the preceding 3-year period.

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 over twenty-five control measures that control stationary source emissions. This has resulted in substantial reductions of ozone precursor pollutants (nitrogen oxides and reactive organic compounds). While we have yet to attain the state 8-hour ozone standard, the 2013 Plan demonstrates how we plan to attain that standard and satisfies all state triennial planning requirements. The 2013 Plan forecasts continued reductions in 2020 and 2030 from current emission levels. Therefore, the implementation of the control measures included in the 2013 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.

The 2013 Clean Air Plan does not address any specific federal planning requirements since Santa Barbara County is in attainment of all federal ambient air quality standards. Several prior air quality plans have been prepared for Santa Barbara County to address federal Clean Air Plan requirements. The first clean air plan for Santa Barbara County was the 1979 Air Quality Attainment Plan (1979 AQAP) which was updated in 1982. These two plans were prepared in response to mandates established by the federal Clean Air Act Amendments of 1977. At that time, the County violated the federal 1-hour ozone standard.

Santa Barbara County was designated an attainment area for the federal 1-hour ozone standard in 2003 (the 1-hour federal ozone standard was revoked for Santa Barbara County in 2005). The EPA has also designated the county as an attainment area for the federal 8-hour ozone standard. The 2001 Clean Air Plan addresses Federal Clean Air Act requirements that apply to our current designation as an attainment area for the federal 8-hour ozone standard (SBCAPCD, 2002). Areas that are designated as attaining for the federal 8-hour ozone standard and attaining for the previous federal 1-hour ozone standard with an approved maintenance plan must submit an 8-hour maintenance plan. The 2001 Plan established an "attainment inventory" that demonstrated emissions in 2005, 2010, and 2015 would remain below the emission levels necessary to maintain attainment of the federal 8-hour ozone standard. Therefore, the 2001 Clean Air Plan serves as the District's approved federal maintenance plan.

3.2. GREENHOUSE GASES

3.2.1. 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 GHGs. Climate change results from the accumulation of GHGs in the atmosphere.

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.

3.2.2. Existing Greenhouse Gas Emissions

The most common greenhouse gases are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6). Each GHG has variable atmospheric lifetime and global warming potential (GWP). GHG emissions estimates are typically represented in terms of metric tons of carbon dioxide equivalents (MTCO2E). CO2E emissions are the product of the amount of each gas multiplied by its GWP. Fossil fuel combustion represents the vast majority of the anthropogenic greenhouse gas emissions, with carbon dioxide being the primary greenhouse gas.

The total U.S. greenhouse gas emissions were 6,872.6 million MTCO2E in 2014, of which 81 percent were carbon dioxide emissions (EPA, 2016). California is one of the larger emitters of GHGs in the world. In 2013, California produced 459 million metric tons of carbon dioxide equivalent greenhouse gas emissions. The transportation sector is the single largest category of California's greenhouse gas emissions, producing approximately 37 percent of the State's total greenhouse gas emissions in 2013. Electrical generation produced approximately 20 percent of greenhouse gas emissions (ARB, 2015).

3.2.3. Regulatory Framework

At the federal level, the EPA has developed regulations to reduce GHG emissions from motor vehicles and permitting and reporting requirements for large stationary emitters of GHGs. Initiatives to address mobile sources include: (1) National Highway Traffic Safety Administration fuel economy standards for new light-duty vehicles, and (2) a Renewable Fuel Standard program. Initiatives to address stationary sources include: (1) Establishing new carbon pollution standards for power plants; (2) Implementing the 2010 Final Greenhouse Gas Tailoring Rule; and (3) Implementing the Prevention of Significant Deterioration permitting program to greenhouse gas. EPA also oversees the Mandatory Greenhouse Gas Reporting Rule (MRR) that requires large sources and suppliers in the United States to report their GHG emissions.

In recent years, California has enacted a number of policies and plans to address GHG emissions and climate change. To tackle climate change in a comprehensive way, the California legislature adopted

Assembly Bill 32 (AB 32) in 2006. AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to reduce greenhouse gases (GHG) to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first considered by the ARB in 2008 and must be updated every five years. The ARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. Many of the GHG reduction measures and programs identified in the AB 32 Scoping Plan relate to stationary sources of air pollution, including the Mandatory Reporting Regulation and the Cap-and-Trade Program.

Senate Bill 97 was also adopted to acknowledge that climate change is a prominent environmental issue that requires analysis under the California Environmental Quality Act (CEQA). The California Office of Planning & Research (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 addressing 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 GHGs. The March 2010 revisions to the CEQA Guidelines require that new projects be evaluated for their potential impacts to climate change.

Locally, several agencies have been involved in climate change planning and regulation. Most notably, 1) the County of Santa Barbara adopted an Energy and Climate Action Plan and greenhouse gas threshold for industrial source emissions in May 2015, and 2) the District Board adopted revisions to the District *Environmental Review Guidelines* on April 30, 2015 that include a threshold of significance for greenhouse gases (applicable to stationary source emissions).

THIS PAGE INTENTIONALLY LEFT BLANK

4. ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

This section analyzes the environmental effects of the proposed project, as well as feasible mitigation measures that would reduce or eliminate any adverse impacts.

An initial assessment was performed to identify the environmental resources and other issue areas that may be adversely impacted by implementation of the proposed project. Potential environmental effects on aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems were considered. Since the proposed project does not involve any new development, earth disturbance, land use changes, etc., it was determined that there is no evidence that the proposed NSR Rule Revisions would have significant direct or indirect effects on any resource besides air quality and greenhouse gases. Therefore, impacts to all resources, except air quality and greenhouse gases, are considered to be insignificant.[8]

The analysis that follows identifies no potential significant impacts to air quality or greenhouse gas emissions, therefore no mitigation measures are required.

The following classifications are used to describe the environmental impacts and residual impacts:

- Class I Impacts - Significant unavoidable adverse impacts for which the decision-makers must adopt a Statement of Overriding Considerations.
- Class II Impacts - Significant adverse impacts that can be feasibly mitigated to insignificance for which the decision-maker must adopt findings and recommend mitigation measures.
- Class III Impacts - Adverse impacts found to be insignificant, for which the decision-makers do not have to adopt findings.
- Class IV Impacts - Beneficial impacts.

4.1. AIR QUALITY

4.1.1. Significance Criteria

Air pollution impacts are primarily cumulative concerns for ozone formation, as it is unlikely that any individual project will emit enough ozone precursor pollutants by itself to cause exceedances of the state or federal ambient air quality ozone standards. For other affected pollutants (e.g., NO_2, CO, $PM_{2.5}$, PM_{10}, SO_2), a single source may have the potential to cause an exceedance to an ambient air quality standard. In these cases, to ensure no individual project causes an exceedance of a non-ozone air quality standards, the NSR program contains modeling requirements that are used on a permit level analysis. The proposed project is not relaxing or making any substantive changes in how these permit level Air Quality Impact Analyses are performed.

[8] CEQA Statute, §21082.2

High ozone air pollution levels exceeding applicable ozone standards are usually the cumulative effect of many individual sources around the region combining together in the ambient air. Therefore, air quality impacts for ozone can be analyzed using the guidance provided in CEQA for cumulative impacts. For non-ozone pollutants, the existing AQIA provisions in Regulation VIII will continue to ensure that no single project can cause a violation of any ambient air quality standard.

To analyze cumulative impacts, first an evaluation must be made of whether there is a significant cumulative impact in the form of pollution concentrations that exceed an established standard. To make this determination, the analysis must consider if the emissions from the project, along with all the emissions from other past, present and reasonably foreseeable future projects impacting the same air quality resource, will cause air pollution levels to exceed the established standards.[9] If there is a significant cumulative problem in the form of air pollution that exceeds an established standard, then the determination must be made whether the emissions from the project being evaluated will result in a "cumulatively considerable" contribution to that cumulative air quality problem.[10]

One measure of whether a project's incremental contribution to a significant cumulative air pollution impact is "cumulatively considerable" is whether it will comply with the requirements in a previously approved plan or mitigation program that provides specific requirements to address that problem, including (but not limited to) an air quality attainment or maintenance plan.[11] Thus, where a regulatory agency has adopted a plan with specific requirements to address cumulative air pollution problems, then the requirements of that plan can establish the levels at which a project's incremental contribution to the problem becomes "cumulatively considerable." Similarly, a project's contribution to significant cumulative impact will be rendered less than cumulatively considerable and thus not significant where a project implements its "fair share" of established measures designed to alleviate the cumulative impact.[12] Thus, where a regulatory agency has adopted an approach to addressing a cumulative air quality problem that calls on various categories of emissions sources to take certain steps to reduce their respective contributions to the problem, a project that is doing its "fair share" to implement this approach will not make a "cumulatively considerable" contribution to the problem. These principles direct the CEQA significance analysis to look to established regulatory standards for air pollution to determine what constitutes a "cumulatively considerable" air quality impact.

The criteria for determining the significance of air quality impacts are based on federal, state, and local air pollution standards and regulations. As adopted in the *Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District* (SBCAPCD, 2015a).

Under the District's thresholds of significance, a proposed development project (i.e., an individual project) will not have a significant impact on air quality, either individually or cumulatively, if operation of the project will:

- emit (from all project sources, both stationary and mobile) less than the daily trigger for offsets or Air Quality Impact Analysis set in the APCD New Source Review Rule,[13] for any pollutant (i.e.,

[9] CEQA Guidelines § 15355.
[10] CEQA Guidelines § 15064(h)(1); §15130(a).
[11] CEQA Guidelines § 15064(h)(3).
[12] CEQA Guidelines § 15130(a)(3).
[13] The APCD New Source Review Rule as it existed at the time the APCD Environmental Review Guidelines were adopted (in October, 1995).

240 pounds per day for ROC or NOx; and 80 pounds per day for PM_{10}. There is no daily operational threshold for CO; it is an attainment pollutant[14]); and

- emit less than 25 pounds per day of NOx 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 latest adopted federal and state air quality plans for Santa Barbara County.

Thresholds of significance implement provisions in the State CEQA Guidelines, including Sections 15064, 15065, and 15382, for determining significant effects. Thresholds of significance provide general guidance for determining significant impacts, but are not ironclad definitions of significant impacts. Each project must be judged individually for its potential for significant impacts based on specific circumstances and evidence.

The proposed project (revisions to a permitting program) is not a specific individual development project (such as an industrial facility or residential housing project) that lends itself to analysis using analytical tools to determine ambient pollutant concentrations and evaluate project compliance with the state and federal ambient air quality standards. Rather, the proposed "project" is a set of revisions to the District's permitting regulations, which govern the conduct of the continuing program responsible for managing air resources in Santa Barbara County. For this reason, the EIR is termed a "program" EIR and considers the broad policy implications of the proposed action.[15]

Therefore, the proposed project will not be analyzed against the project-level thresholds detailed above, and instead, for the purposes of this Program EIR, the criteria for determining the significance of air quality impacts are the following:

- **Do the proposed revisions create significant unmitigated emission increases as compared to the current rules and practices? and,**
- **Are the proposed NSR Rule Revisions consistent with District Board-adopted air quality maintenance and attainment plans, primarily the 2001 Clean Air Plan (federal maintenance plan) and the 2013 Clean Air Plan (state attainment plan)?**

4.1.2. Impact Analysis

CEQA requires disclosure of the "potential, significant environmental effects of proposed activities,"[16] and, "[i]n evaluating the significance of the environmental effect of a project, the Lead Agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project."[17] Because this project will not result in any direct physical changes, this impact analysis will evaluate the reasonably foreseeable indirect physical changes in the environment which may be allowed to occur by the proposed project.

[14] Due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with congested intersections are not expected to exceed the CO health-related air quality standards. Therefore, CO "Hotspot" analyses are no longer required.
[15] CEQA Guidelines § 15168.
[16] CEQA Guidelines § 15002(a)(1)
[17] CEQA Guidelines § 15064(d)

The proposed project revises the NSR permitting program by amending Regulation VIII (New Source Review) and other associated rules (Rules 102, 105, 202, 204, 801, 802, 804, 805, 806 and 1301), adopting new Rule 809, Federal Minor Source New Source Review, and repealing Rule 803, Prevention of Significant Deterioration. Wherever possible, air quality impacts are determined by estimating the net increase in air pollutant emissions resulting from proposed project components above those that would occur under existing conditions (in this case, the existing NSR rules). In many cases, however, insufficient information exists to provide a quantification of affected emissions. Wherever a quantitative analysis is not possible, the impacts are discussed qualitatively.

In order to conduct a quantitative analysis of impacts (when it was feasible), the District carried out an exhaustive detailed review of District permit files for all sources subject to NSR over the last 17 years. Even with this data, however, it was still necessary to make certain assumptions on what future growth might occur under the proposed project. The District determined that the assumptions made were "reasonable" assumptions in light of evidence available to the District in its permit files. Therefore, the District has determined its assumptions are supported by substantial evidence.[18] *Drafting an EIR necessarily involves some degree of forecasting. As foreseeing the unforeseeable is not possible, the District has made its best effort to find out and disclose all that it reasonably can.*

As identified in Section 2.3.3., the impact analysis addresses the following proposed revisions that have the potential to cause adverse environmental impacts:

1. Replacing the NEI calculation methodology with the PTE methodology.
2. Revising the offset program thresholds and calculation basis.
3. Revising the offset program trading ratios, changing to a single trading zone, and allowing inter-district trades.
4. Adding an offset exemption for equipment replacements.
5. Adding an offset exemption for emergency standby generators/flood/firewater pumps.

For each of the proposed revisions, the analysis provides a:

a. Description of the current rule,
b. Description of the proposed rule,
c. Discussion of the effect of the proposed rule revision.

Although the individual components of the proposed project are discussed and analyzed (in the following sub-sections), an impact determination for the proposed project as a whole will be made. This is because the proposed revisions to the NSR program (Rule VIII and other associated rules) are a rule package. Eliminating a portion of the package would change the project description. Therefore, the net impact, or programmatic effect, of the proposed revisions will be compared to the significance criteria (see Section 4.1.3). This is especially appropriate where the focus of the regulations is a regional pollutant like ozone.

4.1.2.1. REPLACING THE NEI CALCULATION METHODOLOGY WITH THE PTE METHODOLOGY

Current Rule:

Currently, the Net Emissions Increase (NEI) calculation methodology is used in the current rules to determine whether a proposed project exceeds the thresholds for offsets and Air Quality Impact Analysis (AQIA) for nonattainment pollutants, and the thresholds for offsets, AQIA and Best Available Control

[18] As described in CEQA Guidelines §15384, "*Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts*."

Technology (BACT) for attainment pollutants. The NEI methodology was used by the District as an equivalent system to the Potential to Emit (PTE) methodology required by the California Health & Safety Code. The NEI calculation uses emission increases, decreases and a baseline date of 1990. For sources that were originally constructed before 1990, the NEI is usually less than the PTE. For sources installed after the baseline date, the NEI equals the PTE.

Proposed Rule:

The proposed rule revisions include switching all the NEI-based thresholds to PTE-based thresholds. Regarding the impact on BACT determinations, the nonattainment review BACT threshold is not changed by this project, as it is already based on the PTE calculation. For the attainment review BACT threshold, the switch to a PTE-based threshold will have no impact as PTE is always equal to or greater than NEI. Likewise, the change from NEI-based calculations to PTE-based calculation will have no impact on AQIA's as PTE is equal to NEI for a new source. Therefore, the change to PTE-based calculations mainly affects the offset requirement determination.

Integrally tied to the change from NEI to PTE is the revision of the offset thresholds from 10 tons per year to 25 tons per year. A detailed discussion of the revisions to the offset thresholds and the combined impact of these two rule revisions (that is, both replacing the NEI calculation methodology with the PTE methodology, and also changing the offset thresholds) is presented in Section 4.1.2.2.

Discussion:

Effect on New Sources*:* This revision by itself will not change the NSR requirements for new stationary sources since the PTE method is equal to the NEI for a new source. The PTE of a device/process will always be equal to or greater than the NEI for the same device/process. This is because the Potential to Emit is the "maximum" capacity of the device/process to emit air pollution. Therefore, there will be no air quality impact related to this aspect of the rule changes, for new sources.

Effect on Existing Sources: Most existing sources will see no change to their NSR requirements from this rule revision, as both their NEI and PTE are lower than the NSR thresholds. However, some sources will see a change because their NEI and PTE are currently higher than the existing and proposed NSR thresholds. There are eight stationary sources that are currently subject to the offset requirements using the NEI calculation that will continue to be subject to offset requirements under the proposed rules.

Some existing sources are near the NEI limit. These sources may benefit from the proposed change as the calculation change would remove an impediment to growth. There are 36 stationary sources that are within 25% of the current offset thresholds but that do not have a PTE within 25% of the proposed thresholds.[19] For these sources, the proposed rule change could allow them to expand as they would no longer be up against the offset threshold.

In contrast, the change from an NEI- to a PTE-based calculation will increase the number of existing stationary sources subject to offsets from 8 sources to 36 sources, meaning 28 additional existing sources would be required to provide mitigation if they propose a modification to their stationary source that increases their potential to emit.

In sum, there is the potential for unmitigated emissions growth from some existing sources, and the potential for new mitigated emissions growth from some existing sources, should they decide to increase

[19] The 25% value was selected to be consistent with the NSR Staff Report, as the staff report identified that sources within 25% of the offset threshold were considered to be potentially constrained.

their emissions through a facility or process modification. These impacts are evaluated in Section 4.1.2.2 below as the revision of the offset program thresholds is interconnected with the change in calculation methodology.

4.1.2.2. REVISING THE OFFSET PROGRAM THRESHOLDS AND CALCULATION BASIS

Current Rule:

The current offset program includes the following elements:

- Net Emissions Increase (NEI) based emission calculations of emission increases and decreases of affected pollutants at a stationary source since 1990
- Offset thresholds set at 55 pounds per day and 10 tons per year for ROC, NO_X, SO_X, and at 80 pounds per day and 15 tons per year for PM_{10} (NEI)
- An offset obligation for all NEI down to zero
- A baseline date of 1990

Proposed Rule:

The proposed revisions to the offsets program are contained in Section E of Rule 802 as well as Rule 804. The elements of the proposed revisions to the offsets program include:

- Potential to Emit (PTE)-based emission calculations
- Offset thresholds set at 240 pounds per day and 25 tons per year (PTE)
- An offset obligation for PTE increases above the annual offset threshold[20]
- No baseline date

Discussion:

This is the most comprehensive change (combined with the change to emission calculation methodology, see Section 4.1.2.1) that is being proposed by the District.

Throughout this evaluation, the District will be using categories to help describe the size and impacts of the proposed changes on the various stationary sources within the District. The following categories were assigned to stationary sources based on their annual PTE for their highest criteria pollutant (ROC, NO_X, SO_X, or PM_{10}). This EIR considers the impact to "small", "medium", and "large" source categories as portrayed in Table 4-1 below.

TABLE 4-1: Source Size Categories Used for the Analysis[21]

Source Size/Category	Annual PTE
Small	< 7.5 tons/yr
Medium	7.5 tons/yr – 24.99 tons/yr
Large	> 25 tons/yr

[20] Note, sources that trigger the daily offset threshold are required to offset the entire project PTE.
[21] These source size categories are for the purposes of this analysis only and does not have relation to source size definitions in APCD Rule 102.

The following potential effects due to the proposed change in offset thresholds and calculation methodology can be considered and analyzed:

Effects on Existing Constrained Stationary Sources:

- Existing sources that are not within 25% of the current annual NEI-based offset threshold are unlikely to be affected by the proposed project. Data in District permit files shows that their low NEI has not grown much since 1990, even though they were not constrained by the current rule's offset requirements. Therefore, this analysis assumes that their growth rate in the past was determined by factors other than the District's NSR program. A change to the NSR program is not expected to change those external factors. Therefore, there is no adverse air quality impact expected to occur from these sources.

- Existing sources within 25% of the current annual NEI-based offset threshold are potentially "relieved" from offset requirements and may expand without providing offsets as a result of the proposed rule revisions. This is because these sources are potentially being constrained by the current 10 ton/year NEI threshold and may have chosen not to expand because of the obligation to provide offsets. For these sources, the proposed rules would be a relaxation of offset requirements because the sources would be allowed to grow up to the new offset threshold of 25 tons per year (tons/yr) without providing offsets.

- Existing sources within 25% of the current daily NEI-based offset threshold are also potentially "relieved" from offset requirements and may expand without providing offsets as a result of the proposed rule revisions. This is because these sources are potentially being constrained by the current 55 pounds per day (lbs/day) NEI threshold and may have chosen not to expand because of the obligation to provide offsets. For these sources, the proposed rules would be a relaxation of offset requirements because the sources would be allowed to grow up to the new offset threshold of 240 lbs/day without providing offsets.

Effects on Newly Constructed Stationary Sources:

- Newly constructed small sources will not be affected by the change because they were not required to offset increases under the existing rules and they will still not be required to offset increases under the proposed rule.

- Newly constructed stationary sources with a PTE greater than 55 lbs/day or 10 tons/yr, but less than 240 lbs/day and 25 tons per year would be affected by the rule change. These sources would no longer be required to provide offsets to mitigate their emissions down to zero.

- Newly constructed sources with a PTE greater than 25 tons/yr would only have to provide offsets for those increases over the annual 25 tons/yr threshold. There is no change to how offsets are provided if the daily threshold (240 lbs/day) is triggered as they will still be required to offset the entire project PTE.[22]

In addition, the proposed revisions to the annual offset obligation will require sources to provide offsets for their incremental potential to emit (PTE) above the 25 tons/yr offset threshold. In contrast, under the

[22] Note that medium and large newly constructed sources would still be subject to all of the other requirements of NSR: BACT, AQIA, and public review and comment on the preliminary decision to grant or deny an Authority to Construct.

current NEI approach, sources that exceed the offset thresholds are required to offset their entire Net Emissions Increase.

In sum, the net result of the proposed changes would require offsets from the large (greater than 25 ton/yr or 240 lbs/day) sources in the County. As stated above, the number of sources subject to offsets under the revised rules will increase from 8 to 36. The proposed rules would also allow some sources to increase emissions before triggering offsets.

For many of these sources above, there will be other constraints that limit or discourage growth, including land use permit restrictions, especially in highly urbanized areas. Additionally, some operations may have no economic reason to grow, as their current operation provides no economic incentive to increase total air pollution, especially where the source is already subject to best available control technology.

Impact Analysis, Methodology, Assumptions

The District conducted an analysis to evaluate the potential impacts listed above: a) projected mitigation gained from existing large sources that will have to provide offsets, versus, b) the projected unmitigated emissions from new medium and large sources that may be constructed, and c) projected unmitigated emissions from existing constrained sources that have a relieved burden.

Below is a simplified model of the comparative analysis that was done to examine these impacts:

Potential Mitigation Gained		**Potential Unmitigated Emissions**		
a) Mitigation gained from existing large sources that will have to provide offsets.	Versus	b) Unmitigated emissions from new sources that may be constructed.	+	c) Unmitigated emissions from existing constrained sources that have a relieved burden.

The analysis relied upon the data set from the NSR staff report, which ultimately came from a comprehensive review of the District's permit database. The permitting trends over the past 17 years were evaluated in order to make reasonable projections into the future. This period covers 1997 through 2014. During that time the United States was in an expansionary business cycle for 190 months, or 88 percent of the time and in a contractionary business cycle for 26 months, or 12 percent of the time. Since 1945 the United States was in an expansionary business cycle 85 percent of the time and in a contractionary business cycle 15 percent of the time (NBER, 2016). Therefore, the last 17 years are representative of typical economic expansions and contractions over long periods of time.

The following key assumptions were used throughout analysis of all three impacts (items a, b, c from above):

- The same types of trends/projects at existing large sources will continue. These sources are expected to continue their operations and generate credits either by conducting emission reduction projects on-site or by purchasing credits or funding projects off-site.
- The same types of trends/projects for constructing new medium & large sources will continue.
- Constrained daily and annual sources will grow based on an evaluation of the sources' potential for growth based on District staff experience and review of the permit files.

This analysis focuses on ozone precursors (NO_X and ROC). Based on a detailed evaluation of permitting history, the evidence shows there will not likely be any medium or large newly constructed stationary sources that have PM or SO_X as the driving pollutant for triggering offset requirements, nor is the District

expecting any existing constrained stationary sources to increase only their PM or SO_X emissions. Sources that would primarily increase PM or SO_X emissions are typically sand, rock, and gravel facilities, concrete batch plants, and asphalt plants. Most existing sources in these industry types are not expected to grow significantly. Existing sources that are likely to modify their operations are large sources (>25 tons/yr) that would be required to mitigate their emission increases.

This analysis projects future behavior of stationary sources throughout the County based on trends in the past 17 years of District permitting history (Appendix A and Appendix B). Sources are affected by many factors including: economic conditions, overall growth in the County, land use requirements, availability of resources, and state and federal regulatory requirements. Variability in any of these factors in the future could influence sources' behavior, and cause different types of trends & projects in the future than what the District has historically experienced. Therefore, the potential impacts identified below are highly sensitive to the assumptions used in the analysis. Variability in assumptions, or factors outside the scope of this analysis, could strongly influence the results. If some of the potential growth in existing constrained sources identified in this analysis **does not occur**, or reasonably foreseeable projects do not come to fruition or their full estimated potential, then the potential net impacts identified below could be substantially lower.

Calculation of Mitigation Gain from Existing Large Sources:

To calculate the mitigation gained from all existing large sources that expand and would be required to provide offsets for their increases under the proposed rules, the same data from the NSR Staff report was used.

The SB 288 analysis conducted in the NSR Staff Report compared the emission reductions generated under the current NEI-based rule to the proposed PTE-based rule. To do this, the past 17 years of NSR permitting actions was used to compare the rules.

The first step in the analysis is to identify which stationary sources have a PTE of 25 tons/yr or more of ozone precursor pollutants. The District's permit database was queried and 31 stationary sources were identified (owned/operated by 21 different companies). Next, the permit files were reviewed to gather the NEI data elements. This included all increases since 1997 ("I" or "P1" terms), all non-NEI based decreases since 1997 ("D" terms) and all NEI based decreases since 1997 ("P2" terms). This data was then evaluated and the "I", "P1" and "P2" terms associated with sources/pollutants that were at or over 25 tons/yr were tagged for use in the analysis. "D" terms act as internal offsets to the source and are considered mitigation.

The next step in the analysis is to determine the ERC obligation under both the current and proposed rules. For the current rules, all the emission reductions credits ("ERCs") surrendered for "use" on permits issued since 1997 under the current NSR rules were totaled. For the proposed rules, the estimate of the ERCs that would have been required for the emissions growth over the past 17 years were totaled.

The offset ratios proposed in the rule are used (1.1:1 for same source ERCs and 1.3:1 for all other intra-District trades). The analysis does not assume any inter-District trades. To complete the analysis, an estimate of what percentage of the ERCs would be subject to the 1.1:1 or 1.3:1 trade ratio is required. This ratio was determined by evaluating every ERC transaction for NSR permitting over the past 17 years. Each use was analyzed for which ratio would be applicable. The ratios were applied and a weighted percentage of all trades was calculated. These percentages were then used in the estimate of required ERCs under the proposed new rules.

Finally, the District determined the amount of Rule 806 ERC shutdown and reduction in throughput discounts over the past 17 years. These reductions count towards the total mitigation value for the NSR program. However, there are no substantive changes proposed to this calculation method, so the throughput discounts will be identical under both the current and proposed rules. [23]

The NSR Staff report showed that, compared to the current rules, **an additional 93.81 tons/yr of ozone precursor offsets** would be achieved by the proposed rules over the next 17 years.[24]

It should be noted that Table A1 shows that the current rules provide approximately 19 tons/yr more NOx mitigation than the proposed rules. This does not, however, mean that the proposed rules are under performing with respect to NOx. The reason for the positive NOx value is that the District has accepted inter-pollutant trades of NOx ERCs for ROC increases. Approximately 44 tons/yr of NOx ERCs were used to offset ROC increases (a greater amount than the 19 tons/yr deficit). In sum, the net positive NOx value is an artifact of some NOx ERCs having been converted to ROC ERCs.

Calculation of Unmitigated Emissions from Newly Constructed Stationary Sources:

To determine the amount of unmitigated emissions that could be produced from newly constructed sources, District staff first evaluated trends in the past 17 years of permitting data. Staff assembled a list of all stationary sources and classified each source as either small, medium or large. Small sources were eliminated from further analysis as only medium and large sources would potentially be affected by the rule revisions. Next, the stationary source creation date was identified for each medium and large source. Data showed that three sources have been created since 1997.[25] These three sources had a PTE that would categorize them as medium sources. None of these sources were subject to offsets under the current rules, and they would not be subject to offsets under the proposed rules. Therefore, this project would have no impact on the types of new sources the District has historically seen.

Under the proposed NSR program, the District could **forego approximately zero (0) tons/yr of ozone precursor offsets from newly constructed sources.**

Calculation of Unmitigated Emissions from Existing Constrained Stationary Sources:

Sources that are most likely to expand without providing offsets as a result of the proposed rules are sources that have an NEI near the current offset thresholds and a PTE below 25 tons/yr or 240 lbs/day. Therefore, the current offset thresholds may be constraining growth from these sources. Sources may be constrained by either the annual threshold or the daily threshold.

To evaluate potential growth from existing sources constrained by the annual and daily thresholds, the analysis considered existing sources with an NEI within 25% of the current offset thresholds for ozone precursor pollutants. These sources are listed in Table 4-1 and Table 4-2 of the NSR Staff Report. Next, new tables were created (see Appendix A – Table A3 and Table A4) that show the potential future emissions growth for these sources (see Appendix B – *Assumptions for Table A3* and *Assumption for Table A4* for the basis of these estimates).

Annual Increase Analysis:

[23] See Appendix B – *Assumptions for Table A1* for the NSR Staff Report tables that detail each step of the analysis.
[24] See Appendix A – Table A1.
[25] See Appendix A – Table A2 and Appendix B – *Assumptions for Table A2*.

Staff identified 14 sources as having NEI within 25% of the current annual threshold and PTE less than 25 tons/yr.[26] These 14 stationary sources could potentially increase their annual emissions once the NEI limit is removed. However, some of these sources can be excluded from the analysis for the following reasons:[27]

- Sources that have specific constraints to further growth (e.g., the facility was already permitted at its maximum capacity and is not expected to expand any further because the facility has no additional physical demand for added capacity).
- Sources that, due to their industry type, are not expected to grow because their operations are inelastic in nature and based on local demand (e.g., autobody).

In general, if an existing source showed no constraints, then continued source emissions growth was assumed possible. Approximately eight sources, which are in the Oil & Gas, Winery, or Solvent industry types, showed no constraints to growth and have the potential to continue to grow.

These eight sources' abilities to grow may be "constrained" by the current annual offset threshold. Hence, these sources would potentially be "relieved" from offset requirements due to the proposed revisions.

To project growth from these potentially constrained sources, the District reviewed each source permit file and evaluated the source's potential emissions growth for the next 17 years. Growth assumptions were based on the District expertise and evidence in District permit files (Appendix A – *Table A3* and Appendix B – *Assumptions for Table A3* provide the amount of emissions growth that was estimated for each source, and the analysis of the permit file for each source to support each growth assumption).

The analysis shows that the District could see emissions at these sources constrained by the annual threshold **increase by approximately 20.92 tons/yr of ozone precursors over the course of the next 17 years**.

Daily Increase Analysis:

To evaluate growth from existing sources constrained by the daily threshold, staff identified 23 sources as having an NEI within 25% of the current daily thresholds and PTE < 240 lbs/day.[28] [29] These 23 sources could potentially increase their daily emissions once the NEI limit is removed. However, some of these sources can be excluded from the analysis for the following reasons:[30]

- Sources that have had historically high PTE limits, but their actual emissions are quite low. These sources would have no need to increase their PTE any further.
- Sources who have specific constraints to further growth (e.g., the facility was already permitted at its maximum capacity and is not expected to expand because the facility has no additional physical demand for added capacity).
- Sources that, due to their industry type, are not expected to grow because their operations are inelastic in nature and based on local demand (e.g. autobody).

[26] See Appendix A – Table A3.
[27] See Appendix B – *Assumptions for Table A3* for growth assumptions for each source considered in the analysis.
[28] See Appendix A – Table A4.
[29] Technically, 33 sources were identified as having an NEI within 25% of the current daily offset thresholds and a PTE <240 lbs/day. However, 10 of these sources are already captured in the annual increase analysis (i.e. their annual growth has already been accounted for). Therefore, 23 sources remain to be considered (33-10=23).
[30] See Appendix B – *Assumptions for Table A4* for growth assumptions for each source considered in the analysis.

This results in approximately six sources, in the Solvent industry type, as being potentially "constrained" by the current daily offset threshold. Hence, these six sources would potentially be "relieved" from offset requirements due to the proposed revisions.

To project growth from these potentially constrained sources, the District reviewed each source permit file and evaluated the source's potential emissions growth for the next 17 years. Growth assumptions were based on the District expertise and evidence in District permit files (Appendix A – *Table A4* and Appendix B – *Assumptions for Table A4* provide the amount of emissions growth that was estimated for each source, and the analysis of the permit file for each source to support each growth assumption).

It was assumed these Solvent sources could grow by 24.90 lbs/day.[31] The amount of 24.90 lbs/day was chosen because any increases beyond this amount would require Best Available Control Technology (BACT) on the project. BACT for these types of sources usually requires a thermal oxidizer which would substantially reduce the facility's emissions. Hence, if a facility was looking to increase emissions without installing additional emission controls, they would only increase up to 24.90 lbs/day.

The analysis shows that the District could see these sources constrained by the daily threshold **grow by approximately 19.44 tons/yr of ozone precursors over the course of the next 17 years**.

Net Effect to Existing and New Sources

There is the potential for 93.81 tons/yr of new offsets required from modifications at existing large sources over the course of the next 17 years.

There is the potential for 0 tons/yr of unmitigated ozone precursor emissions from newly constructed stationary sources in the District over the course of the next 17 years.

There is the potential for a total of 40.36 tons/yr of unmitigated ozone precursor emissions from modifications at existing constrained stationary sources (20.92 tons/yr from sources constrained by the annual threshold + 19.44 tons/yr from sources constrained by the daily threshold) over the course of the next 17 years.

TABLE 4-2: Net Effect of the Proposed Rule Changes to Existing and New Sources

Potential Mitigation Gained		**Potential Unmitigated Emissions**		
Existing Large Sources		**Newly Constructed Sources**		**Existing Constrained Sources**
93.81 tons/yr	Versus	0 tons/yr	+	40.36 tons/yr
= 53.45 tons/yr net decrease of ozone precursor emissions				

Reasonably Foreseeable Projects:

In addition to the potential effects to existing and new sources operating in the District under the proposed rules, the following potential effects to reasonably foreseeable projects has been identified:

[31] Only pollutants identified in Table 4-1 and 4-2 of the NSR Staff Report as being within 25% of the current NSR offset threshold were evaluated.

Effect to Reasonably Foreseeable Projects:

- Reasonably foreseeable small sources will not be impacted by the change because they were not required to offset increases under the existing rules and they will still not be required to offset increases under the proposed rule.

- Reasonably foreseeable stationary sources with a PTE greater than 55 lbs/day or 10 tons/yr, but less than 240 lbs/day and 25 tons per year would be impacted by the rule change. These sources would no longer be required to provide offsets to mitigate their emissions down to zero.

- Reasonably foreseeable stationary sources with a PTE greater than 25 tons/yr would only have to provide offsets for those increases over the annual 25 ton/yr threshold. There is no change to how offsets are provided if the daily threshold (240 lbs/day) is triggered as they will still be required to offset the entire project PTE.

Calculation of Unmitigated Emissions from Reasonably Foreseeable Stationary Sources

To explore the effect that the proposed rules may have on reasonably foreseeable projects, staff identified four major pending projects in the County of Santa Barbara that could potentially exceed District offset thresholds:

TABLE 4-3: Reasonably Foreseeable Projects

	Project Name	**Address**	**Description**	**Status**
1	Aera Energy East Cat Canyon	6516 Cat Canyon Road, Santa Maria	296 new oil & gas wells	In process (not approved or permitted)
2	ERG West Cat Canyon	6085 Cat Canyon Road, Santa Maria	233 new oil & gas wells	In process (not approved or permitted)
3	PCEC Orcutt HIll	1555 Orcutt Hill Road, Santa Maria	96 new oil & gas wells	In process (not approved or permitted)
4	PetroRock UCCB	6527 Dominion Road, Santa Maria	231 new oil & gas wells	In process (not approved or permitted)

These proposed projects will not go through the District permit process until after the County issues a lead agency permit; therefore, emissions estimates are preliminary and unverified. Two of the four projects (ERG West Cat Canyon and the PCEC Orcutt Hill) are located at existing large sources. With regards to the other two projects, PetroRock UCCB will be located at an existing medium source, and Aera Energy East Cat Canyon will be a new medium source.

Of these pending projects, the ERG West Cat Canyon project and the PCEC Orcutt Hill project are projects that will be part of existing stationary sources permitted by the District. These two existing stationary sources have a PTE in excess of 25 tons per year and an NEI in excess of 10 tons per year, and are currently subject to offset requirements. Therefore, growth at these sources will be mitigated under either NSR rule set (i.e., no unmitigated growth will occur from these two sources).

The Aera Energy East Cat Canyon project is anticipated to have an NEI that would exceed the District's current offset thresholds but a PTE below the proposed offset thresholds. Therefore, the emissions from the Aera Energy East Cat Canyon project may be unmitigated under the proposed rules. The ozone

precursors from this project are preliminarily estimated at approximately 16 tons/yr of NOx and 13 tons/yr of ROC.[32]

The PetroRock UCCB project has preliminary emissions estimates that would exceed the District's current NEI offset threshold but remain below the proposed PTE offset thresholds. Therefore, the emissions from the PetroRock UCCB project may be unmitigated under the proposed rules. The ozone precursors from this project are preliminarily estimated at approximately 13 tons/yr of NOx and 12 tons/yr of ROC.[33]

Therefore, under the proposed NSR program, there is the potential for a total of **54 tons/yr of ozone precursor emissions from reasonably foreseeable stationary sources.**

Clarification of the difference between "New Sources" and "Reasonably Foreseeable Projects" in this EIR: While the projects in the "reasonably foreseeable projects" analysis are new projects in the County, the analysis of "new sources" is based on sources constructed in the last 17 years. None of the sources constructed in the District during the last 17 years would have been impacted by the proposed rules, as their PTE is below both the current and proposed offset thresholds. The "reasonably foreseeable projects" would be unusual new projects in that their PTE is higher than the "new sources" the District has permitted in the last 17 years.

Overall Results

TABLE 4-4: Net Impact of the Proposed Rule Changes

Effect to Existing and New Sources				
Potential Mitigation Gained		*Potential Unmitigated Emissions*		
Existing Large Sources		New Sources		Existing Constrained Sources
93.81 tons/yr	Versus	0 tons/yr	+	40.36 tons/yr
= 53.45 tons/yr net decrease of ozone precursor emissions				
Effect to Reasonably Foreseeable Projects				
=54 tons/yr increase of ozone precursor emissions				
Net Impact				
53.45 tons/yr net decrease	–			54 tons/yr increase
= 0.55 tons/yr net increase of ozone precursor emissions[34]				

[32] The permit application containing preliminary emissions estimates for the Aera Energy East Cat Canyon project is on file with County of Santa Barbara Planning & Development - Energy and Mineral Division.
[33] The permit application containing preliminary emissions estimates for the PetroRock UCCB project is on file with County of Santa Barbara Planning & Development - Energy and Mineral Division.
[34] This is composed of a 9.89 tons/yr increase of NO_X emissions and 9.33 tons/yr decrease of ROC emissions.

Overall, the analysis shows that the proposed PTE-based calculation methodology and revised offset threshold will generate more mitigation than emissions growth to produce a 53.45 tons/yr net decrease in ozone precursor emissions. The analysis also shows that construction and operation of reasonably foreseeable projects in the District could result in 54 tons/yr of unmitigated emissions. **In sum, the net impact is that the District could see an increase in ozone precursor emissions of 0.55 tons/yr.**

The impacts of these project components (as discussed in Section 4.1.2.1 and 4.1.2.2), do not result in significant adverse air quality impacts. ***See Section 4.1.3 for the impact determination for the project as a whole.***

4.1.2.3. REVISING THE OFFSET TRADING RATIOS, CHANGING TO A SINGLE TRADING ZONE, AND ALLOWING INTER-DISTRICT TRADES

Current Rule:

The current offset program includes the following elements:

- A minimum offset trading ratio of 1.2:1 and up to to 6:1 depending on the distance between the source and the mitigation
- Three offset zones for determining offset trading ratios (South, North, Cuyama)

Proposed Rule:

The proposed revisions to the offsets program are contained in Section E of Rule 802 as well as Rule 804. The elements of the proposed revisions to the offsets program include:

- Offset trading ratios of 1.1:1 and 1.3:1
- A single offset zone for the County
- Allow for inter-District trades with Ventura and San Luis Obispo counties

Discussion:

The proposed offset trading ratios will be less stringent than current rules. As a general result of these changes, fewer ERCs may be required per project when compared to the current rules. However, the new ratios still require a net air quality benefit for new or modified projects that provide offsets. New and modified projects will continue to be offset at a ratio greater than 1.0, and emission reductions will continue to exceed the amount of new pollution generated, albeit at a reduced level.

The proposed single trading zone and allowance of inter-district trades will be less stringent than current rules. However, the change to the zones will enable companies more opportunities at securing Emission Reduction Credits (ERCs), especially South County stationary sources. A single offset zone will eliminate the fragmentation that the current 3-zone system creates. Trades with Ventura and San Luis Obispo counties must use a minimum trading ratio of 1.5:1. Because these potential trades would be subject to case-by-case analysis, trades may result in even higher trading ratios.

Performing ozone modeling on the impacts of the changes is not technically feasible as such modeling is not granular enough to look at the small emission quantities at hand, and it is not necessary in this case. Ozone is a regional pollutant; hence, the use of offset "zones" within the County is not considered necessary to ensure the effectiveness of mitigation. Additionally, San Luis Obispo and Ventura counties

are part of the same Central Coast Air Basin; hence, offsets located in those counties can be effective mitigation for regional pollutants such as ozone.

In addition, potential impacts to ambient air quality standards are addressed through the requirement to perform Air Quality Impact Analysis (AQIA) on projects with large increases of non-ozone criteria pollutants such as NO_2, CO, SO_2, $PM_{2.5}$ and PM_{10}. These AQIA's are performed when a permit application is evaluated via the ATC permit process. If the AQIA shows that the project will violate one of the non-ozone criteria pollutant ambient air quality standards, then the project's District permit is denied.

While the proposed offset ratios (viewed by themselves) would be less stringent than the current ratios, the proposed revisions will still result in a net air quality benefit, as a greater than one-to-one offset ratio is still required. Further, as discussed in Section 4.1.2.1, the proposed project will result in a larger number of sources being subject to the offset requirements. Taken together, the total mitigation secured under the proposed rules is expected to exceed the current rules even though the trading ratios and offset zones are changed.

Therefore, the impact of the revised offset ratio, zones, and trades—although not as beneficial as the current rules—would not result in potentially significant adverse air quality impact. ***See Section 4.1.3 for the impact determination for the project as a whole.***

4.1.2.4. ADDING AN OFFSET EXEMPTIONS FOR EQUIPMENT REPLACEMENTS.

Current Rule:

Due to the way the current permitting process works, there are a number of instances where projects to replace/modernize existing equipment required offsets. Typically, the potential emissions for a new project (which is required for permitting) is greater than the actual emissions baseline for the existing equipment being replaced (which is required for documenting emission reductions). Under the rules, offsets are required for this difference even if the new equipment is cleaner and actual emissions will be reduced, which is typically the case.

Proposed Rule:

The District is proposing a new offsets exemption to address this situation. Essentially, if the replacement project is functionally equivalent, uses Best Available Control Technology, does not increase the Potential to Emit and does not de-bottleneck a process, then offsets would not be required.

Discussion:

This exemption could result in an increase in emissions since offsets are no longer required for equipment replacements. However, in practice, existing equipment is replaced infrequently if offsets are required. We expect this change to result in more replacements of existing equipment. The proposed change should encourage the replacement of older equipment, and the modernization of sources with cleaner equipment. Since BACT will be required for the replacement equipment, the net result of this proposed exemption would result in less "actual" air emissions into the atmosphere.

This change is expected to have a beneficial impact on air quality. ***See Section 4.1.3 for the impact determination for the project as a whole.***

4.1.2.5. ADDING AN OFFSET EXEMPTION FOR EMERGENCY STANDBY GENERATORS/FLOOD/FIREWATER PUMPS.

Current Rule:

Up until 2005, emergency generators and flood and firewater pumps were exempt from District permits, and thus were not subject to NSR requirements such as offsets. These emergency engines are subject to the State Airborne Toxic Control Measures for diesel engines and have limits on the amount of time that they may be used for non-emergency use (typically less than 50 hours per year for new engines). During the rulemaking for removing the exemption, it was not the District's intent for new engines to trigger the offset thresholds. The District has found that some of the larger engines in this category exceed the daily offsets thresholds or may be located at sources that already exceed the offsets thresholds. The net result is that some facilities currently provide offsets for these devices and most do not.

Proposed Rule:

This proposal would exempt all new diesel emergency standby engines from offset requirements.

Discussion:

This exemption could result in an increase in emissions since offsets are no longer required for emergency standby generators/flood/firewater pumps engine installations. However, the emissions from these sources are not substantial.

Emergency standby engines have limits on the amount of time that they may be used for non-emergency use. Typically, engines are permitted to operate only about 20-50 hours per year for maintenance and testing. There are approximately 500 emergency standby engines in the County, with around 125 at large sources. If we consider the policy, the District expects around 6 emergency generators would require offsets per year under the new PTE thresholds.[35]

Even if the population of engines increased by 6 engines, the forgone offset amount due to the proposed exemption would only amount to 0.06 tons/yr of NOx per generator set.[36] This is a negligible increase in emissions overall.

Therefore, any emission increases that may result from this exemption would not result in a significant impact to air quality in the County. This impact is adverse but not expected to be significant. ***See Section 4.1.3 for the impact determination for the project as a whole.***

4.1.3. Impact Determination

As detailed in the preceding impact analysis, the project components will have varying expected impacts. Overall, as a result of the proposed PTE-based calculation methodology and revised offset thresholds, Santa Barbara County could see a 0.55 tons/yr increase in ozone precursor emissions. This potential emission increase under the proposed new source review rules is small enough that the effectiveness of the proposed new source review rules is found to be equivalent in protecting air quality as the current regulations. Therefore, the proposed project will not result in a significant adverse environmental impact.

[35] Typically, emergency generators have a 20-year lifespan, so 125 generators/20 years = 6 generators per year.
[36] Assumes the new engine is a 350 bhp, Tier 3, and operated for 50 hours/yr for maintenance & testing.

Do the proposed rules create significant unmitigated emission increases as compared to the current rules and practices?

As stated above, the proposed project is equivalent in protecting air quality as the current new source review rules. While the proposed rules could result in a small net increase in emissions, this increase is minor. Even if the proposed project was analyzed against the District's CEQA significance threshold for an individual project, the potential 0.55 tons/yr increase in ozone precursors does not exceed this project-level threshold. The proposed new source review rules are, of course, a district-wide project. The emissions increase also does not constitute a significant increase for all the reasons detailed in the discussion below regarding consistency with the 2001 and 2013 Clean Air Plan.

Also, as mentioned in Section 4.1.2, this analysis projects future behavior of stationary sources throughout the County based on trends in the past 17 years of District permitting history. Sources are affected by many factors including: economic conditions, overall growth in the County, land use requirements, availability of resources, and state and federal regulatory requirements. Variability in any of these factors in the future could influence sources' behavior, and cause different types of trends & projects in the future than what the District has historically experienced. Therefore, the potential impacts identified above are highly sensitive to the assumptions used in the analysis. Variability in assumptions, or factors outside the scope of this analysis, could strongly influence these results. If some of the potential growth in existing constrained sources identified in this analysis does not occur, or reasonably foreseeable projects do not come to fruition or their full estimated potential, then the potential net increase in ozone precursor emissions would not occur, or would show a net decrease in ozone precursor emissions.

Are the proposed rules consistent with District Board-adopted planning documents, primarily the 2001 Clean Air Plan and the 2013 Clean Air Plan?

The proposed project is consistent with a regulatory plan or program to address the cumulative air quality problem, the 2001 Clean Air Plan and 2013 Clean Air Plan. As described in Section 3.1.3, the 2001 Plan is the District's federal maintenance plan, while the 2013 Plan is the District's state attainment plan.

As mentioned in Section 4.1.1, air pollution impacts for ozone are primarily cumulative concerns. Here, air quality impacts are analyzed using the guidance provided in CEQA for cumulative impacts. A project's contribution to cumulative air quality concerns is not significant where the project will be consistent with a regulatory plan or program to address the cumulative air quality problem, such as air quality plans.[37] Here, the revisions to the District's NSR regulations comply with the District's 2001 and 2013 Clean Air Plans, the most recent federal and state air quality plans approved by the District. The State ozone standards are more protective of health than the Federal ozone standards and the District has attained the Federal standards but not the State standards. Under State law, the District is obligated to adopt additional strategies as part of its clean air plan that will bring the District into attainment for State ozone standards. The 2013 Clean Air Plan builds upon all of the maintenance strategies adopted as part of the 2001 Clean Air Plan and incorporates all feasible measures to achieve the more protective State standards. Because of this, if the proposed project is consistent with the 2013 Clean Air Plan, the proposed project will be consistent with the 2001 Clean Air Plan. Therefore, the discussion below will focus on consistency with the 2013 Clean Air Plan, as consistency with the state attainment plan ensures that the federal maintenance plan will not be jeopardized.

The 2013 Clean Air Plan was adopted specifically to address cumulative air quality concerns for ozone in Santa Barbara County. Many regulatory initiatives that are currently being undertaken by the District, Santa Barbara County Association of Governments (SBCAG), and the California Air Resources Board

[37] CEQA Guidelines, § 15064(h)(3).

(ARB) to address cumulative air quality concerns are summarized in the 2013 Clean Air Plan. All of these efforts combined are expected to have a cumulative beneficial impact on air quality by lowering ozone precursor emissions.

The District's 2013 Clean Air Plan establishes a path for Santa Barbara County to maintain attainment with the federal ozone standards and demonstrate reasonable further progress towards achieving the state ozone standards. The Clean Air Plan forecasts allowable emissions growth in the County that will not interfere with the County's efforts to achieve and maintain the federal and state health standards. The proposed NSR rule revisions are designed to ensure that new or modified stationary sources of air pollution will not cause violations of or interfere with the attainment of the air quality standards. Failure to do so would be inconsistent with the 2013 Clean Air Plan.

The NSR permitting program is a comprehensive regulatory program designed expressly to ensure there is not significant emissions growth from new and modified stationary sources of air pollution. The NSR program holds the line on growth from such sources and then through the implementation of control measures through prohibitory rules the District is able to reduce emissions from existing sources. With the NSR program holding the line on growth from new and modified sources, the Clean Air Plan focuses on the implementation of local emission control technologies on existing stationary sources, implementation of transportation control measures by the cities and the County, and ARB's regulation of motor vehicles and consumer products. Additionally, under SB 375, SBCAG has adopted a sustainable community strategy to encourage land use growth patterns that rely less on the automobile. The strategy relies on a balance between reductions in both of the pollutants that form ozone (ROC and NO_X) and on a fair apportionment of reductions between stationary and mobile sources of air pollution.

During the District Clean Air Plan update process, a detailed baseline year emissions inventory is prepared along with forecasts of emissions out to approximately 20 years in the future. The future emissions are compared to the baseline emissions to assess overall trends, and more specifically to evaluate future progress towards attainment of the State 8-hour ozone standard. The District Plan provides estimates of ozone precursor pollutants (ROC and NO_x emissions) over a wide variety of sources (e.g., on-road motor vehicles and other mobile sources, fuel combustion at industrial facilities, solvent, and surface coating usage, etc.). Future emission estimates incorporate local, state, and federal control strategies as well as forecasted growth specific to various sectors.

The 2013 Clean Air Plan projects that from 2008-2020, the District's ozone precursor emission inventory will decrease by 8.19 tons/day, and looking out on a longer time horizon, the Plan projects that from 2008-2030, ozone precursor emission will decrease by 19.15 tons/day (see Table 4-5 below).

TABLE 4-5: Emissions in Santa Barbara County from All Source Categories (tons per day)

	2008		2020		2030	
	NOx	ROC	NOx	ROC	NOx	ROC
TOTAL	71.70	32.33	68.08	27.76	55.09	29.79
TOTOL OZONE PRECURSORS	104.03		95.84		84.88	
PROJECTED REDUCTIONS FROM 2008-2020	8.19 tons/day					
PROJECTED REDUCTIONS FROM 2008-2030	19.15 tons/day					

Source: 2013 Clean Air Plan, Chapter 3, Table 3-3.

For specific source categories, consideration is given to the anticipated amount of growth in emissions over time, and the emissions growth is accounted for in the planning inventory. Generally, the amount of growth in emissions over time is supported by activity indicators (such as increases or decreases in housing or jobs) that are compiled from various information sources such as the SBCAG Regional Growth Forecast. Growth in source categories such a marine shipping, on-road mobile, stationary source, and area-wide sources is all accounted for in the emissions inventory. Even after accounting for this growth, the District's emission inventory is still on a downward trend toward achieving attainment of the state standards.

In sum, the Clean Air Plan assumes the following:

- An NSR rule is being implemented to mitigate pollution from new and modified sources of air pollution;
- Anticipated economic and population growth will not jeopardize the attainment demonstration; and
- Deviation from Plan assumptions that leads to a significant increase in emissions could undermine the attainment demonstration.

The proposed revisions could result in an increase of 0.55 tons/yr of ozone precursors. Therefore, the proposed NSR rules will achieve the same level of regulatory effectiveness as accomplished by the existing NSR rules and it will be accomplished much more simply and efficiently under the proposed NSR rules. The potential increase would have no appreciable effect on the substantial downward trend in Countywide ozone precursor emissions, and would not impair District progress towards attaining the State 8-hour ozone standard.

The impact analysis presented in this EIR demonstrates that the proposed project will not interfere with the District's demonstration of attainment of the state ozone standards, nor will it interfere with maintenance of the federal ozone standard as the proposed project will not result in a significant unmitigated growth of air pollution. Therefore, the proposed project is in compliance with—and consistent with—the District's 2001 Clean Air Plan and 2013 Clean Air Plan.

Summary:

In sum, the proposed revisions are part of a comprehensive regulatory effort by the District and other regulatory agencies to achieve net reductions in air pollution emissions, to reduce significant cumulative air quality concerns, and to ensure safe and healthy air quality for Santa Barbara County. Implementing our proposed revisions will continue to ensure that emissions from regulated sources will not make a cumulatively considerable contribution to ambient pollutant concentrations.

For all these reasons, the proposed revisions will not result in a significant cumulative air quality impact nor will they result in any cumulatively considerable contribution to any significant cumulative air quality impacts (Class III).

4.1.4. Mitigation Measures

As discussed above, no significant adverse air quality impacts would occur due to implementation of the proposed revisions to the District's rules and regulations. Therefore, there is no need for the District to implement mitigation measures to avoid any significant impacts or reduce them to a less than significant level. Mitigation measures are required only where there are significant adverse impacts to be mitigated (See CEQA Guidelines § 15126.4(a)(3)).

4.2. GREENHOUSE GASES

4.2.1. Significance Criteria

As is the case with general air quality impacts, greenhouse gas emissions are primarily a cumulative concern. Global climate change by its very nature is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases. The CEQA analysis considers whether the project's additional contribution is "cumulatively considerable." If so, then the project's impact is deemed significant.

The District revised its *Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District* in April, 2015 to include the following GHG significance threshold for the review of individual projects (SBCAPCD, 2015a).

A proposed stationary source project will not have a significant GHG impact, if operation of the project will:

- Emit less than the screening significance level of 10,000 metric tons per year (MT/yr) CO2e, or
- Show compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions (sources subject to the AB 32 Cap-and-Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms) would meet the criteria), or
- Show consistency with the AB 32 Scoping Plan GHG emission reduction goals by reducing project emissions 15.3% below Business As Usual (BAU).

The above stationary source GHG threshold is defined in terms of carbon dioxide equivalent (CO2e), a metric that accounts for the emissions from various GHGs based on their global warming potential. If annual emissions of GHGs exceed these threshold levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant adverse environmental impact.

Thresholds of significance are intended to supplement provisions in the State CEQA Guidelines, including Sections 15064, 15065, and 15382, for determining significant effects. Thresholds of significance provide general guidance for determining significant impacts, but are not ironclad definitions of significant impacts. Each project must be judged individually for its potential for significant impacts based on specific circumstances and evidence.

The proposed project (revisions to a permitting program) is not a specific stationary source development project that lends itself to analysis using analytical tools as a means of determining ambient pollutant concentrations or quantifying project-specific GHG emissions. Rather, the proposed "project" is a set of revisions to the District's permitting regulations, which govern the conduct of the continuing program responsible for managing air resources in Santa Barbara County. For this reason, the EIR is termed a "program" EIR and considers the broad policy implications of the proposed action.

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.*"

In addition, "*A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment: (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project. (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.*"

The quantification of specific emission increases associated with such broad revisions of the regulations is difficult, if not impossible, for many aspects of the proposed action. In particular, addressing GHG emissions under CEQA is still a fairly recent development in California. The District does not have data or other evidence in its permit files that quantify GHG growth over the last 17 years. The District has begun to quantify GHG emissions for new and modified larger projects over the last few years, but this data does not present an overall picture of GHG emissions from existing sources or how GHG emissions have grown under the existing NSR rules.

Therefore, the District finds it necessary that this EIR use the guidance provided in the CEQA Guidelines to determine significance of impacts and rely on a qualitative analysis of greenhouse gases to determine the extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting, and whether the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

4.2.2. Impact Analysis

To what extent might the project increase or reduce greenhouse gas emissions as compared to the existing environmental setting?

As discussed in Section 4.1.2, the proposed project could result in an increase of 0.55 tons/yr of ozone precursor emissions. A quantitative analysis of what this increase in ozone precursor emissions could equate to in terms of greenhouse gas (GHG) emissions is not feasible as there are simply too many unknown variables. For example, the permitted NO_X range can vary significantly depending on the type of units that get installed, which ultimately could modify the GHG numbers tenfold. If a very low- NO_X unit is installed, a much greater amount of fuel could be burned (and thus generate more GHGs) to yield the same amount of NO_X as a higher NO_X unit. Also, the NO_X or ROC emitting device/activity does not always result in a corresponding increase in GHG emissions, as the device/activity may not be increasing fuel usage or have any associated GHG emissions. For example, a project that involves increases in ozone precursor emissions only in the form of reactive organic compounds (ROCs) may not have any corresponding GHG increase.

However, since the majority of GHG emissions are a result of the combustion of fossil fuels, activities that increase fuel usage would result in an increase in GHG emissions. It is likely that most NO_X emission increases at new or modified sources are due to increases in fuel use, and therefore also result in increased GHG emissions (see Appendix C *Technical Memo on Analysis of Greenhouse Gas Emissions*).

Note that although Section 4.1.2 discusses potential emissions growth in terms of ozone precursors (NO_X + ROC), the analysis of the data has confirmed that the proposed rules also result in more NO_X emissions than the current rules (the NO_X component in the total net ozone precursors emissions increase is approximately 9.89 tons/yr).

Because NO_X emissions are expected to increase under the proposed rules compared to the current rules, the proposed project (proposed rule set) is expected to increase GHG emissions compared to the existing environmental setting (current rule set).

However, as discussed in Section 4.1.2, the analysis projects future behavior of stationary sources throughout the County based on trends in the past 17 years of District permitting history. Sources are affected by many factors including: economic conditions, overall growth in the County, land use requirements, availability of resources, and state and federal regulatory requirements. Variability in any of these factors in the future could influence sources' behavior, and cause different types of trends & projects in the future than what the District has historically experienced.

Hence, the identified potential NO_X emission increases are highly sensitive to the assumptions used in the analysis. Variability in assumptions, or factors outside the scope of this analysis, could strongly influence the results. If some of the potential growth in existing constrained sources identified in this analysis does not occur, or reasonably foreseeable projects do not come to fruition or their full estimated potential, then the potential net increase in NO_X emissions could be diminished substantially, or results could show a net decrease in NO_X emissions.

In addition, as required for Program EIR's by the CEQA Guidelines Section 15168: "*Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.*" Therefore, individual projects will be evaluated and undergo project-specific CEQA review if necessary to ensure impacts are not significant or mitigated to a level of insignificance.

Going forward, GHG emissions from new and modified projects will be reviewed for compliance with adopted CEQA thresholds of permitting agencies. Where the District is lead agency under CEQA, it will determine if a proposed project exceeds or complies with the CEQA thresholds of significance adopted by the District Board in 2015. Any proposed project that exceeds the District's thresholds must reduce its emissions to below the threshold or provide GHG mitigation to reduce impacts.

Normally, the District is not the lead agency for purposes of CEQA. Indeed, in Santa Barbara County, the cities or the County are the CEQA lead agency for large projects as they are the land use authority. For any proposed new or modified project located in the unincorporated area of the County, the County would apply its CEQA GHG threshold of significance, which is 1,000 metric tons per year (MT/yr) CO_2e (County of Santa Barbara, 2015).

Therefore, even though the qualitative analysis indicates that the project may increase greenhouse gas emissions as compared to the existing environmental setting, this increase is not expected to result in a cumulatively considerable increase.

Does the project comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions?

Existing and new stationary sources in the District are operating, and will continue to operate, within an overall regulatory environment that has and will continue to regulate and reduce GHG emissions in the state. The State of California has many programs designed to reduce fuel use from the industrial sector, specifically the Global Warming Solutions Act of 2006, or Assembly Bill (AB) 32 and its Cap-and-Trade program. The core mandate of AB 32 is that statewide GHG emissions in Year 2020 be equal to Year 1990 levels. Cap-and-Trade establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHGs. Beginning in the second Cap-and-Trade

compliance period (January 1, 2015 through December 31, 2017) all distributers of transportation fuels, natural gas, and other fuels are subject to the program requirements. AB 32 is anticipated to secure emission reductions through a variety of mechanisms, such as increasing energy efficiency and introducing more renewable energy sources. Reductions in GHG emissions will come from virtually all sectors of the economy and will be accomplished from a combination of policies, planning, direct regulations, market approaches, incentives and voluntary efforts.

Many of the GHG reduction measures identified in the AB 32 Scoping Plan relate to stationary sources of air pollution, directly and indirectly – for example, measures pertaining to energy use and efficiency, requirements for landfills, motor vehicle emissions standards, measures pertaining to waste reduction and water conservation, standards for the carbon content of fuels, measures specific to high global warming potential pollutants – however, the AB 32 programs that relate most directly to stationary sources of air pollution are the Mandatory Reporting Regulation (Title 17, California Code of Regulations (CCR), sections 95100-95157) and the Cap and Trade Program (Title 17, California Code of Regulations (CCR), sections 95801-96022).

The proposed NSR rule revisions are changes to an existing regulatory scheme, and are not expected to interfere with the State's plans to reduce GHG emissions through the many programs described above. Therefore, the proposed project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

4.2.3. Impact Determination

The proposed NSR rule revisions' incremental contribution to the cumulative effect of global climate change is not cumulatively considerable and would not have a significant impact on the environment (Class III).

4.2.4. Mitigation Measures

As discussed above, no significant adverse greenhouse gas impacts are expected due to implementation of the proposed NSR rule revisions. Therefore, there is no need for the District to implement mitigation measures in connection with the proposed revisions in order to avoid any significant impacts or reduce them to a less than significant level. Mitigation measures are required only where there are significant adverse impacts to be mitigated (See CEQA Guidelines § 15126.4(a)(3)).

4.3. CONCLUSION

In sum, the EIR's analysis has found that the proposed amendments to Regulation VIII, and other associated rules, will not result in any significant unavoidable adverse environmental impacts (Class I) or potentially significant adverse environmental impacts (Class II). All potential adverse impacts were determined to be insignificant adverse environmental impacts (Class III).[38]

The EIR has evaluated the potential for the proposed revisions to have adverse impacts in connection with revising District regulations, and has concluded based on all available evidence that there will be no such significant adverse impacts.

[38] As stated in Section 4.1.3 and Section 4.2.2 above, slight changes to the assumptions of the analysis could lower the emissions profile of the sources analyzed and result in Class IV impacts to Air Quality and Greenhouse Gases.

5. CUMULATIVE IMPACTS

CEQA Guidelines section 15130(a) requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Cumulative impacts are impacts that are created as the result of the combination of the project being evaluated (the proposed NSR rule revisions here) and other projects causing related impacts.

CEQA defines cumulative impacts as "*two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts…The cumulative impacts 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 probable future projects…*"[39]

As discussed in Section 4.1 (Air Quality) and Section 4.2 (Greenhouse Gases) air pollution and climate change are primarily cumulative concerns. That is, they are not caused by a single source of emissions, they are caused by the cumulative effect of many individual sources around the region combining together to create a cumulative problem. The discussion of air quality impacts in Section 4.1 is therefore both a project-specific air quality impact analysis and a cumulative impact analysis. Likewise, the discussion of greenhouse gas emission impacts in Section 4.2 is therefore both a project-specific greenhouse gas impact analysis and a cumulative impact analysis.

As stated above, CEQA requires the evaluation of closely related past, present, and reasonably foreseeable probable future projects. By performing the analysis described in Chapter 4, the District has evaluated the impact of past, present, and reasonably foreseeable projects.

Past Projects

The analysis has considered the emissions of past projects. To conduct the impact analysis, the past 17 years of permitting data was used to evaluate the impact of the proposed rule revisions in the future. The trends and behavior in past projects were the basis for the assumptions of the analysis.

Current Projects

The analysis has considered the emissions of current projects, and the potential impact on current projects. Using the data and trends from the past 17 years of permitting data, the analysis evaluated the potential unmitigated emissions increase that could occur if a source under the proposed offset threshold and near the current offset threshold undertook a modification.

Future Projects

The analysis has accounted for the emissions increases from the expected amount of new sources in the County. As described in Section 4.1.2, based on evaluation of past trends in its permitting history, the District has seen three new medium sources over the past 17 years. None of these sources were subject to offsets under the current rules, and they would not be subject to offsets under the proposed rules. Therefore, this project would have no impact on the types of new sources the District has historically seen.

[39] CEQA Guidelines, §15355.

The analysis in Section 4.1.2 has also accounted for potential unmitigated emission increases from reasonably foreseeable projects in the County. Even accounting for major pending projects, the proposed project only results in an increase of 0.55 tons/yr of ozone precursors. As stated in Section 4.1.3 and Section 4.2.3, this increase does not result in a significant adverse impact.

In sum, the EIR has adequately considered possible cumulative impacts due to the proposed project and other past, present and reasonably foreseeable probable future projects. In particular, the EIR has considered the interplay of the impacts that may be caused by the new PTE-based calculations and new offset thresholds, zones, and trading ratios. The analysis demonstrating that the proposed revisions will not have a significant impact on air quality or greenhouse gases supports both the conclusion that the revisions by themselves will not have a significant impact, and also the conclusion that the proposed revisions will not make a cumulatively considerable contribution to the cumulative air quality challenges facing Santa Barbara County.[40]

[40] CEQA Guidelines, §15064(h)(1).

6. ALTERNATIVES TO THE PROPOSED PROJECT

CEQA requires that an EIR evaluate a range of reasonable alternatives to the proposed action which could feasibly attain most of the basic objectives of the proposed project and evaluate the comparative merits of the alternatives. The alternatives analysis must also include the "no project" alternative. With the exception of the "no project" alternative, the alternatives considered should be those that would feasibly attain most of the project objectives but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.[41]

The key issue in determining the range of alternatives is whether the selection and discussion of alternatives produces informed decision making and meaningful public participation. The EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. A feasible alternative is one that can be "accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."[42]

The environmental effects of the following three alternatives have been assessed in this EIR and considered in determining the environmentally superior alternative, as required by CEQA.

6.1. ALTERNATIVE 1 - NO PROJECT ALTERNATIVE

The "no project" alternative analysis is required by CEQA and would indicate the results of not implementing any change to the current Regulation VIII and other associated rules. This approach is consistent with CEQA Guidelines §15126.6 (e)(3)(A), which states: "*When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.*"

The "No Project" Alternative would not address any changes to the District rules, including those revisions mandated by federal law and those that would result in air quality benefits, such as replacement of existing equipment with newer, cleaner equipment. Because the "No Project" Alternative would not address the revisions mandated by federal law, this alternative is not considered to be a feasible option taking into account the "economic, legal, social, and technological factors" discussed above. In addition, this alternative would not address any of the objectives of the project.

6.2. ALTERNATIVE 2 - PROPOSED PROJECT WITH OFFSET THRESHOLD SET AT 10 TONS PER YEAR

This alternative is similar to the proposed action, but with more restrictive offset thresholds. In this alternative, any source (new or existing) with a PTE over 10 tons/yr would be required to offset all emission increases down to the 10 tons/yr threshold, instead of 25 tons/yr. Also, any source (new or existing) with a PTE over 55 lbs/day would be required to offset the entire project PTE at this lower threshold instead of the 240 lbs/day PTE threshold. Overall, the proposed change for Alternative 2 is

[41] CEQA Guidelines, §15126.6.
[42] CEQA Statute, §21061.1.

much more stringent than both the existing rules and the proposed rules. Many more existing small and medium sources would be subject to the offset requirements. This alternative could result in more offset mitigation, and therefore less adverse impact, than the proposed project since more sources would be required to mitigate their emissions.

This alternative would go beyond what the State requires, since the Health and Safety Code section 40918(a) requires a district's NSR program to not allow a net increase in nonattainment pollution from any source with a PTE over 25 tons/yr. This alternative would require certain small and all medium and large sources to offset their emission increases. This increase in mitigation is not necessary to remain consistent with the 2001 Clean Air Plan or the 2013 Clean Air Plan.

Additionally, the effects of this alternative are also contrary to many of the key objectives of the proposed project including providing more flexibility and simplicity in the NSR permitting process, and addressing scarcity of Emission Reduction Credits. Subjecting more sources to requirement offsets will result in a permitting program that is complicated and difficult to implement. Due to the lack of available offsets, growth of the small and medium size sources would continue to be constrained, and even more so. The proposed project seeks to shift the burden of providing offsets from small and medium sources, to large sources who are better positioned to procure and/or create offsets.

6.3. ALTERNATIVE 3 - PROPOSED PROJECT WITH OFFSETS REQUIRED FOR ENTIRE PROJECT PTE

This alternative is more restrictive to new sources and to existing sources that grow beyond the annual offset threshold for the first time since it requires sources to provide offsets for the entire project PTE versus just the PTE that is above 25 tons/yr (the offset threshold). There is no impact to sources that trigger the daily 240 lbs/day threshold, as these sources are already required to offset the entire project PTE. This alternative would affect new sources the most, as they would be required to mitigate 25 additional tons for their project (anything above 25 tons is covered by the proposed rule). Historically, the District has not seen many new large projects of this size, so the overall programmatic impact is likely small. This alternative will more likely impact existing sources whose PTE grows above 25 tons/yr. Instead of offsetting the emissions above the 25 tons/yr threshold, these source would need to offset the entire project PTE that puts them over the threshold. Small and medium size sources would still be relieved of the offset burden, and more mitigation could be gained from this alternative than from the proposed project. Therefore, this alternative could result in less adverse impact than the proposed project.

This alternative moves away from the project goal of simplifying the NSR program and making the NSR permit process more predictable for sources for their future planning. Under this alternative, projects could have the same impact but see different offset obligations. For example, an applicant could first permit a 10 tons/yr project with the District and no offsets would be required, then the applicant, a few years later, could permit an additional 20 tons/yr increase. Their offset obligation would be 20 tons/yr. Conversely, a different applicant could first permit a 20 tons/yr project with the District and no offsets would be required, then the applicant, a few years later, could permit an additional 10 tons/yr increase. Their offset obligation would be 10 tons/yr. Both projects have a total impact of 30 tons/yr, but one must provide twice the mitigation that the other provides. This alternative would incentivize manipulating the process, and piece-mealing projects to avoid the offset threshold or lower their offset obligation.

This alternative would create a "path dependent" rule set. Whereas, the proposed project is designed to be "path independent", meaning that proposed projects have the same offset obligation no matter what order they occur in. Under the proposed project, the example projects described above would both have an offset obligation of 5 typ. There is no incentive to manipulate the system and piece-meal their projects.

This alternative re-introduces complexity and unpredictability to the NSR permitting process. These effects are contrary to a key objective of the project which is to provide simplicity, predictability, and fairness in the implementation of the NSR program.

6.4. ENVIRONMENTALLY SUPERIOR PROJECT

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." The following is a discussion of which of the project alternatives the District considers to be the "Environmentally Superior" alternative.

Of Alternatives 1-3, Alternative 2 is the environmentally superior alternative. Alternative 2 would avoid much of the potential growth in emissions from existing constrained sources by requiring offsets for PTE increases above 10 tons/yr, and would retain the requirement of subjecting more existing large sources to offset requirements with the switch from an NEI to PTE-based methodology. Therefore, Alternative 2 would result more mitigation than will be achieved under the proposed project and the greatest environmental benefit.

As stated above, Alternative 2 cannot accomplish many of the basic objectives of the project. In addition, it should be noted that ability to achieve the potential mitigation benefit that could be derived from the structure of the proposed NSR program in Alternative 2 is highly questionable. It is quite likely that the multitude of small and medium sources that would be subject to offset requirements under Alternative 2 would be unable to procure the offsets that would be required, as small and medium sources do not have the same ability to create ERCs at their facility and/or the financial resources to purchase ERCs that large stationary sources possess. It is for this reason, that the proposed project is designed to move the burden of obtaining offsets to large sources who are better positioned to create and obtain ERCs.

6.5. ALTERNATIVE 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…*"

RETAINING NEI-BASED CALCULATION AND REVISING THE OFFSET THRESHOLD TO 25 TONS PER YEAR

This alternative was considered but rejected as infeasible, since the California Air Resources Board (ARB) would consider this a relaxation of the District's rules and would be inconsistent with the requirement set forth in SB 288. Therefore, it is legally infeasible.

6.6. CONCLUSION

Of the three alternatives considered, Alternative 2 may generate the greatest environmental benefit compared to the proposed project. Alternative 2, which retains the offset threshold at 10 tons/yr while moving to a PTE-based offset calculation methodology, could increase the amount of mitigation provided by sources over the offset threshold, but it will continue to inhibit modifications to the County's small and medium size sources due to the offset trigger level. Therefore, of the project alternatives, Alternative 2 would achieve the fewest of the project objectives.

Alternative 1, the "No Project" alternative, is not a viable option, since it does not address the minimum mandates of Federal law and does not address any of the objectives of the project.

Alternative 3, which requires new sources and existing sources to offset their project PTE increases below the 25 tons/yr threshold, would continue to constrain sources from pursuing modification and re-introduces complexity and less predictability to the NSR permitting process.

The proposed project is considered to be the most efficient means of attaining the basic objectives of the California and Federal Clean Air Act, with little or no related environmental impacts. The proposed project represents a balance of changes to the NSR Regulations that will address many of the implementation issues that currently exist. As discussed in Chapter 4.0, *Environmental Consequences and Mitigation Measures*, no significant impacts were identified for the proposed project that required mitigation. **Thus, the proposed project is the preferred project.**

TABLE 6-1: Alternatives Impact Comparison

Topic	Project	Alt 1 (No Project)	Alternative 2	Alternative 3
Air Quality	LTS	LTS	LTS	LTS
Greenhouse Gases	LTS	LTS	LTS	LTS

Note: LTS=Less than Significant

7. OTHER CEQA TOPICS

Chapter 7 includes the CEQA topics: Growth-Inducing Impacts, Significant Environmental Effects which Cannot be Avoided, Significant Irreversible Environmental Changes, Economic and Social Effects, Energy Effects, and Environmental Effects Not Found to be Significant.

7.1. GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

The CEQA Guidelines §15126.2(d) require a discussion of a project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment, including, among others, ways in which a project could remove an obstacle to growth.

None of the proposed amendment to the District's NSR Program include incentives that would directly increase or expand growth of residential, commercial or industrial land uses in Santa Barbara County. Adoption of the proposed revisions will not require additional public infrastructure facilities, such as roads or wastewater disposal facilities, which would facilitate additional growth in Santa Barbara County.

The proposed project has the potential to have indirect growth inducing effects in the County. This may be attributed to the relaxation of offset triggers and new permit exemptions. These revisions are likely to make it easier for some sources to locate or expand their operations in the County. This potential for growth in some existing and new sources has been evaluated in Chapter 4 of this EIR, and is incorporated herein by reference.

7.2. SIGNIFICANT EFFECTS WHICH CANNOT BE AVAOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. As evaluated in the preceding portions of Chapter 4 of this EIR, the proposed revisions are not expected to result in any significant or unavoidable impacts.

7.3. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

Section 15126.2(c) of the CEQA Guidelines requires a discussion of "significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of nonrenewable resources during the initial and continued phases of a project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (e.g. a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." The proposed revisions will not result in physical development and land use changes, therefore the project has no potential to result in these irreversible changes (changes in land use that commit future generations; irreversible damage from environmental accidents; and large commitment of nonrenewable resources).

7.4. 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 revisions to the District's NSR Program, some level of economic impact will be realized by the industries that are regulated under the rules. Chapter 2 of this EIR provides a more in-depth discussion of the proposed rule revisions and the types of facilities affected by the revisions. No significant environmental impacts were identified, and economic and social considerations were not necessary to support a finding of significant impacts.

7.5. ENERGY EFFECTS

The CEQA Guidelines Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy. The proposed project does not involve the consumption of energy since the project does not propose any new physical development, construction of structures, or new land uses.

7.6. ENVIRONMENTAL EFFECTS NOT FOUND TO BE SIGNIFICANT

The environmental effects of the proposed revisions are identified and discussed in detail in the preceding portions of Chapter 4 of this EIR per the requirements of the CEQA Guidelines (§15128). The following topics of analysis in this EIR were found to have no potentially significant adverse effects:

Air Quality
Greenhouse Gases

The District conducted an initial analysis of the proposed project's impacts. Through the initial analysis and Notice of Preparation process, the District determined that there was no substantial evidence that the project would cause or otherwise result in significant environmental effects in the resource areas listed below. No further environmental review of these issues is necessary for the reasons summarized in the following discussion.

The proposed project involves revisions to the District's permitting program for stationary sources. The proposed revisions to the District's NSR Program will not result in a physical change to the environment. The proposed project does not involve any new physical development, construction of structures, earth moving activities such as grading, or use of resources. Therefore, impacts to the following issue areas of analysis were found to be insignificant:

Aesthetics
Agriculture and Forestry Resources
Biological Resources
Cultural Resources

Geology and Soils
Hazards and Hazardous Materials
Hydrology and Water Quality
Land Use and Planning
Mineral Resources
Noise
Population and Housing
Public Services
Recreation
Transportation/Traffic
Utilities and Service Systems

Therefore, no potentially significant adverse impacts were identified for the implementation of the proposed revisions.

THIS PAGE INTENTIONALLY LEFT BLANK

8. REFERENCES

California Air Resources Board (ARB), 2015. California Greenhouse Gas Emissions for 2000 to 2013– Trends of Emissions and Other Indicators. California GHG Emission Inventory. 2015 Edition. www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_trends_00-13%20_10sep2015.pdf.

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.

County of Santa Barbara, 2015. Environmental Thresholds and Guidelines Manual. Adopted October 2008. Amended July 2015.

Health and Safety Code, Division 26, Air Resources, State of California.

National Bureau of Economic Research (NBER), 2016. US Business Cycle Expansions and Contractions. Webpage accessed January 26, 2016. www.nber.org/cycles.html.

SBCAPCD, 2015a. Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District. Adopted October 1995. Revised April 2015.

SBCAPCD, 2015b. Santa Barbara County Air Pollution Control District. Final 2013 Clean Air Plan: Santa Barbara County's Plan to Attain the State Ozone Standards. March 2015.

SBCAPCD, 2015c. Proposed Staff Report Proposed Rule Changes to: Rule 102. Definitions, Rule 105. Applicability, Rule 202. Exemptions to Rule 201, Rule 204. Applications, Regulation VIII. New Source Review, Rule 1301. Part 70 Operating Permits – General Information (NSR Staff Report). Published November 10, 2015.

SBCAPCD, 2002. Santa Barbara County Air Pollution Control District. 2001 Clean Air Plan: Santa Barbara County's Plan to Maintain the Federal 1-hour Ozone Standard and Attain the State 1-hour Ozone Standard, Final Report. December 2002.

SBCAPCD, 1991. Santa Barbara County Air Pollution Control District. 1991 Air Quality Attainment Plan, State Ozone Standard, Countywide, Final Report. December 1991.

United States Environmental Protection Agency (EPA), 2016. DRAFT Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014. February 22, 2016. https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf. Retrieved from https://www3.epa.gov/climatechange/ghgemissions/usinventoryreport.html.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A

Source Mitigation/Growth Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A1:

MITIGATION GAINED FROM EXISTING LARGE SOURCES

Current Regulation VIII *(from 2014 No Net Emissions Report: rev 7/24/14)*

	NOx	ROC	NOx + ROC
		(tons per year)	
Total Mitigation	**206.74**	**194.28**	**401.02**
ERCs Used	172.14	97.52	269.67
Shutdown/Redn TP Discounts	16.62	26.91	43.53
Decrease - NEI "D" Term	17.98	69.85	87.83

Proposed Rule Revisions

	NOx	ROC	NOx + ROC
		(tons per year)	
Total Mitigation	**187.43**	**307.39**	**494.83**
ERCs Required	170.81	280.48	451.30
Shutdown/Redn TP Discounts	16.62	26.91	43.53

Notes:

(a) Calculations based on all permiting actions since April 1997.

(b) ERCs used based on ERC Transaction table.

(c) Shutdowns/Reductions in throughput discounts per DOI documents.

(d) "D" term decreases based on actual emission reductions calculated per permitting actions. Only includes "D" terms from sources at 25 tpy PTE or greater.

(The same table is shown as Table 3-2 and Table A-1 in the NSR Staff Report.)

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A2:

NEW SOURCES SINCE 1997 OPERATING IN THE DISTRICT

Stationary Source Name	NOx PTE	ROC PTE	Type	NOx NEI	ROC NEI	Year SS Created
SMV South	6.38	9.56	Medium	6.38	9.56	**2012**
Careaga LA #2	4.34	7.75	Medium	4.34	7.75	**2008**
SMV North	7.79	7.49	Medium	7.79	7.49	**2012**

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A3:

UNMITIGATED GROWTH FROM EXISTING SOURCES WITH ANNUAL NEI WITHIN 25% OF THE OFFSET THRESHOLD

(See Appendix B – Assumptions for Table A3 for detailed notes on growth assumptions for each source)

							Growth Potential (tons/yr)	
SSID	**Company Name**	**Stationary Source Name**	**NOx**	**ROC**	**Potential to grow?**	**Notes**	**NOx**	**ROC**
10834	Central Coast Wine Services	Central Coast Wine Services		x	Yes	Increase in production expected.	--	1.95
08713	City of Santa Maria	City of Santa Maria Landfill	x	x	No	No further build out is expected.	0.00	0.00
03707	County of Santa Barbara	County of SB - Tajiguas Landfill	x	x	No	No further buildout is expected.	0.00	0.00
01636	Gold Coast Collision	Gold Coast Collision - Broadway		x	No	No further build out is expected.	--	0.00
11143	Golden Gate Oil, LLC.	SMV North	x	x	Yes	Minor mods expected.	1.17	1.12
08766	Golden Gate Oil, LLC.	SMV South		x	No	Facility closed.	--	0.00
02680	Greka Oil & Gas	Gato Ridge	x	x	Yes	Minor mods expected	1.50	0.99
01793	Marian Medical Center	Marian Medical Center	x		No	No further build out is expected.	0.00	0.00
08745	National Auto Body & Paint	National Auto Body & Paint		x	No	No further build out is expected.	--	0.00
04621	NuSil Technology	NuSil Technology		x	Yes	Minor mods expected.	--	3.24
01517	Santa Maria Energy	Santa Maria Energy - Orcutt Field	x	x	Yes	Minor mods expected.	0.92	3.29
10746	Terravant Wine Company	Terravant Wine Company		x	Yes	Increase in production expected.	--	1.95
05009	Venoco	Careaga #1	x	x	Yes	Minor mods expected.	1.33	1.64
10222	Venoco	Careaga LA #2	x	x	Yes	Minor mods expected.	0.65	1.16
							5.58	15.34
							20.92	

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A4:

UNMITIGATED GROWTH FROM EXISTING SOURCES WITH DAILY NEI WITHIN 25% OF THE OFFSET THRESHOLD

(See Appendix B – Assumptions for Table A4 for detailed notes on growth assumptions for each source)

							Growth Potential (lb/day)		Growth Potential (tons/yr)	
SSID	**Company Name**	**Stationary Source Name**	**NOx**	**ROC**	**Potential to grow?**	**Notes**	**NOx**	**ROC**	**NOx**	**ROC**
01012	Art-Craft Paint	Art-Craft Paint, Incorporated		x	No	No further build out is expected.	--	0.00	--	0.00
09833	Bacara Resort & Spa	Bacara Resort & Spa	x		No	No further build out is expected.	0.00	--	0.00	--
10845	Byron Vineyard & Winery	Byron Vineyard & Winery		x	No	Part of larger source (offsets).	--	--	--	--
03867	C&D Zodiac, Inc	C&D Zodiac, Inc. - 2641 Airpark Drive		x	Yes	Minor mods expected	--	24.90	--	3.24
10209	CalPortland Construction	CalPortland Construct-1625 E. Donovan		x	No	No further build out is expected.	--	0.00	--	0.00
11048	County of Santa Barbara	SB County Public Works	x		No	No further build out is expected.	0.00	--	0.00	--
10865	Dierberg Vineyard	Dierberg Vineyard		x	No	No further build out is expected.	0.00	0.00	0.00	0.00
10364	Envent	Envent - Degassing		x	No	No further build out is expected.	--	0.00	--	0.00
10600	Firestone Vineyard	Firestone Vineyard		x	No	No further build out is expected.	--	0.00	--	0.00
01536	Granite	Granite - Buellton	x		No	No further build out is expected.	0.00	--	0.00	--
04487	Freudenberg Medical	Freudenberg Medical		x	Yes	Minor mods expected	--	24.90	--	3.24
09654	Indigo Systems Corporation	Indigo Systems Corporation		x	No	Facility closed.	--	--	--	--
10708	Innovative Micro Technology, Inc. (IMT)	Innovative Micro Technology, Inc. (IMT)		x	Yes	Minor mods expected	--	24.90	--	3.24
01794	L-3/MariPro	L-3/MariPro	x		No	No further build out is expected.	0.00	--	0.00	--
10309	Lash Construction	Lash Const. (5 S. Calle Cesar Chavez)	x		No	No further build out is expected.	0.00	--	0.00	--
04635	Medtronic	Medtronic		x	Yes	Minor mods expected	--	24.90	--	3.24
09133	Precision Auto Body	Precision Auto Body & Painting-Magnolia		x	No	No further build out is expected.	--	0.00	--	0.00

01958	Precision Auto Body	Precision Auto Body & Painting-S. Fairview		x	No	No further build out is expected.	--	0.00	--	0.00
01963	Prestigious Auto Body & Painting	Prestigious Auto Body & Painting		x	No	No further build out is expected.	--	0.00	--	0.00
02035	Raytheon	Raytheon-Bldgs B1,2 & 3 (Infrared)		x	Yes	Minor mods expected	--	24.90	--	3.24
03640	Trisep Corp.	Trisep Corp.		x	Yes	Minor mods expected	--	24.90	--	3.24
11133	Tristar Petroserv	Tristar Petroserv - Degassing		x	No	Source no longer exists	--	0.00	--	0.00
02784	United States Navy	United States Navy - Santa Cruz Island	x		No	No further build out is expected.	0.00	--	0.00	--
									0.00	19.44
									19.44	

APPENDIX B

Source Mitigation/Growth Assumptions

THIS PAGE INTENTIONALLY LEFT BLANK

ASSUMPTIONS FOR TABLE A1

The following tables have been taken from the NSR Staff Report.
Table numbering shown below is that of the NSR Staff Report not this EIR and its appendices.

TABLE A-2 2/13/2015

STATIONARY SOURCES with OZONE PRECURSORS at 25 TPY and Greater

NEI ACTIVITY SINCE 1997

SSID	Company Name	Stationary Source Name	Current Potential to Emit (tons per year)		Increases Since 1997 I or P1 Terms (tons per year)		Decreases Since 1997 D Terms (tons per year)		Decreases Since 1997 P2 Terms (for post '97 P1) (tons per year)	
			NOx	ROC	NOx	ROC	NOx	ROC	NOx	ROC
4421	CalPortland Construction	CalPortland - Hot Mix Asphalt Plant	33.53	5.71	0.03	0.02				
8713	City of Santa Maria/J&A Santa Maria II	Santa Maria Regional Landfill	13.95	89.60	9.49	7.59				
3707	County of SB/Fortistar	County of SB-Tajiguas Landfill	36.41	69.37	-	-				
8003	DCOR	Dos Cuadras - South County	143.72	183.16	0.80	7.30		0.01		
8012	DCOR	Platform Habitat	63.19	23.36	2.84	0.53				
1073	E & B Natural Resources	E & B - South Cuyama	59.28	171.64	0.76	12.59		0.34		3.27
4639	E & B Natural Resources	Russell Ranch Lease	34.08	34.95	-	0.68		0.12		
2560	ERG Resources	ERG Resources - Cat Canyon West	22.40	139.02	13.56	16.86			2.61	4.82
11136	ERG Resources	ERG Resources - Cat Canyon East	66.48	25.64	7.04	3.86				
1482	ExxonMobil Production	ExxonMobil - SYU Project	634.56	317.74	4.22	22.46				
4632	Freeport-McMoRan Oil and Gas	Pt. Pedernales/Lompoc Oil Fields	115.44	205.64	5.37	17.90	0.09	0.46		0.09
1325	Freeport-McMoRan Oil and Gas	The Point Arguello Project	806.54	275.04	0.12	8.48				
4630	Greka Oil and Gas	Casmalia	140.45	17.06	13.32	3.57				
2200	Greka Oil and Gas	Clark Avenue Source	42.95	97.98	3.69	1.00			3.69	0.35
10910	Greka Oil and Gas	Greka North Cat Canyon	64.09	93.04	0.98	6.15				
2658	Greka Oil and Gas	Greka South Cat Canyon	264.37	73.84	5.46	9.49	13.74	44.91	3.46	3.53
8678	Greka Oil and Gas	Los Flores	13.39	35.83	4.21	0.92				
8702	Greka Oil and Gas	Zaca Field	13.39	35.83	-	7.35				
1735	Imerys Minerals California, Inc.	Imerys Minerals California, Inc.	3,780.00	667.00	14.34	12.17	3.76	0.88	13.78	3.82
2667	Pacific Coast Energy Company	Pacific Coast Energy Company- Orcutt Hill	437.66	185.41	21.82	26.87		0.63	10.45	8.69
8001	Pacific Offshore Operators Inc.	Pacific Operators - Carpinteria	164.03	35.36	9.94	5.06	-	0.46		
2638	Purisima Hills LLC	Purisima Hills LLC - Blair Lease	30.03	42.34	3.65	5.52				0.16
4640	Greka Refining Company	SMRC/Union Sugar	83.39	40.73	8.32	9.78		0.21		
5019	Southern California Gas Company	So Cal Gas - La Goleta	98.99	295.37	2.40	15.10	0.20	14.17		
4900	The Okonite Company	The Okonite Company	4.00	31.77	2.75	23.19		7.50	0.97	1.81
1195	United States Air Force	Vandenberg Air Force Base	59.67	24.30	9.13	6.16				
2795	University of California	UCSB	74.18	5.75	6.85	1.13			0.74	0.12
27	Venoco	Venoco - Carpinteria	59.12	83.32	0.47	0.98				
1063	Venoco	Venoco - Ellwood	191.94	127.89	20.06	11.22	0.19	0.11	14.66	2.97
10912	Vintage Production California	Vintage Central Cat Canyon	45.53	70.86	-	-		0.05		
1021	Wellhead Power Central Coast	Wellhead Power Central Coast	25.62	1.73	-	-				
		PERMITTED GROWTH =			141.60	232.52	17.98	69.85	46.78	29.51
						374.13				

(1) Increases and decreases are from April 17, 1997
(2) Unless otherwise noted, use final permits issued before May 2, 2014.
(3) I, P1 and P2 terms summed only for sources with PTE over 25 tpy for the pollutant in question.

\\sbcapcd.org\shares\Groups\rule\Rule Revision\Regulation VIII - NSR\Reg VIII (2015)\Draft-Proposed-Final Staff Report\[NOx and ROC Offset Tables (3-2, Att A).xlsx]A-1 Offset Program Comparision

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A-3 2/13/2015

ERCs USED

CURRENT RULES

Company	tons			
	Quarterly		Annual	
	NOx	ROC	NOx	ROC
Arguello, Inc.	0.18	0.54	0.71	2.18
Boeing	2.82	1.19	11.28	4.75
Breitburn Energy	3.25	0.66	12.99	2.62
Chevron USA Prodn	-	0.37	-	1.48
Dos Cuadras Offshore Resources	-	0.01	-	0.02
ERG Resources Company	8.87	5.37	35.49	21.46
Exxon Company USA	-	0.18	-	0.72
ExxonMobil	1.89	3.24	7.58	12.97
Freeport-McMoRan Oil & Gas	-	1.03	-	4.10
Lockheed Martin Corporation	-	0.04	-	0.15
Nuevo Energy	0.01	0.18	0.04	0.72
Pacific Coast Energy Company	3.65	0.17	14.58	0.70
Plains Exploration and Production	1.19	2.44	4.77	9.78
POPCO	0.95	3.51	3.80	14.04
The Okonite Company	5.14		20.56	-
The Pt. Arguello Companies	3.46	0.31	13.84	1.23
ULA - Delta IV	0.20	0.78	0.79	3.11
US Air Force	11.43	4.38	45.71	17.51
Total ERCs Used Current Rules =			**172.14**	**97.52**
		Total NOx + ROC =		**269.67**

Notes:
(1) Data from ERC transactions report.
(2) Includes use of all ERCs since 1997.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A-4
ERCs REQUIRED ANALYSIS
PROPOSED NEW RULES

2/13/2015

	1.1:1 Ratio	1.3:1 Ratio
Ratio % Assumed =	47%	53%

SSID	Company Name	Stationary Source Name	Current Potential to Emit (tons per year)		Emission Increases Since 1997 (tons per year)		ERCs Required (tons per year)	
			NOx	ROC	NOx	ROC	NOx	ROC
4421	CalPortland Construction	CalPortland - Hot Mix Asphalt Plant	33.53	5.71	0.03	0.02	0.04	-
8713	City of Santa Maria/J&A Santa Maria II	Santa Maria Regional Landfill	13.95	89.60	9.49	7.59	-	9.16
3707	County of SB/Fortistar	County of SB-Tajiguas Landfill	36.41	69.37	-	-	-	-
8003	DCOR	Dos Cuadras - South County	143.72	183.16	0.80	7.30	0.97	8.81
8012	DCOR	Platform Habitat	63.19	23.36	2.84	0.53	3.43	-
1073	E & B Natural Resources	E & B - South Cuyama	59.28	171.64	0.76	12.59	0.92	15.19
4639	E & B Natural Resources	Russell Ranch Lease	34.08	34.95	-	0.68	-	0.82
2560	ERG Resources	ERG Resources - Cat Canyon West	22.40	139.02	13.56	16.86	-	20.34
11136	ERG Resources	ERG Resources - Cat Canyon East	66.48	25.64	7.04	3.86	8.49	4.66
1482	ExxonMobil Production	ExxonMobil - SYU Project	634.56	317.74	4.22	22.46	5.09	27.09
4632	Freeport-McMoRan Oil and Gas	Pt. Pedernales/Lompoc Oil Fields	115.44	205.64	5.37	17.90	6.48	21.59
1325	Freeport-McMoRan Oil and Gas	The Point Arguello Project	806.54	275.04	0.12	8.48	0.14	10.23
4630	Greka Oil and Gas	Casmalia	140.45	17.06	13.32	3.57	16.07	-
2200	Greka Oil and Gas	Clark Avenue Source	42.95	97.98	3.69	1.00	4.45	1.21
10910	Greka Oil and Gas	Greka North Cat Canyon	64.09	93.04	0.98	6.15	1.18	7.42
2658	Greka Oil and Gas	Greka South Cat Canyon	264.37	73.84	5.46	9.49	6.59	11.45
8678	Greka Oil and Gas	Los Flores	13.39	35.83	4.21	0.92	-	1.11
8702	Greka Oil and Gas	Zaca Field	13.39	35.83	-	7.35	-	8.87
1735	Imerys Minerals California, Inc.	Imerys Minerals California, Inc.	3,780.00	667.00	14.34	12.17	17.30	14.68
2667	Pacific Coast Energy Company	Pacific Coast Energy Company- Orcutt Hill	437.66	185.41	21.82	26.87	26.32	32.41
8001	Pacific Offshore Operators Inc.	Pacific Operators - Carpinteria	164.03	35.36	9.94	5.06	11.99	6.10
2638	Purisima Hills LLC	Purisima Hills LLC - Blair Lease	30.03	42.34	3.65	5.52	4.40	6.66
4640	Greka Refining Company	SMRC/Union Sugar	83.39	40.73	8.32	9.78	10.04	11.80
5019	Southern California Gas Company	So Cal Gas - La Goleta	98.99	295.37	2.40	15.10	2.90	18.21
4900	The Okonite Company	The Okonite Company	4.00	31.77	2.75	23.19	-	27.97
1195	United States Air Force	Vandenberg Air Force Base	59.67	24.30	9.13	6.16	11.01	-
2795	University of California	UCSB	74.18	5.75	6.85	1.13	8.26	-
27	Venoco	Venoco - Carpinteria	59.12	83.32	0.47	0.98	0.57	1.18
1063	Venoco	Venoco - Ellwood	191.94	127.89	20.06	11.22	24.20	13.53
10912	Vintage Production California	Vintage Central Cat Canyon	45.53	70.86	-	-	-	-
1021	Wellhead Power Central Coast	Wellhead Power Central Coast	25.62	1.73	-	-	-	-
						ERCs Required New Rule =	170.81	280.48

Notes:

(1) Increases are from April 17, 1997
(2) Unless otherwise noted, use final permits issued before May 2, 2014.
(3) Decreases are not accounted for in this table.
(4) Assumes no inter-District trades at 1.5:1 ratio
(5) Ratio percentages based on historical ERC data from 1997 to 2014.

Same Source ERC Ratio = 1.1
Default ERC Ratio = 1.3

\\sbcapcd.org\shares\Groups\rule\Rule Revision\Regulation VIII - NSR\Reg VIII (2013)\Draft-Proposed-Final Staff Report\[NOx and ROC Offset Tables (3-2, Att A).xlsx]A-1 Offset Program Comparision

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A-5
ESTIMATE of ERC TRADING RATIO PERCENTAGE for PROPOSED NEW RULES

2/13/2015

ERC Cert. No. Retired	Date	Company Name	Type	NOx	ROC	Ratio	NOx at 1.1	ROC at 1.1	NOx at 1.3	ROC at 1.3
0032-1103	1/3/2000	Arguello, Inc.	Use			1.3				
0033-1103	4/17/2000	Arguello, Inc.	Use			1.3				
0037-1103	5/2/2000	Arguello, Inc.	Use		0.033	1.3				0.043
0044-0105	12/14/2000	Arguello, Inc.	Use	0.083		1.1	0.092			
0045-0105	1/14/2001	Arguello, Inc.	Use		0.012	1.1		0.013		
0067-0807	11/14/2006	Arguello, Inc.	Use			1.3				
0076-1007	11/14/2006	Arguello, Inc.	Use			1.3				
0094-1108	11/14/2006	Arguello, Inc.	Use			1.3				
0135-0909	11/14/2006	Arguello, Inc.	Use		0.253	1.1		0.278		
0137-0611	11/14/2006	Arguello, Inc.	Use	0.052	0.038	1.3			0.068	0.049
0141-1108	7/11/2008	Arguello, Inc.	Use		0.033	1.3				0.043
0169-0611	9/2/2008	Arguello, Inc.	Use		0.047	1.3				0.061
0059-1103	11/12/2002	Boeing	Use	0.680	0.167	1.3			0.884	0.217
0062-1103	11/12/2002	Boeing	Use			1.3				
0064-1103	12/2/2002	Boeing	Use	1.200		1.3			1.560	
0066-1103	6/19/2003	Boeing	Use		0.625	1.3				0.812
0172-0514	12/28/2009	BreitBurn Energy	Use	1.647	0.546	1.1	1.811	0.600		
0215-0514	11/4/2010	BreitBurn Energy	Use	1.058		1.1	1.164			
0237-0514	4/20/2011	BreitBurn Energy	Use	0.001		1.1	0.001			
0005-0403	4/8/1998	Chevron USA Prodn	Use		0.158	1.1		0.174		
0007-0503	5/28/1998	Chevron USA Prodn	Use		0.150	1.1		0.165		
0124-0908	11/14/2006	Dos Cuadras Offshore Resources	Use		0.004	1.3				0.005
0240-0316	3/5/2013	ERG Resources Company	Use	1.161		1.3			1.509	
0244-0616	3/5/2013	ERG Resources Company	Use	2.377		1.3			3.091	
0271-0714	4/26/2013	ERG Resources Company	Use		3.041	1.3				3.954
0297-0714	5/16/2013	ERG Resources Company	Use		0.149	1.3				0.194
0244-0616	3/11/2014	ERG Resources Company	Use	2.377	0.339	1.3			3.091	0.441
0244-0616	3/27/2014	ERG Resources Company	Use		0.047	1.3				0.061
0004-0103	1/21/1998	Exxon Company USA	Use		0.150	1.1		0.165		
0079-0206	5/19/2003	ExxonMobil	Use		0.185	1.3				0.241
0080-0307	5/19/2003	ExxonMobil	Use		0.221	1.3				0.287
0081-0308	5/19/2003	ExxonMobil	Use		0.438	1.3				0.569
0083-1103	5/19/2003	ExxonMobil	Use		0.427	1.3				0.555
0115-1009	11/1/2004	ExxonMobil	Use		0.407	1.1		0.447		
0125-0310	3/23/2005	ExxonMobil	Use		0.096	1.1		0.105		
0126-0310	3/23/2005	ExxonMobil	Use		0.166	1.1		0.182		
0132-0811	8/15/2006	ExxonMobil	Use	0.181	0.007	1.1	0.199	0.007		
0136-0811	11/24/2008	ExxonMobil	Use	0.388		1.1	0.426			
0128-1009	8/28/2009	ExxonMobil	Use		0.187	1.1		0.205		
0188-0811	9/22/2010	ExxonMobil	Use	0.238		1.1	0.262			
0235-0811	2/21/2012	ExxonMobil	Use	0.730		1.1	0.803			
0030-1103	10/17/2001	ExxonMobil	Transfer/Use			1.3				
0029-0304	11/1/2004	ExxonMobil	Transfer/Use		0.027	1.3				0.035
0102-1108	11/1/2004	ExxonMobil	Transfer/Use	0.033	0.000	1.3			0.043	
0114-1009	11/1/2004	ExxonMobil	Transfer/Use		0.219	1.1		0.241		
0292-1113	9/26/2013	Freeport-McMoRan Oil & Gas	Use		0.656	1.3				0.853
0299-1113	12/26/2013	Freeport-McMoRan Oil & Gas	Use		0.027	1.3				0.036
0121-1108	9/20/2005	Lockheed Martin Corporation	Use		0.025	1.3				0.032
0008-1003	3/22/1999	Nuevo Energy	Use	0.008	0.001	1.1	0.009	0.001		
0020-1103	7/19/1999	Nuevo Energy	Use		0.120	1.3				0.156
0267-0514	9/11/2012	Pacific Coast Energy Company	Return Unused	-0.567		1.1	-0.623			
0270-0514	4/26/2013	Pacific Coast Energy Company	Use	3.360		1.1	3.696			
0269-0817	12/24/2013	Pacific Coast Energy Company	Use	0.060		1.1	0.066			
0296-0818	2/27/2014	Pacific Coast Energy Company	Use		0.090	1.1		0.099		
0311-0819	3/7/2014	Pacific Coast Energy Company	Use		0.011	1.1		0.012		
0288-0817	3/26/2014	Pacific Coast Energy Company	Use		0.044	1.1		0.049		
0249-0514	2/21/2012	Pacific Coast Energy Company	Use	0.185		1.1	0.204			
0119-0909	12/6/2004	Plains Exploration and Production	Use		0.167	1.3				0.217
0120-0909	9/19/2005	Plains Exploration and Production	Use		0.080	1.3				0.104
0130-0909	11/12/2005	Plains Exploration and Production	Use		0.010	1.3				0.013
0131-0909	4/21/2006	Plains Exploration and Production	Use		0.003	1.3				0.004
0153-0812	7/11/2008	Plains Exploration and Production	Use		0.187	1.3				0.243
0143-0611	9/3/2008	Plains Exploration and Production	Use		0.047	1.3				0.061
0170-0812	11/24/2008	Plains Exploration and Production	Use		0.050	1.3				0.065
0178-1113	10/31/2011	Plains Exploration and Production	Use		0.167	1.3				0.217
0199-0812	10/31/2011	Plains Exploration and Production	Use		0.047	1.3				0.062
0258-1016	2/21/2012	Plains Exploration and Production	Use		0.208	1.1		0.229		
0178-1113	9/18/2012	Plains Exploration and Production	Use		0.504	1.3				0.655
0205-0515	9/20/2012	Plains Exploration and Production	Use		0.018	1.1		0.020		
0259-0812	9/20/2012	Plains Exploration and Production	Use		0.080	1.3				0.104
0263-1016	9/20/2012	Plains Exploration and Production	Use		0.011	1.1		0.012		
0284-0817	4/26/2013	Plains Exploration and Production	Use		0.123	1.1		0.135		
0283-0917	11/12/2013	Plains Exploration and Production	Use	0.993		1.1	1.093			

TABLE A-5
ESTIMATE of ERC TRADING RATIO PERCENTAGE for PROPOSED NEW RULES

2/13/2015

ERC Cert. No. Retired	Date	Company Name	Type	NOx	ROC	Ratio	NOx at 1.1	ROC at 1.1	NOx at 1.3	ROC at 1.3
0026-0304	12/22/1999	POPCO	Use		0.507	1.3				0.659
0028-1103	12/22/1999	POPCO	Use	0.633	1.833	1.3			0.823	2.383
0106-0709	11/17/2004	SpaceX	Use		0.013	1.3				0.017
0202-0714	11/1/2011	SpaceX	Return Unused		-0.013	1.3				-0.017
0226-0315	3/25/2011	The Okonite Company	Use	1.903		1.3			2.473	
0214-0914	4/20/2011	The Okonite Company	Use	1.523		1.3			1.980	
0149-1207	10/4/2007	The Pt. Arguello Companies	Use	2.541		1.1	2.795			
0009-0903	9/30/1998	The Pt. Arguello Companies	Use	0.150	0.025	1.1	0.165	0.028		
0012-1103	4/22/1999	The Pt. Arguello Companies	Use	0.075	0.012	1.1	0.083	0.013		
0013-0104	4/22/1999	The Pt. Arguello Companies	Use	0.073	0.011	1.1	0.081	0.012		
0018-0331	5/19/1999	The Pt. Arguello Companies	Use		0.167	1.3				0.217
0016-0104	6/7/1999	The Pt. Arguello Companies	Use	0.044		1.1	0.049			
0245-0616	11/1/2011	ULA - Delta IV	Use		0.509	1.3				0.662
0165-1113	8/25/2009	ULA - Delta IV	Use	0.132	0.009	1.3			0.172	0.011
0001-0902	9/26/1997	US Air Force	Use	0.883	0.333	1.1	0.972	0.367		
0002-0902	9/26/1997	US Air Force	Use	0.167		1.1	0.183			
0003-0902	9/26/1997	US Air Force	806.D.7	-0.158	-0.008	1.1	-0.174	-0.009		
0056-1103	11/5/2002	US Air Force	Use		0.775	1.3				1.007
0058-0907	11/27/2002	US Air Force	806.D.7	-0.227	-0.010	1.1	-0.249	-0.011		
0070-0907	12/5/2002	US Air Force	Use	2.258	0.675	1.1	2.483	0.743		
0071-0907	6/19/2003	US Air Force	806.D.7	-1.441		1.1	-1.585			
0086-0907	9/30/2003	US Air Force	Use	0.979	0.698	1.1	1.077	0.767		
0093-0907	2/26/2004	US Air Force	Use	0.163	0.023	1.1	0.179	0.025		
0092-1108	10/18/2004	US Air Force	Use		0.200	1.3				0.260
0103-0907	2/27/2006	US Air Force	Use	0.074	0.007	1.1	0.081	0.008		
0138-0907	5/27/2007	US Air Force	Use	0.562	0.037	1.1	0.618	0.041		
0107-1108	9/21/2007	US Air Force	Use		0.008	1.1		0.008		
0148-0907	9/21/2007	US Air Force	Renewal/Use	0.187	0.006	1.1	0.205	0.006		
0129-0907	11/29/2007	US Air Force	Use	0.053	0.004	1.1	0.059	0.004		
0150-0912	12/17/2007	US Air Force	Use	0.056		1.1	0.061			
0151-1108	12/17/2007	US Air Force	Use		0.003	1.1		0.004		
0156-1108	1/24/2008	US Air Force	Use		0.008	1.1		0.008		
0157-0912	1/24/2008	US Air Force	Use	0.070	0.000	1.1	0.077			
0158-1108	3/14/2008	US Air Force	Use	0.000	0.037	1.1		0.040		
0159-0912	3/14/2008	US Air Force	Use	0.432		1.1	0.475			
0160-1108	3/14/2008	US Air Force	Use		0.008	1.1		0.008		
0161-0912	3/14/2008	US Air Force	Use	0.042		1.1	0.046			
0162-0912	10/2/2008	US Air Force	Use	0.178		1.1	0.196			
0163-1108	10/2/2008	US Air Force	Use		0.045	1.1		0.050		
0167-0912	10/2/2008	US Air Force	Use	0.057		1.1	0.062			
0168-1108	10/29/2008	US Air Force	Use		0.012	1.1		0.013		
0187-1113	11/24/2008	US Air Force	Use		0.036	1.3				0.047
0182-0912	12/1/2008	US Air Force	806.D.7	-0.218	-0.016	1.1	-0.239	-0.017		
0184-0912	1/26/2009	US Air Force	Use	0.246		1.1	0.270			
0193-0912	3/12/2009	US Air Force	Use	1.481		1.1	1.629			
0194-1113	3/12/2009	US Air Force	Use		0.102	1.3				0.133
0195-0912	3/12/2009	US Air Force	Use	0.056	0.000	1.1	0.061			
0196-1113	3/12/2009	US Air Force	Use		0.004	1.3				0.005
0207-0912	3/24/2010	US Air Force	Use	0.464		1.1	0.511			
0208-1113	3/24/2010	US Air Force	Use		0.034	1.3				0.044
0221-1113	3/24/2010	US Air Force	Use		0.003	1.3				0.004
0220-0912	4/26/2010	US Air Force	Use	0.049		1.1	0.054			
0223-0912	9/20/2010	US Air Force	Use	0.072		1.1	0.079			
0224-1113	9/20/2010	US Air Force	Use		0.003	1.3				0.004
0229-0912	9/20/2010	US Air Force	Use	0.235		1.1	0.259			
0232-1113	9/20/2010	US Air Force	Use		0.017	1.3				0.023
0234-1113	9/21/2010	US Air Force	Use		0.017	1.3				0.023
0238-1113	4/20/2011	US Air Force	Use		0.008	1.3				0.010
0233-0912	2/21/2012	US Air Force	Use	0.317		1.1	0.348			
0250-1113	2/21/2012	US Air Force	Use		0.038	1.3				0.049
0252-0912	3/7/2012	US Air Force	Use	0.342		1.1	0.376			
0253-1113	3/7/2012	US Air Force	Use		0.023	1.3				0.030
0273-0912	5/24/2012	US Air Force	Use	0.375		1.1	0.413			
0274-1113	5/24/2012	US Air Force	Use		0.025	1.3				0.033
0275-0912	6/5/2012	US Air Force	Use	0.117		1.1	0.128			
0276-1113	6/5/2012	US Air Force	Use		0.035	1.3				0.046
0277-0912	6/20/2012	US Air Force	Use	0.357	0.005	1.1	0.392	0.006		
0278-1113	6/20/2012	US Air Force	Use		0.019	1.3				0.025
0280-1113	4/30/2013	US Air Force	Use		0.013	1.3				0.016
0290-0917	4/30/2013	US Air Force	Use	0.188		1.1	0.207			
0303-0917	5/17/2013	US Air Force	Use	0.018		1.1	0.020			
0304-1113	5/17/2013	US Air Force	Use		0.001	1.3				0.002
0305-0917	6/12/2013	US Air Force	Use	0.048		1.1	0.053			
0306-1113	6/12/2013	US Air Force	Use		0.006	1.3				0.008
0309-0917	7/17/2013	US Air Force	Use	0.373		1.1	0.411			

TABLE A-5
ESTIMATE of ERC TRADING RATIO PERCENTAGE for PROPOSED NEW RULES

2/13/2015

ERC Cert. No. Retired	Date	Company Name	Type	NOx	ROC	Ratio	NOx at 1.1	ROC at 1.1	NOx at 1.3	ROC at 1.3
0310-1113	7/17/2013	US Air Force	Use		0.020	1.3				0.026
0314-0917	8/26/2013	US Air Force	Use	0.056		1.1	0.061			
0315-1113	8/26/2013	US Air Force	Use		0.007	1.3				0.009
0318-0917	12/26/2013	US Air Force	Use	0.604		1.1	0.665			
0319-1113	12/26/2013	US Air Force	Use		0.032	1.3				0.042
							22.850	5.252	15.694	16.165

Notes:
(1) ERC 030, 032, 033, 067, 076 and 094 for SO_2 ERCs
(2) ERC 062 for PM_{10} ERCs.
(3) NOx and ROC listed is the Offset obligation

Total NOx+ROC at 1.1 = 28.102 tpq

Total NOx+ROC at 1.3 = 31.859 tpq

% Ratio of Total at 1.1 = 47%

% Ratio of Total at 1.3 = 53%

\\Aqcapcd.org\shares\Groups\rule\Rule Revision\Regulation VIII - NSR\Reg VIII (2015)\Draft-Proposed-Final Staff Report\[NOx and ROC Offset Tables (3-2, Att A).xlsx]A-1 Offset Program Comparison

THIS PAGE INTENTIONALLY LEFT BLANK

2/13/2015

TABLE A-6

RULE 806 - SHUT DOWN - REDUCTIONS in THROUGHPUT: DISCOUNTS

CURRENT RULES and PROPOSED NEW RULES

		tons per year	
DOI No.	**Company**	**NOx**	**ROC**
010	Grefco	5.800	6.890
014	SB Aerospace		1.050
019	Chevron		1.770
022	Southern California Gas	0.027	2.559
024	McGhan Medical		0.280
029	Pactuco	0.097	0.567
030	McGhan Medical		0.360
032	Inamed		0.657
036	Inamed	0.521	0.729
041	GTC	0.171	2.612
045	USAF		0.032
056	Plains Exploration		0.022
059	Vintgae Petroleum		1.959
067	ExxonMobil Production		0.131
068	Plains Exploration		0.272
079	Venoco		0.650
080	Santa Maria Energy		0.322
081	Santa Maria Energy		0.189
086	E&B Natural Resources		0.846
087	ERG Resources		0.183
090	ERG Resources		0.773
092	ERG Resources		0.555
091	DCOR	0.506	3.244
089	Imerys California	9.498	0.138
093	ERG Resources		0.120
		16.620	**26.910**

THIS PAGE INTENTIONALLY LEFT BLANK

ASSUMPTIONS FOR TABLE A2

Data gathering to concluded that three medium sources have been constructed (and are continuing to operate) since 1997:

Company	Stationary Source Name	NOx PTE	ROC PTE	Type	NOx NEI	ROC NEI	Year SS created	Notes
Home Motors Chevrolet-Geo-BMW	Home Motors Chevrolet-Geo-BMW		7.79	Medium		2.59	Pre- 1980	
McLean's Auto Body & Paint	McLean's Auto Body & Paint		9.08	Medium		3.88	Pre- 1990	
Superior Collision Repair	Superior Collision Repair		9.91	Medium		4.71	1990	
GI Autobody and Paint Repair	GI Autobody and Paint Repair		13.04	Medium			1977	
National Auto Body & Paint	National Auto Body & Paint		18.83	Medium			1996	
University of California - Santa Barbara	UCSB	74.18	5.73	Large	6.30	0.97	1958	
Santa Barbara County/Fortistar	County of SB-Tajiguas Landfill	36.41	69.37	Large	36.41	17.52	1967	
City of Santa Maria	Santa Maria Regional Landfill	4.46	82.01	Large	9.49	7.59	1950s	
United States Air Force	Vandenberg Air Force Base	57.71	30.64	Large	9.33	8.37	1956	
United Launch Alliance, L.L.C	United Launch Alliance	15.17	9.91	Medium	10.74	4.13	1958	
Marian Medical Center	Marian Medical Center	13.57	6.49	Medium	9.99	6.31	1967	
SBC Rsrc Recovery & Waste Mgmt Div.	Foxen Canyon Landfill	22.77	1.86	Medium	1.59	0.18	pre-1989	
City of Santa Barbara	Elings Park Landfill	0.36	18.56	Medium	0.36	4.53	2011	Landfill closed in 1967
NRG California South LP.	Ellwood Generating Station	19.73	9.00	Medium	9.86	4.50	1972	
Venoco, Inc.	Venoco - Carpinteria	59.12	83.32	Large	0.47	1.19	pre-1970	

Venoco, Inc.	Venoco - Ellwood	191.94	127.89	Large	5.21	8.07	1970s	
E & B Natural Resources	E & B - South Cuyama	59.28	171.64	Large	0.28	8.80	1940s	
Freeport-McMoRan Oil & Gas, LLC.	The Point Arguello Project	806.54	275.04	Large	36.14	52.50	1989	
ExxonMobil Production Company	ExxonMobil - SYU Project	634.56	317.74	Large	98.93	83.96	1987	
Greka Oil & Gas	Clark Avenue Source	42.95	97.98	Large	9.32	9.45	pre-1990	
ERG Resources, LLC.	ERG Resources - Cat Canyon West	22.40	124.84	Large	12.09	13.20	pre-1990	
Purisima Hills LLC	Purisima Hills LLC - Blair Lease	30.03	42.34	Large	1.17	1.95	1990	
Greka Oil & Gas	Greka South Cat Canyon	264.37	73.84	Large	9.03	13.93	1979	
Pacific Coast Energy Company LP	Pacific Coast Energy Company-Orcutt Hill	437.66	185.41	Large	11.36	17.63	1920s	
Greka Oil & Gas	Casmalia	140.45	17.06	Large	9.50	3.28	1976	
Freeport-McMoRan Oil & Gas, LLC.	Pt. Pedernales/Lompoc Oil Fields	115.44	205.64	Large	5.22	31.51	1988	
Elysium Russell, LLC.	Russell Ranch Lease	34.08	34.95	Large		0.42	pre-1990	
Santa Maria Refining Company	Greka Refining Company	83.39	40.73	Large	8.13	9.76	1977	
Southern California Gas Company	So Cal Gas - La Goleta	98.99	295.37	Large	0.33	1.50	1940s	
Pacific Operators Offshore, LLC.	Pacific Operators - Carpinteria	164.03	35.36	Large	4.16	3.95	1967	
DCOR, LLC.	Dos Cuadras - South County	143.72	183.16	Large	0.80	8.75	1969	
DCOR, LLC.	Platform Habitat	63.19	23.36	Large	2.84	0.54	1981	

Greka Oil & Gas	Los Flores	7.43	34.61	Large	4.21	0.76	pre-1988	
Greka Oil & Gas	Zaca Field	13.39	35.83	Large	0.00	2.36	1977	
Greka Oil & Gas	Greka North Cat Canyon	64.09	93.04	Large	0.98	6.54	1985	
Vintage Production California, LLC.	Vintage Central Cat Canyon	45.53	70.86	Large	3.34	6.91	pre-1988	
ERG Resources, LLC.	ERG Resources - Cat Canyon East	66.48	24.57	Large	7.93	2.57	pre-1988	
Purisima Hills LLC	Purisima Hills LLC-Barham Ranch	7.30	9.75	Medium	7.30	9.75	1990	Now under SSID 2638
Santa Maria Energy, LLC.	Santa Maria Energy - Orcutt Field	5.79	20.14	Medium	5.79	8.19	1975	
Greka Oil & Gas	Gato Ridge	10.02	6.57	Medium	10.02	2.26	1975	
Venoco, Inc.	Careaga #1	8.89	10.90	Medium	8.89	10.03	pre-1991	
Greka Oil & Gas	SMV East	18.32	18.54	Medium	0.00	0.06	1975-1990	
Golden Gate Oil, LLC.	SMV South	6.38	9.56	Medium	6.38	9.56	**2012**	
Venoco, Inc.	Careaga LA #2	4.34	7.75	Medium	4.34	7.75	**2008**	
ERG Operating Company, LLC.	ERG Resources - Cat Canyon Central	3.00	12.73	Medium	1.10	2.85	1990	
Golden Gate Oil, LLC.	SMV North	7.79	7.49	Medium	7.79	7.49	**2012**	
Agri-Chip	Agri-Chip	13.70	0.91	Medium	0.00	0.00	Pre-1997	Previously exempted equipment.
Imerys Minerals California, Inc.	Imerys Minerals California, Inc.	4,333.00	723.00	Large	0.00	7.51	1950s	
Gordon Sand Company, Inc.	Gordon Sand - Guadalupe Division	4.37	0.11	Large			pre-1974	
Lompoc Warehouse Corporation	Lompoc Valley Seed & Milling			Large			1987	

CalPortland Construction	CalPortland - Garey Plant			Large			pre-1990	
CalPortland Construction	CalPortland - Hot Mix Asphalt Plant	33.50	5.69	Large	0.03	0.02	pre-1972	
CalPortland Construction	CalPortland Construction - Donovan Rd		0.05	Medium			pre-1990	
CalPortland Construction	CalPortland Construction - A St, Lompoc			Medium			pre-1972	
Granite Construction Company	Granite - Buellton	7.55	3.35	Medium	0.41	0.93	pre-1990	
Hanson Aggregates Mid-Pacific, Inc.	Sisquoc Sand, Rock and Gravel Plant	15.90	11.96	Medium			pre-1990	
Lynch Ready Mix Concrete Company, Inc.	Lynch Ready Mix Concrete Company, Inc.			Medium			pre-1990	
CalPortland Construction	CalPortland Construction - Solvang			Medium			1975	
Hanson Aggregates Mid-Pacific, Inc.	Hanson Aggregates-Goleta Batch Plant			Medium			1970s	
The Okonite Company	The Okonite Company	4.00	31.77	Large	3.56	15.23	1967	
Raytheon Space & Airborne Systems	Raytheon-Bldgs B1,2 & 3 (Infrared)	6.21	7.89	Medium	0.90	5.70	pre-1980	
Trisep Corp.	Trisep Corp.	0.31	13.09	Medium	0.31	5.71	1978	
NuSil Technology	NuSil Technology		13.01	Medium		13.01	pre-1989	
Cambria Winery	Cambria Winery	0.95	19.44	Medium			1990	Existing Phase-in circa 2008.
Central Coast Wine Services	Central Coast Wine Services		9.99	Medium		9.99	1996	Existing Phase-in circa 2008.

ASSUMPTIONS FOR TABLE A3

SSID: 10834. Central Coast Wine Services

Started operations in 1996 (all NEI is pre '97). Source can expand fermentation operations of their non-Series 400 tanks by 24.9 lb/day before BACT is required. Barrel aging processes are permitted to a high storage capacity already, however the analysis assumes additional ageing associated with the daily increase. Total estimated growth is 1.95 tpy.

SSID: 8713. Santa Maria Regional Landfill

Emissions growth from this facility was due to addition of J&A cogeneration system in 2011. Landfill installed a flare in 1996 (pre' 97). No additional growth is expected for this facility.

SSID: 3707. COSB Tajiguas Landfill

Recent emissions growth is associated with the Mustang resource recovery project under ATC 14500. The draft of that permit will be issued in early March 2016 and is expected to be final before the adoption date of the proposed NSR rules. Prior growth was for the permitting on a 4 MW LFG engine installed to comply with the NSPS in 1998. No further growth is expected at the source after installation of the resource recovery project.

SSID: 1636. Gold Coast Collision - Broadway

This source was previously Iverson Motors and had a high annual PTE (pre '97) of 12.36 tpy. Gold Coast Collision has subsequently taken over Iverson's Booth and combined operations. The current permit reflects a lower (more realistic PTE) for an auto body shop (3.26 tpy). The NEI is now 3.26 tpy and is not within 25% of the NEI offset threshold. This source no longer has the potential to go over the existing NSR offset thresholds.

SSID: 11143. Golden Gate Oil - SMV North

This source was constructed post '97. No activity is occurring at the source, but modifications can reasonably be expected in the future. Steaming is not expected for this source. Potential mods would include increase in throughput and additional tanks and fugitives to the existing permitted facilities. Estimates are that these mods would not exceed 15% of the current PTE.

SSID: 8766. Golden Gate Oil - SMV South

This source was constructed post '97. All permits for this source have subsequently been cancelled. No further activity is expected.

SSID: 2680. Greka Oil & Gas – Gato Ridge

The source has been around for many decades with a steady level of mods occurring over the past 17 years. This source's PTE is below 25 tpy. Additional potential mods would include increase in throughput and additional tanks and fugitives to the existing permitted facilities. Estimates are that these mods would not exceed 15% of the current PTE.

SSID: 1793. Marian Medical Center

The Marian Medical Center was re-built in the last 10 years, adding new equipment post 1997. In addition, J&A Santa Maria has installed two large cogeneration engines since 1997. The only future changes reasonably expected are for existing equipment (engine or boiler) replacements. Such replacement would either have no increase in emissions or would result in lower emissions if the offsets exemption was utilized. No emissions growth is assessed.

SSID: 8745. National Auto Body & Paint

Source permitted in 1996 for 104 lb/day and 18.8 tpy under the old Rule 205.C. No subsequent emission increase since then (NEI97 equals zero). This facility paints larger vehicles and is permitted at its maximum design. Actual emissions are consistently reported at 0.5 tpy. No future growth is expected.

SSID: 4621. Nusil Technology

Source is comprised of two facilities, part of which were constructed prior to 1990 and part with emissions pre-97. Post '97 increases include ATC 14059 (2.93 lb/day, 0.38 tpy). Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 1517. Santa Maria Energy – Orcutt Field

Source is comprised of two parts, the older Monterey zone and the newer Diatomite zone, and is complicated in that it includes pre-90, pre-97 and post '97 emissions. Post '97 increases at the older Monterey operations as well as new permit for a large steam generation project for the diatomite zone under ATC 13986 (to be issued prior to June 2016). ATC 9533, issued prior to the1997 NSR rules, was for 38.44 lb/day and 7.01 tpy of NOx and 48.7 lb/day and 8.88 tpy ROC, respectively as pre '97 NEI. The post diatomite project NEI90 for the source is 43.21 lb/day and 6.15 tpy of NOx and 46.92 lb/day and 6.29 tpy of ROC, respectively. Actual permitted NEI90 emissions post Phase II diatomite project are essentially the same as those permitted NEI increases prior to 1997. Draft ATC 13986 Phase II PTE is 51.44 lb/day (6.15 tpy) of NOx and 31.61 lb/day (21.96 tpy) of ROC. This source will essentially be permitted for its full capacity prior to the adoptions of the new NSR rules. We should only see minor mods in future years. We reasonably estimate permit growth to be 15% of the PTE for ATC 13986.

SSID 10746. Terravant Wine Company

This source was permitted in 2007 and began operations in 2008. In July 2015, ATC/PTO 14626 was issued to increase their stationary source NEI to 54.99 lbs/day and 9.99 tpy. Following the rule adoption, the source can expand fermentation operations by 24.9 lb/day before BACT is required. Barrel aging processes are permitted to a high storage capacity already, however the analysis assumes additional ageing associated with the daily increase. Total estimated growth is 1.95 tpy.

SSID: 5009. Venoco – Careaga #1

Now owned by PRE Resources. New facilities permitted under ATC/PTO 13566-02 expanded prior facilities to full buildout. Future growth for this source appear limited, and only minor modifications are expected. Estimates are that these mods would not exceed 15% of the current PTE.

SSID: 10222. Venoco –LA #2

Now owned by PRE Resources. New facilities permitted under ATC 12114. Future growth for this source appear limited, and only minor modifications are expected. Estimates are that these mods would not exceed 15% of the current PTE.

ASSUMPTIONS FOR TABLE A4

SSID: 1012. Art-Craft Paint

Pre-97 emissions were 19.92 lb/day (2.60 tpy). AP10253 increased emissions to 24.90 lb/day. Subsequently permit increased emissions to 49.80 lb/day (6.46 tpy) for two booths operating full load concurrently. Source has historically operated well below permitted limits. No future growth is expected.

SSID: 9833. Bacara Resort and Spa

Daily NOx emissions have been reduced due to the replacement of two 5.3 MMBtu/hr boilers with two smaller low NOx units. Also, NE90 of 43 lb/day was incorrectly listing 33.5 lb/day from two DIECE E/S engines. The boiler contribution NEI97 is 9.5 lb/day (1.74 tpy). This source was not within 75% of the offset threshold. Notwithstanding, no further build out of the combustion sources are expected.

SSID: 10845. Byron Vineyard

Byron Winery is now part of the Jackson Family Wines stationary source (SSID 10593), which also includes the Cambria Winery. The combined PTE for this stationary source is currently above the offset thresholds of the proposed rules, so any future growth will be mitigated.

SSID: 10865. Dierberg Winery

This source is for a winery. The NEI90 is 54.13 lb/day and 3.38 tpy. All emission increases occurred after 1997. Source has historically operated below permitted limits. No future growth is expected.

SSID: 3867. C&D Zodiac

This existing aircraft interiors manufacturer's NEI90 is 54.98 lb/day and 7.16 tpy. Operations started in 1992 under PTO 8189. Pre '97 NEI was 24.99 lb/day and 2.77 tpy (NEI97 is 29.99 lb/day, 4.39 tpy) ROC. Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 10209. CalPortland - Donovan

This existing construction yard is used to repair and paint vehicles. The NEI90 is 46.80 lb/day and 2.20 tpy ROC. All emission increases occurred prior to 1997 and actual emissions are far under permitted levels. No additional growth is expected.

SSID: 11048. SB County Public Works

This source is for portable green waste grinder and screen engines. The NEI90 is 54.69 lb/day and 3.40 tpy NOx. All emission increases occurred after 1997. Equipment use is limited by Rule limits and HRA analysis. No additional growth is expected.

SSID: 10364. Envent

This source is for portable thermal oxidizers for temporary degassing projects. The NEI90 is 54.13 lb/day and 3.38 tpy. All emission increases occurred after 1997. Currently two units are permitted with an ROC PTE of 44.20 lb/day (2.21 tpy). No additional growth is expected.

SSID: 10600. Firestone Winery

This source is for a winery. The NEI90 is 45.85 lb/day and 2.16 tpy. All emission increases occurred before 1997. Source has historically operated below permitted limits. No future growth is expected.

SSID: 1536. Granite Buellton

This source is for a combined hot mix asphalt plant and sand, rock and gravel facility. The NOx NEI90 is 49.25 lb/day and 0.31 tpy. All emission increases occurred after 1997. No future fuel burning growth is expected.

SSID: 4487. Freudenberg Medical

Previously known as Helix Medical. It is a medical device manufacturer of custom elastomer products. The NEI90 is 54.17 lb/day (7.05 tpy) ROC. The source was initially permitted in 1993. Pre '97 NEI was 11.23 lb/day and 1.46 tpy. Post '97 NEI is 42.94 lb/day and 5.59 tpy. Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 9654. Indigo Systems

This is an electronic device manufacturer of infrared camera systems. The NEI90 is 49.49 lb/day (6.44 tpy) ROC. The source was initially permitted in 2004. All permits for this source have subsequently been cancelled. No further activity is expected.

SSID: 10708. Innovative Micro Technologies

This is an electronic device manufacturer of semiconductors. The NEI90 is 54.99 lb/day (7.15 tpy) ROC. The source was initially permitted in 2003. Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 1794. L-3 Maripro

This is a manufacturer of underwater electronic systems. The NEI90 is 46.64 lb/day (0.19 tpy) NOx. The source was initially permitted in 1991. Engine emissions permitted after 1997. Engine use is limited by Diesel ATCM. No future growth is expected.

SSID: 10309. Lash Construction

This is a C&D material recycling plant. The NEI90 is 41.69 lb/day (5.00 tpy) NOx. The source was initially permitted in 2004. No further build out is expected for this source.

SSID: 4635. Medtronic

This is a medical device manufacturer of infrared camera systems. The NEI90 is 54.98 lb/day (7.16 tpy) ROC. The source was initially permitted in 1995. Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 9133. Precision Auto Body - Magnolia

This is an auto body shop that repairs and paints cars. The NEI90 is 46.99 lb/day (6.26 tpy) ROC. The source was initially permitted in 1999. Actual emissions are far below permitted levels. No future

growth is expected.

SSID: 1958. Precision Auto Body – S. Fairview

This is an auto body shop that repairs and paints cars. The NEI90 is 46.93 lb/day (6.11 tpy) ROC. The source was initially permitted in the late '80s. Actual emissions are far below permitted levels. No future growth is expected.

SSID: 1963. Prestigious Auto Body & Painting

This is an auto body shop that repairs and paints cars. The NEI90 is 54.98 lb/day (7.16 tpy) ROC. The source was initially permitted in the late '80s. Actual emissions are far below permitted levels. No future growth is expected.

SSID: 2035. Raytheon

This is an electronical device manufacturer of semiconductors and infrared devices. The NEI90 is 45.69 lb/day (5.70 tpy) ROC. The source was initially permitted in 1980's and has had numerous modifications over the years. Approximately half the NEI90 emissions occurred after 1997. Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 3640. Trisep

This is a manufacturer of reverse osmosis units and materials. The NEI90 is 54.40 lb/day (5.90 tpy) ROC. The source was initially permitted in 1991. Approximately half the NEI90 emissions occurred after 1997. Minor mods expected up to the BACT threshold (24.90 lb/day and 3.24 tpy ROC).

SSID: 11133. Tristar Petroserv

This source no longer exists. Was a portable tank degassing source using thermal oxidizers. NEI90 was 51.95 lb/day and 1.56 tpy ROC.

SSID: 2784. US Navy Santa Cruz Island

Prime diesel generator engines. NEI90 is 53.24 lb/day and 1.39 tpy NOx. Initially permitted in 2006. Annual usage is below permitted limits. No future growth is expected.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX C

Technical Memo on the Analysis of Greenhouse Gas Emissions

THIS PAGE INTENTIONALLY LEFT BLANK

memo

To:	Aeron Arlin Genet
From:	Ben Ellenberger
Date:	4/18/2016
Re:	Analysis and Conclusions Regarding Potential Increase of Greenhouse Gas Emissions from Implementation of Proposed New Source Review Rule Revisions

---

The purpose of this memo is to analyze the potential greenhouse gas (GHG) growth associated with the Santa Barbara County Air Pollution Control District's (District) project to revise its New Source Review (NSR) program. The EIR conducts a quantitative analysis of the proposed NSR project's impact on affected pollutants, such as oxides of nitrogen (NO_X) and reactive organic compounds (ROC). Because the NSR rules do not directly regulate GHG emissions, the offset ratios, Best Available Control Technology requirements, and modeling requirements in the rules cannot be used to directly estimate the impacts of the proposed rule revisions on GHG emissions. The EIR quantitatively estimates the impacts the proposed NSR rule revisions will have on NO_X and ROC emissions. This analysis looks at a representative sample of proposed or existing facilities to determine how increases of NO_X emissions can be used as a proxy to make a qualitative analysis of the impact of the proposed NSR project's for GHG emissions.

I currently manage the Technology and Environmental Assessment (TEA) Division at the District. I have a Bachelor of Science degree in aerospace engineering from the Georgia Institute of Technology. I have approximately eleven years' experience working on air quality. The first six years were spent working as an air quality engineer, split between the San Joaquin Valley Unified Air Pollution Control District and the District. This includes work reviewing permit applications, calculating emissions from sources, and reviewing technical compliance reports. I then spent approximately four years as an engineering supervisor at the District, overseeing the work of other engineers and supervising the District's new source review and federal operating permit programs. In that capacity I also supervised the District's implementation of the federal Tailoring Rule for major sources of GHGs and calculating the GHG potential to emit of federally-regulated stationary sources in the District. For the last year and a half, I have managed the District's TEA Division.

My review of the available data from District permit files leads me to conclude that a full quantitative analysis of the potential GHG growth due to the proposed NSR project is not feasible. The last 17 years of District permit actions were used to estimate the impact of the project on ozone precursor emissions. Because GHG emissions were not calculated for the vast majority of these permit actions, the only way to conduct a similar quantitative analysis for GHG impacts would be to re-open each individual permit file (most of which are archived as hard copies) and calculate GHG emissions for each permit issued over the last 17 years. In many cases this would require searching through the files for the necessary information, and would likely require making assumptions to fill in data gaps for files that don't have sufficient information. Even if the District completely stopped work on our current obligations and

assigned our entire engineering staff this task, it could take significant time to complete. Because it is not reasonably feasible to conduct a quantitative analysis of GHG emissions, this memo describes the process and justification for a qualitative analysis.

Therefore, I have prepared an analysis of the correlation between NO_X and GHG emissions which demonstrates NO_X is an appropriate proxy for GHGs. If the NSR project were to show an increase in NO_X emissions, then my analysis is that GHG emissions could potentially increase too. If the NSR project were to show no growth or a decrease in NO_X emissions, then I conclude that GHG emissions are likely to remain constant or decrease.

To establish a correlation between NO_X emission rates and GHG emission rates, I have identified and analyzed two oil and gas production projects and one existing oil and gas processing facility. The two oil and gas production projects are typical of the types of projects which have been proposed and implemented recently in the county. Both projects consist of expansions at existing stationary sources. One project is proposed and has not yet received a final production plan from the lead agency approving the project. One project has already received County approval and is in the process of full build-out. One project does not involve installing new combustion equipment, but does involve increasing the use of existing equipment. The other project involves installing new combustion equipment and also increasing the use of existing equipment. For one project, the non-combustion equipment emits the majority of ozone precursors, while for the other project the combustion equipment emits the majority of ozone precursors. The oil and gas processing facility is an existing major source with a federal operating permit. Because combustion emissions at the oil and gas processing facility mostly come from reciprocating internal combustion engines, its GHG emissions from combustion equipment are relatively low compared to a facility with large boilers and water heaters. Therefore, these three examples represent the range of equipment types that are typically seen at oil and gas operations in the county.

This analysis will present the potential emissions from equipment which combusts fuel at each facility and the potential emissions from all other equipment at each facility. Since NO_X is a product of combustion, all of the NO_X emissions from each facility come from equipment which combusts fuel. My review and analysis of these facilities shows that the vast majority of GHG emissions from facilities come from combustion equipment. It also shows non-combustion equipment contributes a very small portion of total GHG emissions. By comparing the percentage of total affected pollutant emissions from combustion equipment to the percentage of total GHG emissions from combustion equipment, I conclude that NO_X emissions from a facility can be used as a proxy for total combustion equipment at a facility, and total combustion equipment can be used as a proxy for total GHG emissions.

The growth analysis in the EIR also discusses potential growth from autobody shops, solvent facilities, vineyards, and other miscellaneous facilities. Significant GHG emissions are very unlikely to occur from autobody shops and solvent facilities, because these facilities mostly experience evaporative losses from liquid coatings and solvents, which typically have negligible concentrations of methane and other GHGs. GHG emissions can occur from wineries during fermentation; however, the growth analysis in the EIR

projects minimal effects on wineries due to the proposed NSR rule change[1]. Therefore, the rest of this analysis focuses on the correlation between NO_X and GHG at oil and gas facilities.

1. Orcutt Hill Resource Enhancement Plan Project

The Orcutt Hill Resource Enhancement Plan Project would add 96 new oil wells to an existing diatomite cyclic steaming operation. It would use existing steam generators to provide steam to the wells. So, combustion emissions for the project are due to increased use of existing combustion equipment. Non-combustion emissions are due to new wells, pipelines, and vessels and due to increased use of existing processing facilities. The Orcutt Hill Resource Enhancement Plan Project Draft EIR (14EIR-00001) quantified ozone precursor emissions and GHG emissions. The calculation of GHG emissions from non-combustion sources used on-site measurements of produced gas to determine the quantity of methane associated with fugitive gas leaks.

Combustion equipment had a potential to emit (PTE) of 6.28 tons NO_X/year, 2.08 tons ROC/year, and 35,322 metric tons carbon dioxide equivalent per year ($MTCO_2e$/year). For the combustion equipment 5,625 $MTCO_2e$ were emitted for each ton of NO_X. Fugitives, tanks, and loading racks had a PTE of 2.43 tons ROC/year, and 2 $MTCO_2e$/year. So, the combustion sources accounted for 100 percent of NO_X emissions (all 6.28 tons NO_X/year), 77 percent of total ozone precursor emissions (2.08 tons ROC/year compared to a total of 4.51 tons ROC/year) and 99.99 percent of total GHG emissions (35,322 $MTCO_2e$/year compared to a total of 35,324 $MTCO_2e$/year). Fugitives, tanks, and loading racks accounted for 23 percent of total ozone precursor emissions, and less than 1 percent of total GHG emissions. So, for this facility, focusing only on the GHG emissions associated with combustion equipment is a reasonable approach to determining whether GHG emissions are increasing or decreasing overall.

2. North Garey Oil and Gas Production Plan

This project added 56 new wells, associated processing equipment, and one new steam generator to an existing production facility. Combustion emissions from the project are due to the new steam generator and increased use of existing combustion equipment at the existing facility. Non-combustion emissions are due to new wells, pipelines, and vessels and due to increased use of existing processing facilities. The negative declaration for this project (13NGD-00007), quantified GHG emissions from the combustion equipment, but assumed that GHGs from fugitive components were negligible. For my analysis, GHG emissions from fugitive components were calculated as described below.

Fugitive air emissions from oil and gas operations are the result of gas leaks from valves, flanges, connections, and other oil and gas handling equipment. District Policy 6100.061.1998 specifies the

[1] Furthermore, CO_2 emissions even from a winery that produces hundreds of thousands of cases of wine each year are comparable to the potential to emit of one medium size boiler. Therefore, these facilities are not a significant factor in this analysis or conclusions. The District's emission factors for wineries are here: http://www.ourair.org/wp-content/uploads/WineryCO2Calcs.pdf

methodology by which the District estimates the potential for fugitive emissions at various facilities. The methodology was established based on outside studies of emissions at actual facilities, EPA reference material, and research commissioned by the District. The methodology first estimates total hydrocarbons (THC) emission rates, then identifies typical ratios of ROCs to THCs for different facility types and component types so that the ROC emission rate can be calculated. Typically, the portion of THC that is not ROC will be a mixture of methane, ethane, and other gases but to be conservative I assume that the entire portion is methane (since methane has the highest global warming potential of the gases typically associated with oil and gas production).

For components handling gas or light condensate at onshore oil and gas production facilities, District Policy 6100.061.1998 identifies that a typical ratio is 0.31 tons of ROCs emitted for every ton of. This means that the remaining 0.69 tons of THC are not ROC. For components handling oil at oil and gas production facilities, a typical ratio is 0.56 tons of ROCs emitted for every ton of THC. For these components, the conservative assumption would be that the remaining 0.44 tons of THC is entirely methane. Therefore, I can conservatively assume that the ratio of methane emissions to ROC emissions at onshore oil and gas production facilities is:

Gas/light condensate:
0.69 tons methane/0.31 tons ROC = 2.23 tons methane/tons ROC

Oil:
0.44 tons methane/0.56 tons ROC = 0.79 tons methane/tons ROC

To convert these to $MTCO_2e$/ton ROC, a global warming potential of 25 tons CO_2e/ton methane and a ratio of 0.907 metric tons/short ton are applied:

Gas/light condensate:
2.23 tons methane/tons ROC x 25 x 0.907 = 50.5 $MTCO_2e$/short ton ROC

Oil:
0.79 tons methane/tons ROC x 25 x 0.907 = 17.8 $MTCO_2e$/short ton ROC

These ratios likely overestimate GHG emissions relative to fugitive ROC emissions because the non-ROC portion of the emissions typically includes compounds other than methane (which would likely have a lower global warming potential than methane), so using these ratios will likely overstate the GHG impacts of fugitive leaks from onshore oil and gas production facilities.

Combustion equipment had a PTE of 1.07 tons NO_X/year, 0.45 tons ROC/year, and 9,027 $MTCO_2e$/year. For the combustion equipment 8,437 $MTCO_2e$ were emitted for each ton of NO_X. Fugitives, tanks, and loading racks had a PTE of 3.44 tons ROC/year, and a conservatively estimated 174 $MTCO_2e$/year. So, the combustion sources accounted for 100 percent of NO_X emissions, 31 percent of total ozone precursor emissions and 98 percent of total GHG emissions. Fugitives, tanks, and loading racks accounted for 69 percent of total ozone precursor emissions, and only 2 percent of total GHG emissions.

So, for this facility, focusing only on the GHG emissions associated with combustion equipment is a reasonable approach to determining whether GHG emissions are increasing or decreasing overall.

3. Carpinteria Gas Plant

This is an existing oil and gas processing facility. It receives oil and gas that is produced on two offshore platforms and sent to the facility through undersea pipelines. This facility's combustion equipment consists of large piston engines that are used to compress gas before it is sold, two smaller ancillary engines, and three small process heaters. The non-combustion equipment consists of piping, vessels, and equipment for handling the oil and gas and wastewater tanks and sumps for handling water that is separated from the oil and gas.

For this facility emissions totals were taken from the existing federal operating permit. The operating permit did not quantify GHG emissions from non-combustion equipment, but Attachment 10.1 and Table 5.1.0 of the permit specify the ROC/THC ratio of the emissions from the non-combustion equipment. To be conservative, it was assumed that all non-ROC emissions were methane. The methane emission rate was converted to metric tons CO_2e using the same factors as in the analysis of the North Garey Oil and Gas Production Plan.

Combustion equipment had a PTE of 58.99 tons NO_X/year, 57.27 tons ROC/year, and 21,489 $MTCO_2e$/year. For the combustion equipment 364 $MTCO_2e$ were emitted for each ton of NO_X. Non-combustion equipment had a PTE of 26.04 tons ROC/year, and 993 $MTCO_2e$/year. So, the combustion sources accounted for 100 percent of NO_X emissions, 82 percent of total ozone precursor emissions and 96 percent of total GHG emissions. Fugitives, tanks, and loading racks accounted for 18 percent of total ozone precursor emissions, and 4 percent of total GHG emissions. So, for this facility, focusing only on the GHG emissions associated with combustion equipment is a reasonable approach to determining whether GHG emissions are increasing or decreasing overall.

Summary of Results

	Facility 1	Facility 2	Facility 3
Combustion Equipment % of Total GHG Emissions	>99.99	98	96
Non- Combustion Equipment % of Total GHG Emissions	<0.01	2	4
Non- Combustion Equipment % of Total Ozone Precursor Emissions	23	69	18
$MTCO_2e$/ton NO_X	5,624	8,436	364

This summary of the data shows that equipment that combusts fuel at oil and gas production and processing facilities account for the vast majority of GHG emissions at those facilities. Even after accounting for the high global warming potential of methane, and making very conservative

assumptions where the underlying data is uncertain, this correlation holds true. It still holds true for a project where non-combustion equipment contributes a large percentage of the total ozone precursor emissions.

Conclusions:

There is a wide variation from facility to facility in the exact ratio of GHG emissions to NO_X emissions. This is because different types of combustion equipment will combust fuel at different rates and will emit NO_X at different rates, depending on the equipment type and controls employed. Therefore, it is not feasible to establish a GHG/NO_X factor to make a quantitative assessment of GHG impacts from the NSR rule without doing an exhaustive facility-by-facility assessment of the exact equipment at each facility and the exact controls used by each piece of equipment.

The EIR for the NSR project shows that there is the potential for a relatively small increase in NO_X emissions due to the NSR project. That increase can be attributed to an increase in fuel combusted by new or modified equipment, and therefore an increase in GHG emissions.

By comparing the percentage of total affected pollutant emissions from combustion equipment to the percentage of total GHG emissions from combustion equipment, I conclude that NO_X emissions from a facility can be used as a proxy for total combustion equipment at a facility, and total combustion equipment can be used as a proxy for total GHG emissions. Other than generally predicting a GHG increase when there is an increase in NO_X, it is not possible to determine a ratio between NO_X increases and GHG increases that holds for all facilities.

Therefore, the projected 9.89 ton/yr NO_X increase due the NSR Project would likely increase GHG emissions. However, the level of that GHG increase cannot be determined.

APPENDIX D

Notice of Preparation

THIS PAGE INTENTIONALLY LEFT BLANK

NOTICE OF PREPARATION

TO: State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

FROM: Carly Barham
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The Santa Barbara County Air Pollution Control District (District), as Lead Agency under the California Environmental Quality Act, will prepare a Draft Environmental Impact Report (EIR) for the project identified below. We are requesting the views of concerned agencies and any interested persons regarding the scope of the analysis and content of the environmental document.

PROJECT NAME: Proposed Amendments to Regulation VIII, (New Source Review), and Other Associated Rules (commonly referred to as NSR Revisions).

PROJECT LOCATION: The NSR Revisions will apply in Santa Barbara County, in California State Tideland waters, and on the Outer Continental Shelf (OCS) within 25 miles of the coast of Santa Barbara County. California State Tidelands are coastal waters within three miles of the coastline.

PROJECT DESCRIPTION: The District is proposing to amend its New Source Review (NSR) permitting program. NSR rules apply to businesses that are proposing to install or modify any emission unit or operation that requires a permit and that could emit regulated air pollutants. These amendments are designed to update the District's current NSR permitting program to reflect recent regulatory mandates, and to simplify the permitting process while maintaining an equally stringent rule set, among other changes. The principal changes that are proposed include:

- Replacing the Net Emission Increase (NEI) calculation methodology with the Potential to Emit (PTE) methodology;
- Revising the offset thresholds, ratios, and calculations;
- Adding offset exemptions for equipment replacements and emergency standby engines;
- Adding $PM_{2.5}$ (particulate matter less than 2.5 microns in diameter) to the attainment pollutant permitting requirements;
- Revising the Air Quality Impact Analysis procedures; and
- Creating new Rule 809, Federal Minor Source NSR, to address federal requirements.

The District has published drafts of the proposed amendments that include the full text of all proposed regulatory changes, as well as background documents explaining the District's reasons for making these proposed changes. All of these documents are available on the District's web page for the proposed amendments at www.ourair.org/rules-under-development. Furthermore, physical copies are also available for public review at the District office at 260 N. San Antonio Road, Suite A, Santa Barbara, CA 93110.

PURPOSE OF THE NOTICE OF PREPARATION: The purpose of the Notice of Preparation is to obtain agency and public comments on the adequacy of the scope of analysis and content of the environmental information and analysis to be conducted, including significant environmental issues, reasonable alternatives, and mitigation measures that should be included in the Draft EIR.

EIR SCOPE OF ANALYSIS: The EIR is intended to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed project. The EIR would identify potentially significant effects, and any feasible means of avoiding or reducing the effects through project redesign, the imposition of mitigation measures, or implementation of alternative(s) to the project. Consistent with Section 15082 of the CEQA Guidelines, the District has identified that the EIR will focus on the following probable environment effects: air quality and global climate change. Impacts to other issue areas are anticipated to be less than significant and will not be further analyzed in the EIR.

PUBLIC AND AGENCY COMMENTS: Please send your written responses to this Notice of Preparation to: Carly Barham, Air Quality Specialist, 260 N. San Antonio Road Suite A, Santa Barbara, CA, 93110 or by email at BarhamC@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.

Date: September 11, 2015

Signature: _____

Carly Barham

Title: Air Quality Specialist

Telephone: (805) 961-8890

APPENDIX E

Comments on the Notice of Preparation

THIS PAGE INTENTIONALLY LEFT BLANK

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

October 13, 2015

Carly Barham
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110
BarhamC@sbcapcd.org

Subject: Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Proposed Amendments to Regulation VIII, (New Source Review), and Other Associated Rules Project SCH# 2015091030

Dear Ms. Barham:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Notice of Preparation (NOP) for the Proposed Amendments to Regulation VIII, (New Source Review), and Other Associated Rules Project Draft Environmental Impact Report (DEIR). The project area is located in Santa Barbara County, in California State Tideland waters, and on the Outer Continental Shelf (OCS) within 25 miles of the coast of Santa Barbara County. The Santa Barbara County Air Pollution Control District is proposing to amend its New Source Review (NSR) permitting program. NSR rules apply to businesses that are proposing to install or modify any emission unit or operation that requires a permit and that could emit regulated air pollutants.

The following comments and recommendations have been prepared pursuant to the Department's authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq*., and pursuant to our authority as Trustee Agency with jurisdiction over natural resources affected by the project (California Environmental Quality Act, [CEQA] Guidelines § 15386) to assist the Lead Agency in avoiding or minimizing potential project impacts on biological resources.

1) Project Description and Alternatives. To enable the Department to adequately review and comment on the proposed project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:

   a) A complete discussion of the purpose and need for, and description of, the proposed project, including all staging areas and access routes to the construction and staging areas; and,

   b) A range of feasible alternatives to project component location and design features to ensure that alternatives to the proposed project are fully considered and evaluated. The alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas.

2) Lake and Streambed Alteration Agreements (LSA). As a Responsible Agency under CEQA Guidelines section 15381, the Department has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream, or use material from a streambed. For any such activities, the project applicant (or "entity") must provide written notification to the Department pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other information, the Department determines whether a Lake and Streambed Alteration Agreement (LSA) with the applicant is required prior to conducting the proposed activities. The Department's issuance of a LSA for a project that is subject to CEQA will require CEQA compliance actions by the Department as a Responsible Agency. As a Responsible Agency, the Department may consider the Negative Declaration or Environmental Impact Report of the local jurisdiction (Lead Agency) for the project. To minimize additional requirements by the Department pursuant to section 1600 *et seq.* and/or under CEQA, the document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA.[1]

   a) The project area supports aquatic, riparian, and wetland habitats; therefore, a preliminary jurisdictional delineation of the streams and their associated riparian habitats should be included in the DEIR. The delineation should be conducted pursuant to the U. S. Fish and Wildlife Service wetland definition adopted by the Department.[2] Some wetland and riparian habitats subject to the Department's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.

   b) In project areas which may support ephemeral streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of ephemeral channels and help maintain natural sedimentation processes; therefore, the Department recommends effective setbacks be established to maintain appropriately-sized vegetated buffer areas adjoining ephemeral drainages.

   c) Project-related changes in drainage patterns, runoff, and sedimentation should be included and evaluated in the environmental document.

3) Wetlands Resources. The Department, as described in Fish & Game Code § 703(a) is guided by the Fish and Game Commission's policies. The Wetlands Resources policy (http://www.fgc.ca.gov/policy/) of the Fish and Game Commission "…to seek to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion which would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals

[1] A notification package for a LSA may be obtained by accessing the Department's web site at www.wildlife.ca.gov/habcon/1600.
[2] Cowardin, Lewis M., et al. 1970. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values".

a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. The Department encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. The Department encourages activities that would avoid the reduction of wetland acreage, function, or habitat values. Once avoidance and minimization measures have been exhausted, the project must include mitigation measures to assure a "no net loss" of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Conversions include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions for the benefit to on-site and off-site wildlife populations. The Department recommends mitigation measures to compensate for unavoidable impacts be included in the DEIR and these measures should compensate for the loss of function and value.

b) The Fish and Game Commission's Water Policy guides the Department to insure the quantity and quality of the waters of this state should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this state, and prevent the degradation thereof caused by pollution and contamination; and endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife. The Department recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible.

4) California Endangered Species Act (CESA). The Department considers adverse impacts to a species protected by CESA, for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, candidate species, or state-listed rare plant species that results from the Project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, the Department recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from the Department may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and Game Code §§ 2080.1, 2081, subds. (b),(c)). Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

5) Biological Baseline Assessment. To provide a complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, sensitive, regionally and locally unique species, and sensitive habitats, the DEIR should include the following information:

   a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]);

   b) a thorough, recent, floristic-based assessment of special status plants and natural communities, following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see http://www.dfg.ca.gov/habcon/plant/);

   c) floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the project site and within the neighboring vicinity. *The Manual of California Vegetation*, second edition, should also be used to inform this mapping and assessment (Sawyer et al. 2008[3]). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

   d) a complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by the project. The Department's California Natural Diversity Data Base (CNDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. The Department recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp;

   e) a complete, recent assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines § 15380). Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service; and,

---

[3]Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2008. A manual of California Vegetation, 2nd ed.

ISBN 978-0-943460-49-9.

f) a recent, wildlife and rare plant survey. The Department generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.

6) Biological Direct, Indirect, and Cumulative Impacts. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR:

a) a discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The latter subject should address project-related changes on drainage patterns and downstream of the project site; the volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site. The discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary and the potential resulting impacts on the habitat, if any, supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included;

b) a discussion regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a NCCP). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

c) the impacts of zoning of areas for development projects or other uses nearby or adjacent to natural areas, which may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the environmental document; and,

d) a cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

7) Avoidance, Minimization, and Mitigation for Sensitive Plants. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts. The Department considers these communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3 and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2008).

8) Compensatory Mitigation. The DEIR should include mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

9) Long-Term Management of Mitigation Lands. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include, but are not limited to, restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

10) Nesting Birds. In order to avoid impacts to nesting birds, the DEIR should require that clearing of vegetation and construction occur outside of the peak avian breeding season, which generally runs from February 1st through September 1st (as early as January 1 for some raptors). If project construction is necessary during the bird breeding season, a qualified biologist with experience in conducting bird breeding surveys should conduct weekly bird surveys for nesting birds within three days prior to the work in the area, and ensure that no nesting birds in the project area would be impacted by the project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer should be a minimum width of 300 feet (500 feet for raptors), be delineated by temporary fencing, and remain in effect as long as construction is occurring or until the nest is no longer active. No project construction shall occur within the fenced nest zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the project. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

11) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of moving an individual from the project site and permanently moving it to a new location. The Department generally does not support the use of, translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. The Department has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals, and their habitats.

12) Moving out of Harm's Way. The proposed project is anticipated to result in clearing of natural habitats that support many species of indigenous wildlife. To avoid direct mortality, the Department recommends a qualified biological monitor approved by the Department be on site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by

grubbing or project-related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting project impacts associated with habitat loss.

13) Wildlife Movement and Connectivity. The project area supports significant biological resources and is located adjacent to a regional wildlife movement corridor. The project area contains habitat connections and supports movement across the broader landscape, sustaining both transitory and permanent wildlife populations. Onsite features, which contribute to habitat connectivity, should be evaluated and maintained. Aspects of the project could create physical barriers to wildlife movement from direct or indirect project-related activities. Indirect impacts from lighting, noise, dust, and increased human activity may displace wildlife in the general area.

14) Revegetation/Restoration Plan. Plans for restoration and re-vegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

    a. Local Propagules. The Department recommends that local onsite propagules from the project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

    b. Special Habitat Elements. Restoration objectives should include providing special habitat elements where feasible to benefit key wildlife species. These physical and biological features can include, for example, retention of woody material, logs, snags, rocks and brush piles (see Mayer and Laudenslayer, 1988[1], for a more detailed discussion of special habitat elements).

---

[4]Mayer, K. E. and W. F. Laudenslayer, Jr. 1988. Editors: A guide to wildlife habitats of California. State Of California, The Resources Agency, Department of Forestry and Fire Protection, Sacramento, CA.

We appreciate the opportunity to comment on the referenced NOP. Questions regarding this letter and further coordination on these issues should be directed to Mr. Martin Potter, Senior Environmental Scientist (Specialist), at (805) 640-3677 or Martin.Potter@Wildlife.ca.gov

Sincerely,

Betty J. Courtney
Environmental Program Manager I
South Coast Region

ec: Christine Found-Jackson, CDFW, Los Alamitos
Mary Meyer, CDFW, Ojai
Sarah Rains, Newbury Park
Scott Morgan, State Clearinghouse, Sacramento