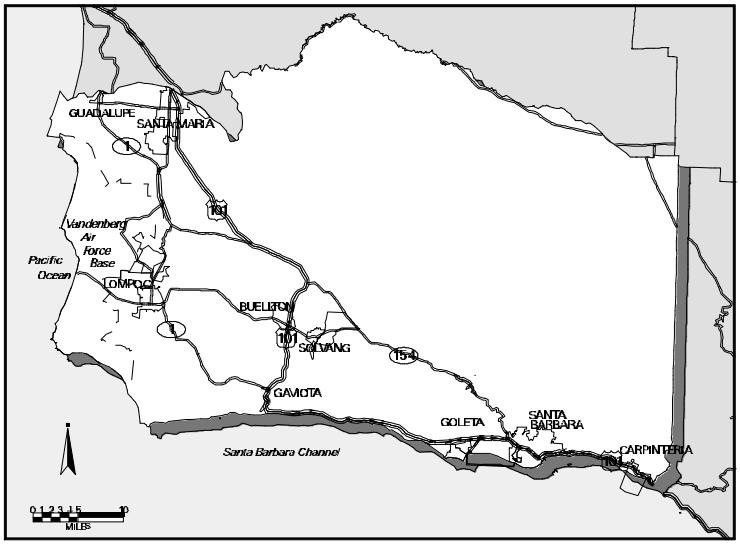
SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT

REVISED STAFF REPORT



Revised Staff Report for

Proposed Rule Changes to

Rule 102. Definitions
Regulation II. Permits
Regulation VIII. New Source Review

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Santa Barbara County

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1. Executive Summary

1.1 Introduction

The Santa Barbara County Air Pollution Control District (APCD) is proposing to modify the rules which implement the APCD permitting process. Regulation II (Permits) and VIII (New Source Review) are the APCD's permitting program. These two regulations:

- Require permits for activities that emit or affect air pollutants (Rule 201)
- Designate which sources need permits and which are exempt (Rule 202)
- Stipulate how permits may be transferred from one owner to another (Rule 203)
- Describe information required on a permit application (Rule 204)
- Establish standards for granting permits (Rule 205)
- Implement permit streamlining legislation (Rule 208)
- Implement federal and state laws regarding the permitting of new and modified sources (Regulation VIII)
- Implement an air pollution emission reduction credit source register(Rule 806)

1.2 Permitting Programs Overview

Permitting programs are primarily intended to provide a mechanism for air pollution control agencies to ensure compliance with air pollution control standards. The permitting process allows the APCD to review a company's proposed plan to construct a source of air pollution, analyze the potential air pollution emissions which the proposed facility will produce, and impose emission limitations. The APCD permit contains conditions which stipulate the parameters under which the source must operate in order to remain in compliance with the rules. Also, the permit enables the APCD to keep track of the location, number and size of air pollution sources so that pollution control strategies are based on sound information.

Regulation II establishes the basic permitting system applicable to all stationary sources of pollution in the county. In addition to complying with Regulation II, certain new or modified sources must also comply with Regulation VIII: New Source Review. The objective of Regulation VIII is to:

- Prevent the degradation of air quality from air pollution generated by both new sources of air pollution and modifications of existing sources of air pollution and to ensure that they do not interfere with attainment and maintenance of air quality health standards.

- Establish certain threshold levels of air pollution emissions above which the installation of Best Available Control Technology, the acquisition of offsets, and/or the completion of an Air Quality Impact Analysis may be required.

- Specify how increases in both non-attainment pollutants and attainment pollutants are permitted.

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

1.3 Overview of the Major Changes

The draft revisions to Regulations II and VIII encompass substantial changes to 13 different rules. Many of the changes are administrative in nature. Current Regulation II includes both general permitting and new source review requirements. To improve clarity and readability, Regulation II was divided into two separate regulations. Proposed Regulation II now covers basic permitting requirements while proposed Regulation VIII contains New Source Review. The proposed rule revisions contain a number of important regulatory changes. The major changes, and their implications to the regulated sources of air pollution are summarized in Table 1.1. Full text of the proposed revisions is given in the Attachment.

The following text discusses the major rule changes listed in Table 1.1.

Rule 201. Permits.

A proposed provision has been added to Rule 201 that makes it clear that the Air Pollution Control Officer may issue a combined authority to construct and permit to operate permit. The issuance of a combined authority to construct and permit to operate will eliminate one entire permitting cycle.

Rule 202. Permit Exemptions.

Staff is proposing three major changes to the APCD's permit exemption rule: caps on the amount of emissions allowed, elimination of the exemption for drill rigs, and the addition of a number of new equipment/activity exemptions.

Under the present rule, certain equipment/activities are exempt from permit provided emissions from such equipment do not exceed 150 pounds per day. In the proposed revisions the 150 pounds per day limit per listed equipment category is lowered to 10 tons per year except for combustion equipment which has a 25 ton per year gatekeeper. The new exemption for the semiconductor industry has a one ton per year gatekeeper. An option has been added that allows sources to use actual emissions with recordkeeping or potential to emit without recordkeeping of usage for determining if a piece of equipment qualifies for exemption.

Table 1.1
Implications of Major Rule Changes

Rule	Change	Cost to Regulated Community[1]	Impact on APCD Program Effectiveness[2]	Impact on APCD Fee Revenues	Impact on APCD Staffing-Startup[3]	Impact on APCD Staffing-Ongoing
201	Combined Authority to Construct Permit to Operate for small sources	Decrease	Positive	Decrease	Increase	Decrease
202	Decrease in the size of aggregate exemption limit per equipment category	Increase	Positive	Increase	Neutral	Neutral
202	Addition of new exemptions	Decrease	Positive	Decrease	Neutral	Decrease
202	Eliminate the exemption for drill rigs	Negligible	Increase	Increase	Neutral	Increase
208	Permit streamlining, reduced processing times	Decrease	Positive	Neutral	Increase	Decrease
802	Change in the emission growth allowed before Best Available Control Technology for nonattainment pollutants is triggered	Decrease	Positive	Neutral	Increase	Neutral
803	Change in the emission growth allowed before Best Available Control Technology for attainment pollutants is triggered	Decrease	Positive	Neutral	Increase	Neutral
802	Change in the emission growth allowed before emission offsets are required for nonattainment pollutants	Increase[4]	Negative	Increase	Increase	Neutral
803	Change in the emission growth allowed before emission offsets are required for attainment pollutants	Decrease	Neutral	Decrease	Increase	Neutral
802	Change in emission offset ratios	Neutral	Negative	Neutral	Neutral	Neutral
806	Emission reduction credits (source register)	Neutral	Neutral	Increase	Increase	Increase
Total	Sum of all changes	Decrease	Increase	Neutral	Increase	Neutral

1 This column indicates the likely direct impact of the proposed change on sources directly affected by the change from the perspective of the source.

2 This column refers to the effect of the proposed change on the APCD's regulatory program as a whole. For example, adding exemptions for insignificant equipment will allow the APCD to emphasize larger sources that generate the majority of pollution generated by stationary sources resulting in a better and more efficient overall regulatory program.

3 This column indicates those changes where startup staff labor will be required to implement the change.

4 The emission growth trigger for nonattainment pollutants was changed in several ways. For the largest sources that have experienced emission growth since 1979, the changes will allow more source growth than allowed under the current rule. However, this condition applies only to a handful of sources. For most sources the proposed changes will reduce the emission growth allowed before emission offset requirements are triggered.

Staff is proposing to eliminate the exemption for drill-rigs because staff believes that drill rigs are a significant source of pollution and should be regulated either by the state's registration program or by APCD permit (sources have the option of registering with the state or complying with local district permit requirements).

Staff is proposing a number of new equipment/activity exemptions. For example, exemptions are proposed for engines used to power amusement rides, emissions from temporary equipment, and a number of semiconductor manufacturing and military/commercial space activities.

Rule 208. Action on Applications - Time Limits

Draft Rule 208 implements state mandates for streamlining the permit process for small and medium sized sources of air pollution. Essentially, this rule establishes time limits for permit processing depending on the size and complexity of the proposed source. For example, the processing time limits for the APCD to take final action on authority to construct applications for qualifying "medium" and "small" sources is reduced from 180 days to 90 and 30 days, respectively. The intent of the regulatory change is to implement a streamlined permitting process for sources where there is minimal variation from facility to facility (for example, gas stations, dry cleaners, and auto body shops). The proposed rule change should reduce the time and effort required by industry to obtain permits and hence reduce overall permit costs.

Rules 802. Nonattainment Review

Rule 802 contains the APCD's permitting requirements applicable to new or modified sources of nonattainment pollutants. In general, new source review programs reduce pollution by requiring new or modified facilities to be constructed with highly effective emission control equipment (Best Available Control Technology) and to offset emission increases with emission reductions from existing sources either on or off site. Because these two programs are generally costly, new source review requirements are reserved for larger sources of air pollution.

In response to a state mandate, staff is proposing to increase the amount of emission growth allowed before a source must install Best Available Control Technology. The current emission trigger is a net emission increase resulting from a new or modified source of 2.5 pounds hour or more since 1979. This means that the permitted emission increases and decreases at each source are summed since 1979, and if any new or modified source results in an emission increase of 2.5 pounds per hour or more, the new source or modification must be constructed using Best Available Control Technology.

Staff is proposing to replace this trigger with a potential to emit of 25 pounds per day for a new source or per project for a modified source. Thus, emissions from the "modified source" is being replaced with emissions from the "project[1]," "net emission increase" is being replaced with "potential to emit," and the 2.5 pounds per hour trigger is being

[1] A definition of "project" is given in Rule 801.C.

replaced a with 25 pounds per day trigger. While this proposed revision to the BACT trigger could be viewed as less stringent than the current definition, in practice, the current rule as implemented often leads to a determination that only a RACT level of control should be required for small modifications to existing small and medium sources. The proposed change in APCD rules roughly achieves the same result but avoids the necessity of doing a cost analysis by staff prior to determining that RACT control levels are justified due to the cost of implementing the most efficient technology.

Staff is proposing to lower the threshold for requiring emission offsets. The current triggers are based on a net emission increase resulting from a new or modified source since 1979 of 10 pounds per hour, 240 pounds per day, or 25 tons per year; except for PM-10 where the triggers are 10 pounds per hour, 80 pounds per day, or 15 tons per year. The proposed triggers are a net emission increase since 1990 of 55 pounds per day or 10 tons per year, except for PM-10 where the limit is 80 pounds per day or 15 tons per year. This change is also motivated by a state law.[1]

The proposed changes to the offset requirements both increase and decrease offset requirements compared to the current rule. Moving the baseyear from 1979 to 1990 will forgive emission growth that occurred during this period from inclusion in the value of "net emission increase," and will therefore allow increased growth compared to the current rule. Conversely, the reduction in the offset trigger amount from 25 tons per year to 10 tons per year will decrease the amount of growth allowed before offsets are triggered. On balance, the two changes will be less restrictive for a handful of larger sources, and potentially more restrictive for many other smaller sources. Again, this is a mandated change and was designed to be the least restrictive overall method for complying the with state law.

Eliminating the hourly offset threshold will reduce the probability of a source triggering offsets. The probability of a source exceeding any emission threshold will generally increase as one moves to shorter averaging times. For example, the emissions from a source that uses batch operations will be very high during the hours when the operation is underway, and very low at other times. The elimination of a hourly emission limit by itself therefore represents a relaxation of the current rule. However, when coupled with the lower offset threshold and other changes, the use of daily triggers is not expected to result in increased emissions.

Rule 803. Prevention of Significant Deterioration

Like nonattainment review (Rule 802), Rule 803 contains two primary emission control requirements: Best Available Control Technology and emission offsets. Staff is proposing to change the amount of emission growth that triggers Best Available Control Technology for attainment pollutants. The current trigger is based on the net emission increase of a new or modified source since 1979 and is expressed in pounds per hour. The proposed triggers replace 1979 with 1990 as the baseline year, and replace the hourly triggers with daily triggers (for example from five pounds per hour to 120 pounds per day).

[1] State Health and Safety Code 40918.

Generally, the proposed revision will allow more growth before a source triggers Best Available Control Technology requirements. The change in the baseyear from 1979 to 1990 eliminates emission growth a source may have experienced from 1979 to 1990 from net emission increase[1]. The change in trigger from pounds per hour to pounds per day should also reduce the probability of a source triggering Best Available Control Technology requirements. Similar to the proposed changes to Rule 802, the changes proposed here should tend to limit application of Best Available Control Technology to larger emission increases. The impact of this change is limited by the fact that most attainment pollutants are precursors to non-attainment pollutants (i.e., ROC and NOx are precursors to Ozone and SOx is a precursor to PM10).

The proposed changes to the emission offset trigger are similar to those changes proposed for Best Available Control Technology: The baseyear for net emission increase was changed from 1979 to 1990 and hourly triggers are replaced with daily triggers. These changes will tend to limit the application of emission offsets to larger emission increases[2].

Historically, the requirements of the APCD's new source review rules applicable to attainment pollutants are not often invoked. This fact is due to two primary reasons. First, most of the attainment pollutants are precursors to nonattainment pollutants. For example, reactive organic compounds and oxides of nitrogen are precursors to ozone, and oxides of sulfur is a precursor to PM10. Secondly, the new source review thresholds for attainment pollutants are much higher than for nonattainment. As the county continues to make progress towards attainment of all pollutants, the importance of Rule 803 will grow in the future.

Rule 806. Emission Reduction Credits

Emission Reduction Crediting is a system by which emission reductions from shutdowns or from controls which were not required as part of an attainment or maintenance demonstration may be stored as credit or "registered" for use later as offsets or for sale to other companies needing offsets. Current APCD rules do not allow emission reductions for later use or sale. The proposed rule establishes an emission reduction credit registration system. Allowing the registration of emission reduction credits will provide new or modified sources that need emission offsets with a source of offsets, and may facilitate growth in the county.

Current District Rules that Reference Existing Rule 102 or Regulation II

In addition to changes to Rule 102 and Regulation II and the adoption of Regulation VIII, staff is proposing modifications to existing APCD rules to update references to Rule 102 and Regulation II as appropriate. A table of the proposed changes is provided in Section 6.4 of this Staff Report.

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[1] This applies only to those sources that had a permit to operate as of November 15, 1990. If a source had an authority to construct but not a permit to operate, its net emission increase would not be eliminated.

[2] Very few sources have ever triggered offsets for nonattainment pollutants, and even fewer (one) have ever triggered offsets for attainment pollutants.

Amendment to the 1991 Air Quality Attainment Plan

As a part of this rule making effort, staff are proposing to modify the Air Quality Attainment Plan to delete the recommendation given in the 1991 Air Quality Attainment Plan that the minimum offset ratio for sources needing offsets be increased from 1.2 to 1 to 1.5 to 1. This change is not significant because the minimum ratio offers full mitigation and a reasonable net air quality benefit, and the proposed ratio increases from 1.2 to 1 to 1.5 to 1 when the source of the offsets is located more than 7.5 miles from the new or modified source.

1.4 Cost Implications

Cost implications of the proposed revisions are highlighted below and discuss the implications of the proposed revisions on the regulated community in aggregate.

1.4.1 Effect on the Regulated Community

Permit processing times.The proposed changes should reduce permit processing times in aggregate by accomplishing the following .

- Reduced permit processing times. The proposed revisions implement a state mandated permitting program, which requires the APCD to more quickly issue permits (authority to construct permits and permits to operate) for qualifying sources.

- Combined permits. The proposed revisions also afford large sources making small modifications the ability to obtain a combined authority to construct and permit to operate thereby eliminating one entire permitting cycle.

- Less complex permits. The addition of new exemptions and increases in the emission increase thresholds for Best Available Control Technology (for nonattainment and attainment pollutants) and emission offset requirements (for attainment pollutants) will result in less complex permits and permit requirements which should facilitate the issuance of permits.

Overall, staff expects the proposed changes to reduce the average time it takes the APCD to issue a permit. It is difficult to provide a quantitative assessment because this would require the APCD to estimate the location, size, and type of future permitting activity.

Permit requirements The proposed revisions change a number of permitting requirements. Staff expects that these changes will affect the cost industry incurs complying with the APCD's permitting program in a number of ways.

- New exemptions will reduce recordkeeping and reporting requirements.

- The increase in the amount of emission growth allowed before Best Available Control Technology (for sources of both attainment and nonattainment pollutants) and emission offset requirements (for attainment pollutants) are triggered will reduce the capital costs, permit processing costs, and the cost of emission offsets which industry incurs complying with these requirements.

- The change from hourly to daily emission thresholds for New Source Review requirements as a whole will reduce the costs industry incurs complying with recordkeeping and reporting requirements.

- The emission reduction credit registration system may allow new or modified sources the ability to obtain emission reductions at a lower cost than would otherwise be available.

APCD staff expects that in sum the revisions will lower the cost of the APCD's permitting and new source review program to the regulated community as a whole.

Fees. Possible implications of the proposed rule changes on fees are highlighted below.

- New exemptions will reduce permit, reevaluation, and emission based fees.

- The increase in the amount of emission growth allowed before Best Available Control Technology (for sources of both attainment and nonattainment pollutants) and emission offset requirements (for attainment pollutants) are triggered will reduce the number of new and modified sources subject to these complex permitting requirements. Less permit complexity will result in lower permit costs for large sources which are subject to reimbursable fee provisions.

- The increase in the emission growth allowed before Best Available Control Technology is invoked may result in slightly higher emissions and higher emission based fees.

- Additional emission reductions that result from the lower offset thresholds will result in lower emissions and hence reduced emission based fees for those sources that provide the emission reductions.

The emission reduction credit registration system will result in additional fees necessary for the APCD to evaluate and credit emission reductions as certified credits and to administer the source register.

In total, the proposed rule changes are expected to result in a slight decrease in overall district revenues.

1.4.2 Effect on District Staffing

Changes in APCD staffing levels that may result from the proposed revisions are comprised of two components: start-up and ongoing staffing requirements. Section 5 of this staff report lists those tasks the APCD will need to complete in order to implement the proposed revisions to Regulations II and VIII. Staff anticipates that 1.0 staff person will be needed over a six month period to develop the infrastructure necessary to successfully begin implementing the proposed rule changes. This staffing can be accomplished by short term internal reassignments in conjunction with the delay of accomplishment of other APCD goals.

Ongoing APCD staffing changes may result from the proposed changes to the APCD's permitting requirements.

- The proposed revisions allowing combined authority to construct and permit to operate applications and processing should reduce staff labor required to issue permits.

- The proposed revisions to Regulation VIII, including the revised Best Available Control Technology emission thresholds should reduce the number of sources subject to these requirements and hence APCD staff time required to assure sources fully comply with these requirements.

- The proposed new emission reduction credit registration system(new Rule 806) will require additional staff resources to implement and administer.

Providing a quantitative assessment of the effect of the proposed rule changes on APCD staffing would require information on exempt equipment and accurate predictions of the type and size of future growth. The APCD lacks information on exempt equipment for the simple reason that it is exempt. Detailed specifics of future source growth are beyond the APCD's predictive capabilities. Currently, there is not sufficient empirical data to make such an analysis. In general, the APCD's qualitative estimate is that the proposed changes will result in no change in the demand for labor required for permitting and compliance.

Because the proposed rule changes are not expected to increase staffing requirements, and APCD costs of administering its permitting program are currently adequately covered by existing fee rule provisions, staff is not proposing a revision to its fee rule at this time.

1.5 Comparisons to Other Local Districts

A summary comparison of the major regulatory elements of the proposed regulations to other local districts is given in Table 1.2. The areas selected for this evaluation are those local air districts in California which are adjacent to Santa Barbara County, or those with similar air quality problems. As indicated, there are some areas where the proposed revisions are more stringent than other districts, and others where the proposed revisions are less stringent.

1.6 Mandates

The proposed revisions address a number of new state and federal requirements. The most important of the additional requirements are highlighted below. Staff inserted references to applicable regulatory requirements in the text of the proposed rules, as bracketed comments to clarify mandated changes. For additional information on regulatory requirements, please refer to the draft rules (Attachment).

Table 1.2
Comparison of Key Provisions of the Proposed Revisions to Other Local District Rules

Regulatory Issue	Ventura	San Luis Obispo	Bay Area	San Joaquin	Monterey
Combined authority to construct/permit to operate	Yes	No	No	No	No
Permit Exemptions	Ventura has fewer	SLO has fewer	Bay Area has fewer	San Joaquin has fewer	Monterey has fewer
Exemption for drill rigs	Similar	SLO requires BACT but not offsets.	Bay Area exempts exploratory drill rigs	Similar	Similar
Permit Time Limits	Similar	Similar	Similar	Similar	Similar
Best Available Control Technology for nonattainment pollutants	Ventura is more restrictive	Similar	Bay Area is more restrictive	San Joaquin is more restrictive	Similar[1]
Best Available Control Technology for attainment pollutants	Similar	SLO is less restrictive[2]	Similar	Similar	Similar
Emission offset thresholds for nonattainment pollutants	Ventura is more stringent	Similar[3]	Bay Area is more stringent	San Joaquin is more stringent	Similar
Emission offsets thresholds for attainment pollutants	Ventura is less stringent[4]	SLO is less stringent	Bay Area is less stringent	San Joaquin is less stringent	Monterey is less stringent
Emission offset ratios for nonattainment pollutants	Ventura is more stringent[5]	SLO is less stringent	Bay Area is less stringent	San Joaquin is less stringent	Monterey is less stringent
Emission banking periodic renewals (five year renewals are proposed)	No	No	No	No	Annual

1 Less restrictive for PM-10 and SOx.

2 San Luis does not have delegation from USEPA to implement USEPA's Prevention of Significant Deterioration (Santa Barbara does). Therefore, while San Luis's limits may appear lower, more restrictive limits would be implemented in San Luis by USEPA.

3 Ventura and the other listed districts use "potential to emit" rather than "net emission increase" of a new or modified source as the basis for the offset trigger. APCD staff estimate that the proposed approach is consistent with the state mandate that requires no net increase in emissions from new or modified sources with a potential to emit of 25 tons per year or more.

4 Other districts do not establish specific offset emission thresholds for attainment pollutants.

5 Ventura dose not allow any emissions offset trading between certain areas.

- Amendments to the California Clean Air Act require the APCD to implement Best Available Control Technology for all new or modified stationary sources that have a potential to emit 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 (Health and Safety Code Section 40918).

- In 1992, the California state legislature passed legislation requiring Districts to establish an emissions banking system (Health and Safety Code section 40709, *et seq.*).

- In 1992, the Air Pollution Permit Streamlining Act was enacted (Health and Safety Code Section 42320, et seq.). The Streamlining Act requires local air districts to implement an accelerated permitting program for small and medium sources.

- In 1994 the USEPA conducted a comprehensive assessment of the APCD's New Source Review Rule and identified a number of rule deficiencies. The revised rules address these issues.

- USEPA added pollutants subject to prevention of significant deterioration (attainment pollutant) new source review.

- The 1990 federal Clean Air Act requires that Best Available Control Technology determinations for attainment pollutants consider alternatives to air toxics compounds.

- The 1990 federal Clean Air Act requires that the permitting process for nonattainment pollutants assess alternative sites, sizes, production processes and environmental control techniques for "major" new or modified sources.

- USEPA staff reviewed the APCD's draft rule revisions and identified a number of deficiencies that need to be corrected in order for USEPA to approve the rule.

- Finally, the proposed revisions were prepared in response to the APCD Board's direction for greater permit streamlining and efficiency in the permitting process.

1.7 Public Review

The proposed revisions were publicly noticed in May of 1995 and four workshops were held in late May. Two in Santa Maria, and two in Goleta. In addition, staff held numerous meetings with industry groups and representatives and with environmental organizations. Numerous changes were made to the rules in response to public input received to date (please refer to Section 9.2).

Over the last two years, the APCD's Community Advisory Council (CAC), which meets monthly, has met 23 times on the proposed revisions to Regulation II and VIII. The CAC also established a subcommittee to facilitate its review, and the subcommittee met an additional 10 times.

Out of these meetings the CAC identified over 100 issues where the CAC expressed some type of concern with the proposed regulations. Staff and the CAC have been able to come to agreement on all except two issues. These issues are given below:

1. The CAC recommended that the exemption for drill rigs be reinstated, and that the exemption be reevaluated once the state's portable equipment regulation is adopted (scheduled for March 27, 1997).

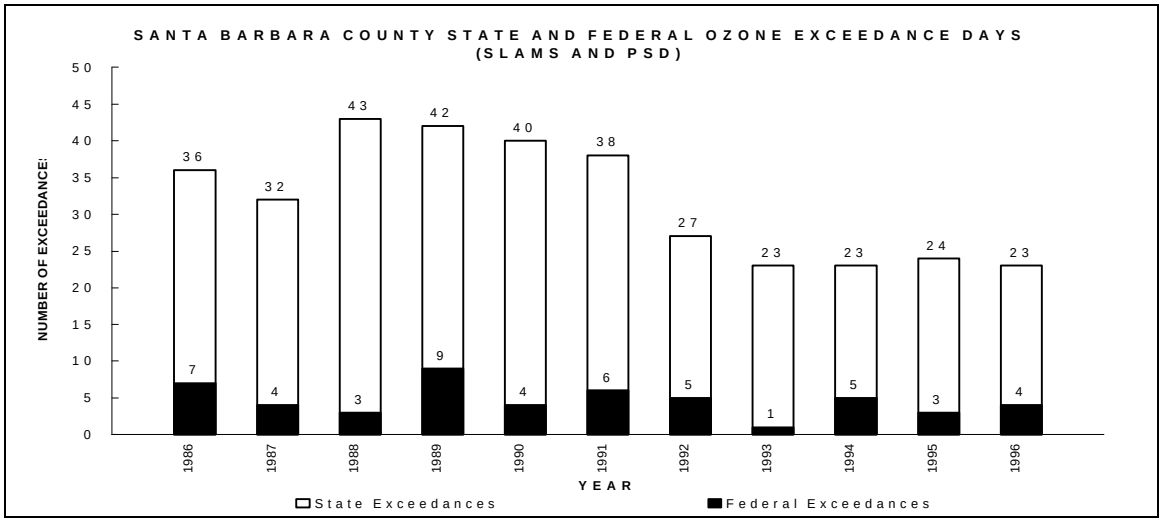
2. Staff disagrees and believes that drill rigs are a significant source of pollution and should be regulated either by the state's registration program or by APCD permit (sources have the option of registering with the state or complying with local district permit requirements).

3. The CAC recommended that new rule text at 201.D.2 be deleted. Text at 201.D.2 would subject dredges, pile driving equipment, pipe-laying barges, and derrick barges to permit. Similar to the concern above, the CAC concluded that it wanted to wait for the state's portable equipment registration program to be adopted before taking any action on the dredges, barges and pile driving equipment. The state subsequently approved the state's portable equipment registration regulation on March 27, 1997 and sources operating in state or federal waters are not eligible for registration. Staff recommends that this equipment be subject to permit and new source review because dredges, pipeline barges and pile driving equipment can be substantial emission sources for example, the 26,000 horsepower pipe-laying barge "Lorelay" emitted 42 tons of Nox in six weeks of operation.

2. Background and Mandates

2.1 Regulatory Background

The State and federal governments have set health-based air quality standards for ozone at 0.09 and 0.12 parts per million respectively, measured over a one-hour period. Ozone is viewed as a regional pollutant because the formation process takes several hours. (Ozone is not emitted directly; it is formed in the atmosphere by a series of chemical reactions involving sunlight, oxides of nitrogen, and reactive organic compounds.) At present, Santa Barbara County does not attain either the State or federal ozone standards. Air quality in the county has exceeded the state ozone standard (0.09 parts per million) an average of 25 days per year for the period 1992-1995, and federal ozone standard (0.12 parts per million) an average of 4 days per year during this same period. The number of violations per year are depicted graphically in the figure below. The state ozone standard is more restrictive than the federal standard to be more protective of the public's health.



As these data suggest, the county has made significant progress towards attaining the state ozone standard. The county has in recent years been close to attainment of the federal ozone standard. In fact, recently APCD staff have submitted a reclassification request to the US Environmental Protection Agency to have the county reclassified as an attainment area for the federal ozone standard. However, a bad ozone season in 1995 has jeopardized the county's reclassification. It is therefore important for the county to make continued progress towards ozone standard if the reclassification is to be successful, especially in the next couple of years.

Documented human health effects due to exposure to ambient concentrations of ozone above 0.08 parts per million include decreased physical performance during strenuous work or other activity, acceleration of the loss of lung capacity associated with aging, reduced ability to fight infection, aggravation of chronic respiratory and other diseases, and

increased asthma attacks[1]. The medical phenomenon of "attenuation of response" causes many to believe that air pollution is not affecting their health because the overt symptoms of exposure tend to fade. Recent evidence shows, however, that injury continues during attenuation[2].

Numerous studies have shown that elevated ozone can substantially reduce crop yields. A very recent study prepared for California estimated that just attaining the federal air quality standard would increase annual crop revenues in California by $80 to $110 million, and attaining a more stringent ozone standard (an eight hour daily standard of 0.07 part per million) would increase the annual benefits to $350 to $500 million[3].

These effects are not confined to highly elevated ozone concentrations. Spinach has been shown to incur a 10 and 30 percent yield loss over the ranges of 0.043 to 0.049 parts per million and 0.08 to 0.082 parts per million (seven hour seasonal average)[4]. Empire lettuce was reported to experience a 10 and 30 percent loss in yield at ozone concentrations of 0.053 and 0.075 parts per million, respectively (seven hour seasonal average)[5]. Other studies have shown a reduction in yields of 18 to 41 percent when ozone exceeded 0.08 parts per million during the day for 5-18 days over a growing season[6]. Adverse effects have also been found to occur with only a few ozone occurrences above 0.08 parts per million when average ozone concentrations exceed 0.05 parts per million for 4 to 6 hours per day for at least two weeks[7]. These conclusions apply to orchard crops as well. Valencia orange trees exposed to a seasonal 12 hour average of 0.04 and 0.075 parts per million had 11 and 31 percent lower yields than trees grown with very low ozone[8]. Avocado growth was reduced by 20 or 60 percent when exposed to 12 hour seasonal means of 0.068 and 0.096 parts per million[9].

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1 Air quality criteria for ozone and other photochemical oxidants, US EPA, 1978, EPA-600/8-78-004. Air quality criteria for ozone and other photochemical oxidants, US EPA, 1986, EPA-600/8-84-020aF-eF. Summary of selected new information on effects of ozone on health and vegetation: supplement to 1986 air quality criteria for ozone and other photochemical oxidants, US EPA, 1992, EPA/600/8-88/105F. Air quality criteria for ozone and other photochemical oxidants, US EPA, 1995, EPA/AP-93/044a-c.

2 ibid.

3 Most of the references for ozone effects were taken from an early release version of the US EPA's recent study of the ozone health standard. However, because this study was not formally released when the initial drafts of the this staff report were in preparation, references were provided to references cited in the study rather than to the study itself. These references are retained here even through the study is now publicly available (see Review of the National Ambient Air Quality Standards for Ozone: Assessment of Scientific and Technical Information; EPA-452/R-96-007, June 1996). In this instance, the reference is: Ozone NAAQS Benefits Analyses: California Crops, Abt and Associates, Inc., Report to U.S. EPA, July 1995.

4 Assessing the Impacts of Ozone on Agricultural Crops: II. Crop yield functions and alternative exposure statistics. J. Air Pollution Control Association. 34: 810-817.

5 ibid..

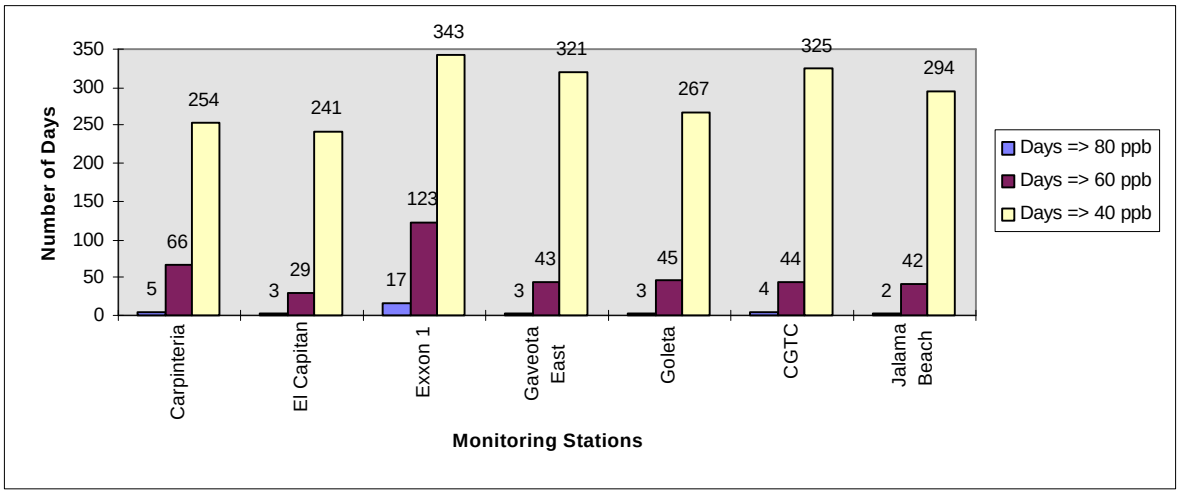
6 Air Quality Criteria for Ozone and Other Photochemical Oxidants, US EPA, 1978, EPA-600/8-78-004. See also: Air Quality Criteria for Ozone and Other Photochemical Oxidants, US EPA, 1986, EPA-600/8-84-020aF-eF; Summary of Selected New Information on Effects of Ozone on Health and Vegetation: supplement to 1986 Air Quality Criteria for Ozone and Other Photochemical Oxidants, US EPA, 1992, EPA/600/8-88/105F; Air Quality Criteria for Ozone and Other Photochemical Oxidants, US EPA, 1995, EPA/AP-93/044a-c.

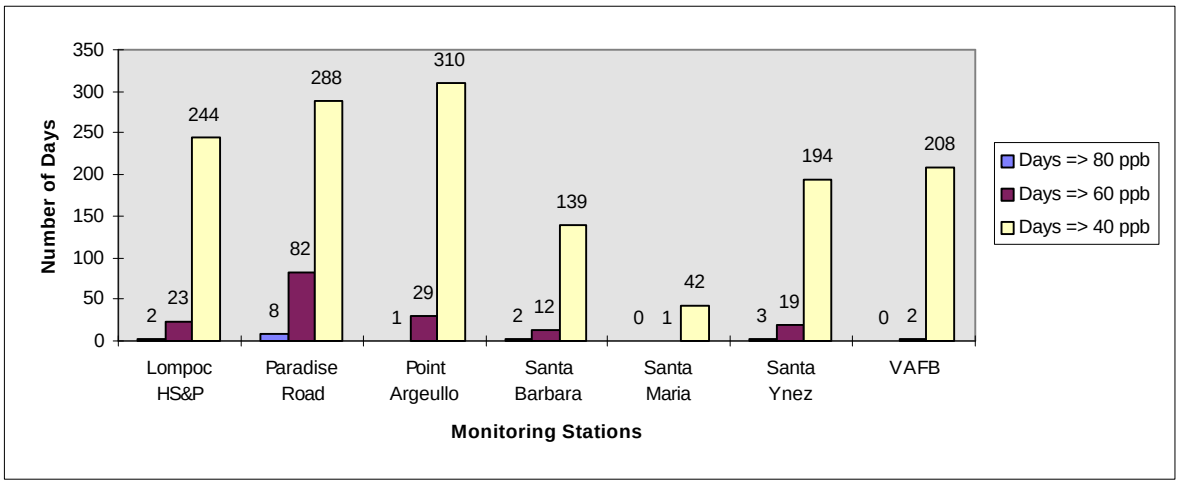
7 Factors Influencing Ozone Dose Yield Response Relationships in Open Top Field Chamber Studies. In Heck, W.W.; et al., eds. Assessment of Crop Loss from Air Pollutants. New York, NY: Elsevier Applied Science; pp. 141-179.

8 Sensitivity of Frost Resistance and Growth in Citrus and Avocado to Chronic Ozone Exposure. New Phytol. 118: 139-146.

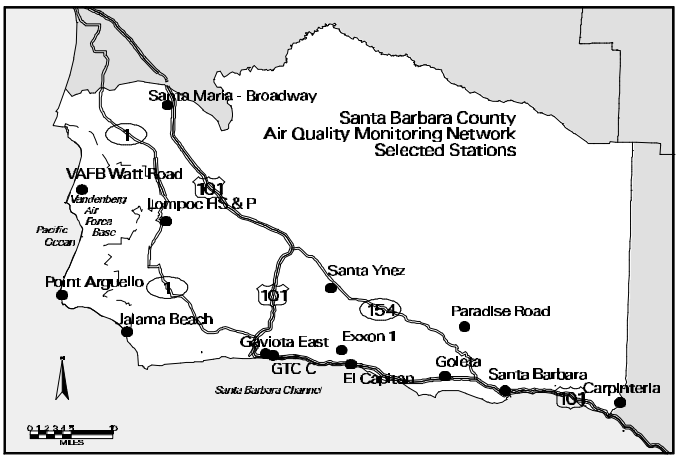
9 ibid..

For comparison purposes, the number of days per year, averaged over 1994 where ozone exceeded 0.04 parts per million (40 parts per billion), 0.06 parts per million (60 parts per billion) , and 0.08 parts per million (80 parts per billion), on a seven hour daily average, are summarized below.





The location of the monitoring stations listed in the figures above are depicted below.



As these data suggest, it is probable that ozone levels currently experienced in the county adversely affects crop yields and agricultural revenues.

In addition to biological systems such as humans and agricultural crops, ozone and other photochemical oxidants also damage non-biological materials such as paints, microfilm, metals, rubber and other elastic materials, and textiles and dyes[1]. The national economic impact of photochemical oxidants on materials has been estimated by a number of researchers at from $1.6 billion to $3.9 billion (1984 dollars)[2]. The adverse effects on materials are not confined to high levels of ambient ozone. Adverse effects on rubber and other elastic products and on fading of dyes has been well documented at concentrations less than 0.10 parts per million[3].

In its staff paper reviewing the ozone standard, EPA staff has proposed to replace the 0.12 parts per million one hour standard with a 0.07 to 0.09 parts per million eight hour standard. The eight hour standard is the maximum average of eight consecutive hourly ozone concentrations per monitoring station during each day. EPA is proposing the revised standard because of the body of scientific evidence that indicates adverse health effects occur at prolonged concentration less than 0.12 parts per million and above 0.07 to 0.09 parts per million.

Santa Barbara County is also a nonattainment area for the state's 50 microgram per cubic meter 24 hourly average particulate matter standard for particulate matter less than 10 microns in diameter (PM10). A number of studies have investigated the relationship between short-term (24 hourly average) PM10 concentrations and health effects. Researchers have found strong associations between increased mortality and PM10

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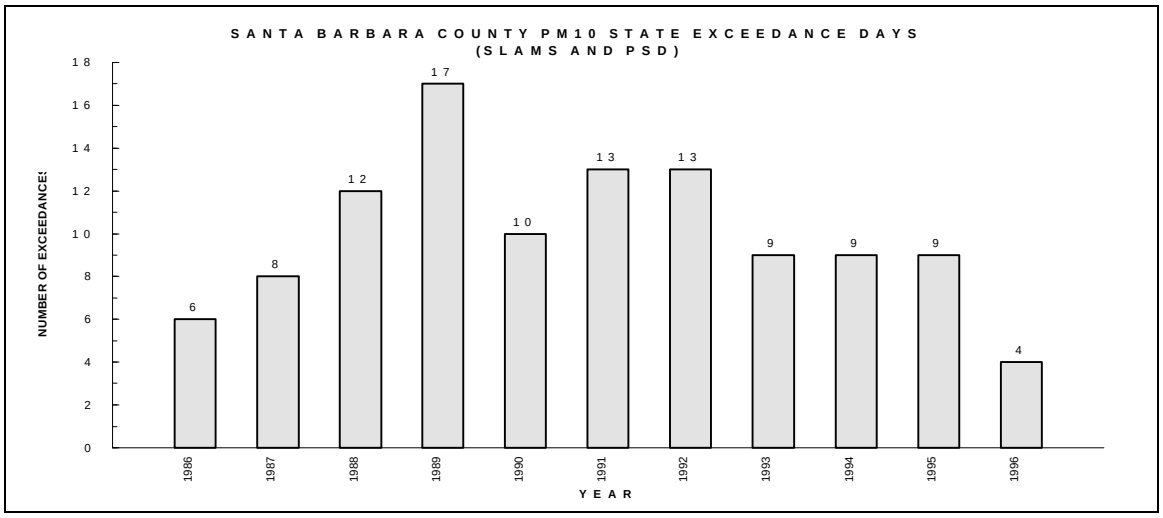
1 Air Quality Criteria for Ozone and Other Photochemical Oxidants, US EPA, 1986, EPA-600/8-84-020aF-eF. See Chapter 9 from Volume III.

2 ibid..

3 ibid..

concentrations in the range of 40 to 50 micrograms per cubic meter.[1] Other researchers have found associations between hospital admissions of the elderly for pneumonia and PM10 at concentrations of 52 micrograms per cubic meter and above.[2] The number of days where the 24 hour concentration of PM10 has exceeded the state standard are depicted below.



PM10 is both a directly emitted and a secondary pollutant. PM10 can be produced directly by natural or industrial dry grinding processes and indirectly via chemical reactions involving condensation and combustion. Secondary PM10 tends to be smaller and hence to pose a greater health risk than larger primary particles because they can lodge more deeply in the lungs. Pollutants most commonly involved in the formation of secondary PM-10 include oxides of nitrogen and oxides of sulfur. Hence, these compounds are treated as precursors to PM-10 and are treated as nonattainment pollutants.

In recognition of the greater health risks associated with smaller particle size, U.S. EPA has recently released a draft staff report in which U.S. EPA is proposing a new annual air quality standard for particles smaller than 2.5 microns in diameter.

The county is attainment for all other state and federal criteria pollutants (a criteria pollutant is a pollutant where the state or federal government has established an ambient air quality standard).

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[1] Air Pollution and Daily Mortality: Associations with Particulates and Acid Aerosols, D.W. Dockery, et al, Environ. Res. 59: 362-373, 1992.
The Association of Mortality and Particulate Air Pollution, in: Particulate Air Pollution and Daily Mortality: Replication and Validation of Selected Studies, J.M. Samet, et al, Prepared by: Health Effects Institute, Cambridge, MA. August 1995.
Daily Mortality and PM10 Pollution in Utah Valley. C.A. Pope et al Arch. Environ. Health 47: 211-217. 1992.

[2] Air Pollution and Hospital Admissions for the Elderly in Detroit, Michigan. J. Schwartz. Am. J. Epidemic. 139: 589-598.

2.2 Regional Air Quality Plans

Regional air quality planning programs are required by state[1] and federal statutes[2]. In essence, regional air quality plans represent multi-year work plans that establish specific regulatory actions local agencies need to implement in order for the region to attain and maintain state and federal air quality standards.

The county first adopted an Air Quality Attainment Plan in 1979 in order to attain the federal standard for ozone as required by the Clean Air Act Amendments of 1977. In 1982 a revised plan was prepared that projected that the federal ozone standard would be attained by 1984 in South County, which had been designated as nonattainment in 1977. The County failed to attain the ozone standard as projected in the 1982 Air Quality Attainment Plan. As a result, the USEPA required the District to prepare a revised plan, and in response, the APCD prepared the 1989 Air Quality Attainment Plan which was adopted by the APCD Board in June of 1990. The 1989 Plan contained the following proposed changes to the APCD's New Source Review Regulation:

- Require Best Available Control Technology for any net emission increase of nonattainment pollutants.

- Require lowest achievable control technology for emission increase of five pounds per hour or more of any nonattainment pollutant.

- Lower the offset threshold from ten pounds per hour to five pounds per hour.

- Increase the minimum offset ratio from 1.2 : 1 to 1.5 : 1.

- Require offsets for reactive organic compounds based on the relative reactivity of different organic compounds (some compounds are much more conducive to ozone formation than other compounds).

In December 1991 the APCD Board adopted the 1991 Air Quality Attainment Plan to demonstrate attainment of the state ozone standard. The 1991 Plan was prepared in response to the California Clean Air Act which requires areas in violation of the state's air quality standards to prepare a plan for attaining the state's health standards. By the time the 1991 Plan was adopted, the changes to new source review proposed in the 1989 Plan had not been implemented. The 1991 Plan committed to the development of a revised new source review rule to comply with a provision of the Act that requires nonattainment areas implement a permitting program that would allow no net emission increase from all new or modified sources of nonattainment pollutants. The 1991 Plan committed to the following:

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[1] California Health and Safety Code Section 40910 et seq

[2] Federal Clean Air Act Amendments of 1990 P.L. 101-549 Section 107(a)

- Lower the emission increase threshold for new or modified sources that triggers Best Available Control Technology and emission offset requirements.

- Establish some type of industry and community emission banking program.

- Increase the minimum offset ratio from 1.2 : 1 to 1.5 : 1.

In 1990, the federal Clean Air Act Amendments of 1990 were enacted. The 1990 Act established new and revised requirements for regional nonattainment plans. In response to the revised mandates, the APCD prepared the 1994 Clean Air Plan, which was adopted by the APCD Board in 1994. By the time the 1994 Plan was adopted the proposed new source review changes identified in the 1991 Plan had not been implemented. An element of the 1994 Clean Air Plan also updated the County's 1991 state air plan.

As a part of this rule making effort, we are proposing to modify the 1991 Air Quality Attainment Plan to limit the recommendation that the minimum offset ratio for sources needing offsets be increased from 1.2 to 1 to 1.5 to 1. As proposed, sources that obtain offsets within 7.5 miles need only provide offsets at a minimum ratio of 1.2 to 1. All other trades must meet the minimum 1.5 to 1 ratio. This change is not significant because the minimum ratio offers full mitigation and a reasonable net air quality benefit when the source of the offsets is located within 7.5 miles from the new or modified source.

The change in the minimum offset ratio proposed in the 1989 and 1991 Air Quality Attainment Plans requires clarification and discussion. The change was not proposed in response to the results of any quantitative assessment such as the use of photochemical simulation modeling. The change in the offset ratios was proposed because the county was (and remains) an area that fails to attain the state and federal health based ozone standards, and the county therefore needs to do everything feasible to attain the ozone standard. The increase in the offset ratio was designed to help accomplish this end.

This is not to say that ozone formation has not been exhaustively studied in Santa Barbara County. The cause and control of the ozone air quality problem in Santa Barbara County has been subject to extensive study. Numerous highly expensive and comprehensive regional air quality and meteorological data collection and simulation modeling programs have been conducted on ozone formation in the greater Santa Barbara area[1]. While these studies were highly successful in reaching a number of program objectives, they were unable to provide a quantitative answer on how much mitigation (size of the offset ratio) is required to eliminate the impact of increased emissions from a new or modified sources.

The inability of these studies to provide a quantitative answer to the issue of offset ratios is due to several factors. The best ozone modeling tools are regional photochemical models. These models are capable of assessing large scale changes in regional emissions but not small scale localized changes needed to assess offset ratios. An investigation of offset ratios

[1] For example, the Joint Interagency Modeling Study (JIMS), 1980; South Central Coast Cooperative Aeromatic Modeling Program, 1984-1985; and an extensive photochemical simulation modeling program conducted by the California Air Resources and the APCD for the 1989 Air Quality Attainment Plan.

is also highly dependent on the meteorology used in the evaluation. Different meteorological conditions will produce different conclusions about offset requirements. Regional photochemical models programs are highly complex undertakings and require an extensive and expensive air quality and meteorological data collection program. Developing model inputs for just a few days can and has cost well in excess of one million dollars. Increasing the number of days to be modeled compounds these costs. It is for these reasons that the federal government establishes offset ratios by statute rather than by study.

2.3 State Requirements

The APCD's permitting and new source review program is authorized and mandated by the California Health and Safety Code[1]. The proposed revisions address a number of additional state statutory permitting requirements that the current rules do not meet. Recent amendments to the California Clean Air Act impose different requirements for Best Available Control Technology and offsets depending upon the severity of a district's ozone problem . For example, "moderate" nonattainment areas must require 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[2]. In addition, stricter requirements may be applied to areas, like Santa Barbara County, which contribute to ozone violations in other counties[3].

In 1992, the California state legislature passed legislation requiring districts to establish a system by which emission reduction credits can be created[4]. No timeline was established for the implementation of a banking rule. It has always been the APCD's intention to develop a banking rule in conjunction with a revision to the APCD's new source review rule.

In 1993, Assembly Bill 2288 was passed. It prohibits variances from requirements to obtain a permit for Title V sources, changes permit renewal obligations, and establishes other requirements related to the Title V program[5].

In 1992, the Air Pollution Permit Streamlining Act was enacted[6]. The Streamlining Act requires local air districts to implement an accelerated permitting program for small and medium sources.

The APCD's proposed revisions to the Permitting and New Source Review Regulations contain provisions which specifically address these new mandates.

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1 Health and Safety Code Sections 42300 et seq., 40918 et seq.).

2 Health and Safety Code Section 40918.

3 Title 17 of the California Code of Regulations section 70600.

4 Health and Safety Code section 40709, et seq.

5 Although a substantial portion of this bill changed Health and Safety Code sections commencing with 42301, the remainder of its changes are scattered throughout Division 26, the primary repository of California air law.

6 Health and Safety Code Section 42320, et seq.

2.4 Federal Requirements

The APCD's permitting and new source review program is mandated by federal statute. Section 110 of the federal Clean Air Act requires states to develop and implement a permitting program for stationary sources of air pollution. Sections 165 and 173 establish permitting requirements applicable to new and modified sources that seek to locate or expand in attainment and nonattainment areas, respectively, and requires states to develop and implement a permitting program consistent with these requirements.

The USEPA is the federal agency responsible for implementing the federal Clean Air Act. In response to the Act's mandate for a permitting and new source review program, the USEPA promulgated regulations clarifying minimum requirements for an approveable state permit program[1].

There are also a large number of other USEPA regulations and policy statements that establish and clarify permitting requirements. For example, federal law requires emission reductions to have specific characteristics if they are to be converted to emission credits. In particular, the following attributes are required in the USEPA Emissions Trading Policy Statement: surplus, permanent, quantifiable, enforceable[2]. The additional requirement that the emission reduction be "real" is a consequence of the federal requirement that all creditable reductions be actual emissions.

In response to changes in federal regulations, staff is proposing several minor modifications to the APCD's Prevention of Significant Deterioration rule (Rule 803). Additional pollutants that trigger Prevention of Significant Deterioration (attainment pollutant)[3] review have been added. They are primarily pollutants emitted by municipal waste incinerators, and are not expected to impact any existing sources. In the circumstance where a source will impact a Class I area, the APCD has added a requirement that the source analyze the air quality related values identified by the Federal Land Manager[4]. Santa Barbara County has one Class I area: the San Rafael Wilderness. The Federal Land Manager is the U.S. Forest Service. The scope of the energy, environmental and economic impacts required in the Prevention of Significant Deterioration Best Available Control Technology analysis will require consideration of alternatives to toxics to implement USEPA direction[5].

The federal Clean Air Act amendments of 1990 require sources with a potential to emit more than 100 tons per year to include an analysis of alternative sites, sizes, production processes and environmental control techniques[6].

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1 The requirements are given at 40 CFR 51.165 and 40 CFR 51.166.

2 51 FR 43814, 12/4/86

3 As defined in the proposed regulations, attainment pollutants refers to those pollutants other than nonattainment pollutants. In addition to those pollutants where the county attains applicable air quality standards, attainments as used here and it the proposed rules also includes pollutants for which there is no air quality standards (for example, beryllium and mercury).

4 Comment Letter, USEPA to D. Allard, dated March 23, 1994; page 12, section C.3.b.7, and 40 CFR 52.21, exp (p).

5 Comment Letter, USEPA to D. Allard, dated March 23, 1994; page 4, section C.3.b.7.

6 Section 173.a.5 of the federal Clean Air Act.

Federal statutes require that the District require operators to pay fees sufficient to cover the costs of application processing, hence the cost reimbursement provisions at section H of Rule 806, Emission Reduction Credits.[1]

Federal permitting regulations and statutes allow very little in the way of exemptions,[2] and U.S. EPA will not allow a state or local agency to exempt a source out of applicable requirements for obvious reasons. It is for this reason that staff added emission limits on exemptions and made other changes to exemption limits.

[1] 42 USCS 7410.a.2.K.

[2] The only exemptions allowed under federal regulation are certain routine maintenance, repair, and replacements (see definition of modification under 40 CFR 51.166); and mobile sources regulated under Title II (see Section 302(z) of the Act).

3. Discussion of Major Changes

3.1 Regulation II. Permits

Regulation II is currently comprised of twelve rules. Of the proposed revisions to Regulation II, the most significant proposed changes are found in modified Rule 201 (Permits), modified Rule 202 (Exemptions to Permit), and Rule 208 (Action on Applications - Time Lines). These changes are discussed below.

Rule 201. Permits

A provision has been proposed to Rule 201 that allows the Air Pollution Control Officer to issue a combined authority to construct and permit to operate. Under current APCD permitting requirements, sources must normally file for and obtain both an authority to construct and then a permit to operate. The provision allowing the issuance of a single permit will reduce the time it takes to obtain a permit.

Staff is proposing language that would subject equipment used for the dredging of waterways, or equipment used in pile driving adjacent to or in waterways, or pipe-laying and derrick barges, to permit. Staff is proposing this change because these sources are potentially significant emitters. In response to a request from industry, the APCD reviewed an ATC for one of the newer oil and gas processing facilities that included installation of platforms and pipelines. Based on potential as well as actual emissions, derrick barges and pipe-laying vessels are extremely large emitters of air contaminants. The potential emissions associated with this one project from pipe-laying and derrick barges totaled more than 500 tons of NOx. Emissions during a six week period for the 26,000 horsepower pipe-laying barge "Lorelay" alone were 42 tons of NOx.

Rule 202. Exemptions to Permit

A standard element of all APCD rules describes which facilities and/or equipment do not need permits. The basis for the exemption provisions is that certain types of activities/equipment emit such small quantities of air pollution that such emissions do not materially contribute to the County's air pollution problem. Another important consideration is regulatory efficiency. The APCD's resources are better spent on larger sources of pollution that comprise the vast majority of the county's stationary source emission inventory than on very small sources.

Staff's proposed changes to permit exemptions were developed in an attempt to provide for exemptions while meeting federal permitting requirements. Federal regulations and statutes allow very little in the way of exemptions[1], and U.S. EPA will not allow a state or local agency to exempt sources out of applicable requirements for obvious reasons. The problem

[1] The only exemptions allowed under federal regulation are certain routine maintenance, repair, and replacements (see definition of modification under 40 CFR 51.166); and mobile sources regulated under Title II (see Section 302(z) of the Act).

confronting staff is therefore how to allow for exemptions while meeting federal mandates and regulatory requirements.

In an attempt to provide for exemptions for equipment that has very small emission potential while at the same time complying with federal permitting requirements, staff has made the following major changes to its permit exemption rule.

- An aggregate limit on the exemption of 25 tons per year for external combustion equipment (for example, for boilers over one million BTUs per hour heat input) was added (see Rule 202.G).

- For certain other exemptions that already contained an aggregate limit (also referred to as a "gatekeeper"), the aggregate limit per equipment category was lowered from 150 pounds per day to 10 tons per year (for example, see Rule 202.H, I, and J)

- The ten ton per year exemption limit was not applied to internal combustion engine exemptions because of the current linkage between Rule 333 (which establishes emission limits for piston powered internal combustion engines) and provisions of Rule 202 pertaining to internal combustion engines. Staff intends to revise Rule 333 within the next year. The relationship between the applicability of Rule 333 and exemptions afforded under Rule 202 will be an area of primary consideration in the rule making effort.

- A substantial number of new exemptions were added covering a diversity of activities such as engines used to power amusement rides and other short-term entertainment, semi conductor manufacturing activities, and other exemptions (see Rule 202).

Staff is proposing to eliminate the exemption for drill-rigs because staff believes that drill rigs are a significant source of pollution and should be regulated either by the state's registration program or by APCD permit (sources have the option of registering with the state or complying with local district permit requirements). If the exemption is not eliminated, drill rigs will be exempt from both.

According to data compiled by the Ventura County APCD, drill rigs range from 1000 to 2100 horsepower, consume 750 to 1000 gallons of diesel fuel per day, and operate 15 to 100 days per site. Based on these data, emissions of NOx would range from over 2 to 21 tons per drilling project.

The statewide portable equipment registration program was specifically developed for drill rigs and other portable stationary engines, and APCD staff feel that drill rigs operating in Santa Barbara County should be subject to the registration program as they are elsewhere in California. Portable equipment such as portable drilling rigs that move from county to county has long been a difficult permitting challenge for both portable equipment operators and local permitting agencies. The state's Portable Equipment Registration program[1] is designed to resolve the permitting problems associated with portable equipment by

[1] Health and Safety Code section 41750 (AB 531).

consolidating permitting requirements under a single agency. In response to the state's program, provisions of Rule 202 pertaining to drilling rigs were replaced with text that indicates portable drilling rigs are exempt until 180 days after the state's portable equipment regulation takes effect. At that time, the equipment must either be in compliance with the state's portable equipment regulation or be under APCD permit. (See 202.F.2)

It is difficult to provide an overall indication of whether the proposed changes to Rule 202 represent a more or less restrictive permitting program. The changes primarily affect exempt equipment, and the APCD does not have a good data base on exempt equipment because the equipment is exempt and is therefore not subject to the same level of reporting requirements as permitted equipment and activities. The APCD's overall objective in revising Rule 202 is to keep small inconsequential activities/sources/emissions out of the permitting program so it can focus on larger sources that represent the vast majority of pollution from stationary sources in the county. For this reason a number of exemptions were added. The reduction in the aggregate emission limit per exemption category may result in additional devices being subject to permit, but the addition of new exemptions will result in fewer equipment being subject to permit.

Rule 208. Action on Applications - Time Limits

Draft Rule 208 implements state mandates for streamlining the permit process for small and medium sized sources of air pollution. The proposed revisions guarantee permit processing times depending on the size and complexity of the source. For example, the processing time limits for the APCD to take final action on authority to construct applications for qualifying medium and small sources is reduced from 180 days to 90 and 30 days, respectively.

3.2 Regulation VIII. New Source Review

Regulation VIII, the APCD's New Source Review Regulation is comprised of seven rules, most of which are highly interrelated. The most significant proposed changes to Regulation VIII are highlighted below.

Rule 801. New Source Review

In the APCD's current new source review regulation, the "net emission increase" of a new or modified source of air pollution is used to determine when the requirements of new source review apply. The APCD is proposing to change its definition of net emission increase which will affect multiple new source review rules. The proposed definition is given in Rule 801.

In the current rule the term "Net Emission Increase" is used to define the emission increase from a new or modified source of pollution that triggers new source review requirements such as Best Available Control Technology, air quality modeling, and emission offsets. Currently, Net Emission Increase or NEI is the sum of all increases and decreases of an affected pollutant, caused by the installation of a new source or the modification of an existing source since July 2, 1979. This calculation is made by summing all permitted

emissions of a pollutant for a source which was built or modified since July 1, 1979 with all actual emission reductions of the pollutant which have been documented by an Authority to Construct and a Permit to Operated since that date.

In the draft rule, the baseline date from which emission increases and decreases are summed has been changed, and, in addition, another type of emission trigger is proposed for the Best Available Control Technology trigger for nonattainment pollutants (potential to emit). The change to net emission increase is summarized below. The change to potential to emit is described below under the discussion of proposed Rule 802.

The current New Source Review Rule measures net emissions increase from a baseline date of 1979. This means that the emission trigger used to determine new source review and other requirements is based on all the emission changes (increases and decreases) since 1979.

The United States Environmental Protection Agency has commented to the APCD that the use of a 1979 baseline for calculating net emission increase is inappropriate because it allows for reductions in net emission increase to be carried on a permit for such a long time that unmitigated emissions growth may occur which could interfere with a district's ability to attain the federal health based ozone standard[1].

The approach in the current draft goes back to the baseline date concept but moves the baseline to 1990. A baseline of 1990 is consistent with the emission baseline (emission inventory) used in the 1994 Clean Air Plan, and will therefore ensure that the new source review rule is consistent with the regional air quality plan. APCD rules must be consistent with the Clean Air Plan[2]. In addition to consistency with regional programs by eliminating emission decreases prior to 1990, the new definition of net emission increase will wipe out any emission increases prior to 1990 and will allow some sources to experience emission growth (10 tons/year) before triggering offsets which would not have been allowed under the current rule.

Rule 802. Nonattainment Review - Best Available Control Technology

Best Available Control Technology represents a stringent level of pollution control and is required for certain new or modified sources of pollution. In response to the requirements of state law[3], the APCD is proposing to modify the amount of nonattainment pollutant emission growth allowed before Best Available Control Technology is imposed. The change was crafted to minimize unnecessary burdens on industry while at the same time complying with the law.

Currently, Best Available Control Technology is required for any new source or modification to an existing stationary source if the emissions of the new or modified source result in a total net emission increase since 1979 of over 2.5 pounds per hour of any non-attainment pollutant. In the current draft the trigger level is a potential to emit of 25 lb. per

[1] Letter from MattHaber, U.S. EPA Region IX, to Doug Allard, APCO, SBCAPCD, p. 6, March 23, 1995.
[2] Section 173(a) of the Federal Clean Air Act.
[3] Health and Safety Code Section 40918.

day or more for a new stationary source or per project for a modification at an existing source. Thus, the proposed Best Available Control Technology threshold was changed in three ways (Refer to Rule 802.C in the Attachment for proposed text).

- The threshold criteria was changed from net emission increase to potential to emit of a new stationary source or for each project for modifications at an existing stationary source. As indicated above, net emission increase refers to the change in emissions over some period of time and is calculated by summing all the creditable emission increases and decreases at a source since 1979. The potential to emit is the maximum capacity of a source to emit, unless the source is subject to enforceable limits which restrict the potential to emit.

- The applicability criteria was changed from "new or modified source" to "new source" or "project" at an existing source. Under the present definition, the trigger level is based on emissions from the entire source.. This is still true for new sources, however for modifications at an existing source, the trigger is based on emissions from the "project." A "project" is a proposed activity covered under one or more authority to construct permit applications where the activities are at the same stationary source, are related, and the permit applications are submitted within 12 months the issuance of the PTO for a related project. Please see the explanation of project in Section 8 of this staff report for a full explanation of the term "project" including examples.

- The threshold level was changed from 2.5 pounds per hour to 25 pounds per day. The change in threshold levels from shorter to longer averaging times generally reduces the chance of the trigger being exceeded. However, in this instance the averaging time was increased, and at the same time, the size of the threshold was reduced. Hence, the effect of the change will depend on the operating cycle of each source. For sources with essentially continuous operations that operate for less than 10 hours per day, the proposed threshold is less stringent than the old threshold. For sources that operate more than 10 hours per day, the new thresholds will be more stringent. For batch operations the new limits are less restrictive.

While this proposed revision to the BACT trigger could be viewed as less stringent than the current definition, in practice, the current rule as implemented often leads to a determination that only a RACT level of control should be required for small modifications to existing small and medium sources. The proposed change in APCD rules roughly achieves the same result but avoids the necessity of doing a cost analysis by staff prior to determining that RACT control levels are justified due to the cost of implementing the most efficient technology. The proposed approach will comply with state law and exempt small projects (at any size source) from the Best Available Control Technology for nonattainment pollutants. Staff believes that Best Available Control Technology is inappropriate for small equipment and processes (low emissions) and the proposed changes will allow staff to focus on those sources for which Best Available Control Technology was intended.

Rule 802. Nonattainment Review - Emission Offsets

Emission offsets are emission reductions that larger new or modified sources must obtain in order to locate or expand in the county. The emission offset threshold or trigger is the amount of emission increase from a new or modified source that triggers emission offset requirements. The emission offset liability is the amount of emission reductions that the source must obtain, once offsets have been triggered.

APCD staff is proposing a modified approach to both offset triggers and offset liabilities for nonattainment pollutants (see Rule 802.E for rule text). The proposed change was made in response to state law, and represents an attempt at balancing current requirements with the requirements of state law. The modified approach was also crafted to provide flexibility while at the same time meeting state mandates.

State law[1] requires that the APCD implement a permit program that allows no net increase in emissions from sources which emit or have the potential to emit 25 tons per year or more of ozone precursors (reactive organic compounds or oxides of nitrogen). In response to this mandate, staff is proposing to retain the use of net emission increase as the basis for determining when emission offsets are required for nonattainment pollutants, with the following changes:

- Change in the baseyear for net emission increase from 1979 to 1990.

- Revised thresholds that triggers offsets of 150 pounds per day or 25 tons per year for carbon monoxide, and 55 pounds per day or 10 tons per year for other nonattainment pollutants. The PM-10 thresholds remained the same except for the hourly threshold which was deleted. The current offset thresholds are 10 pounds per hour, 240 pounds per day, or 25 tons per year of any nonattainment pollutant except for PM-10 in which case the threshold is 10 pounds per hour, 80 pounds per day, or 15 tons per year.

Overall, the two changes to the offset threshold both strengthen and weaken offset requirements. The proposed revisions forgive a source's emission growth that occurred between 1979 to 1990 and could therefore result in emissions growth which would have been mitigated under the current rule. However, the proposed lower offset threshold will require offsets for future projects that would otherwise not have been required to offset emissions growth. On balance, the two proposed changes will allow more growth before emission offsets are triggered for a handful of sources while allowing less emission growth for many other sources.

It should be emphasized that very few sources in the county are affected by offset requirements. In the last ten years only five sources have been subject to emission offset requirements. Most sources in the county have not been required to offset emissions increases and would not have triggered the offset requirements even if they had been

[1] Health and Safety Code Section 40918.

permitted under the requirements of the proposed rule. Only five percent of the permitted sources in the county emit more than 10 tons per year of any non-attainment pollutant.

The elimination of the hourly threshold will tend to reduce the probability of a source triggering offsets (as explained above, the probability of a source exceeding any emission threshold will generally increase as one moves to shorter averaging times due to minute to minute, hour to hour, day to day, and month to month variability in source's activity and hence emission levels). The change to daily emission therefore represents a slight relaxation of the current rule. The inclusion of more liberal limits for CO also represents a relaxation.

Lowering the offset threshold to 10 tons per year is a strategy intended to comply with the state statute that requires no net increase in sources with a potential to emit of 25 tons per year or larger. To comply, the sum of the emission offsets currently in place since 1990, plus the emission offsets required after the rule is in place, must exceed the growth in emissions from sources with a potential to emit of more than 25 tons per year that do not require offsets. That is, the Health and Safety Code (Section 40918) requires no net emission increase in emissions from sources with a potential to emit 25 or more tons per year. The proposed rule says that all sources with a net emission increase of 10 tons per year must offset the full net emission increase. Thus, the proposed rule would require, for example, a source with starting emissions of one ton per year and a growth of 11 tons per year (net emission increase of 11 tons per year) to offset the 11 tons per year, and a 1000 ton source with growth of 11 tons per year (net emission increase of 11 tons year) would also be required to offset 11 tons per year. For the proposed approach to be equivalent to Health and Safety Code mandate, the offsets obtained from the proposed approach, plus the offsets obtained under the current rule since 1990, must be more than or equal to the offsets that would have been obtained had the district required sources with a potential to emit of 25 or more tons per year to offset all net emissions increases.

Rule 803. Prevention of Significant Deterioration

The proposed changes to Rule 803 do not represent major changes. There are no significant new mandates related to Prevention of Significant Deterioration that must be addressed in these proposed revisions.

For sources which emit attainment pollutants, the Best Available Control Technology trigger was changed in two ways (refer to Rule 803.D in the Attachment for proposed text).

- The revised definition of net emission increase, as described above (change in baseyear from 1979 to 1990).

- The pounds per hour threshold was replaced with pounds per day.

On balance, the proposed revision should be less restrictive than the current rule. For existing sources the change in baseyear for net emission increase will allow sources more growth before the source triggers Best Available Control Technology requirements. The change in trigger from pounds per hour to pounds per day should also reduce the probability of a source triggering Best Available Control Technology requirements.

Rule 803. Prevention of Significant Deterioration - Offset Threshold

The proposed changes to offsets requirements for attainment pollutants will loosen offset requirements compared to the present rule. The offset trigger for attainment pollutants is also based on net emission increase, and similar to the discussion for nonattainment pollutants, the change in the baseline for calculating net emission increase from 1979 to 1990 in effect forgives emission growth that has occurred between this period. The proposed change in the offset trigger from pounds per hour to pounds per day will reduce the chance that a source will trigger offset requirements.

Rule 803. Prevention of Significant Deterioration - Offset Ratio

The offset ratio requirements for attainment pollutants is unchanged.

Rule 806 Emissions Reduction Credits (Emission Banking)

Emissions Reduction Crediting is a system by which emission reductions from shutdowns or from controls which were not required may be stored as credit or "registered" for use later as offsets or for sale to other companies needing offsets. Current APCD rules do not allow emission reductions to be stored for later use. The proposed rule contains a provision that establishes an emission reduction credit registration system (see Rule 806 for rule text). Allowing the registration of emission reduction credits will provide new or modified sources that trigger emission offsets with a source of offsets, and may facilitate growth in the county. For sources that generate emission reduction credits, the registration system will allow sources to realize financial gains that would be more difficult to realize in the absence of proposed Rule 806.

4. Cost Implications

Permitting and new source review regulations require affected sources to internalize the costs of air pollution. There are three primary types of costs associated with permitting and new source review.

- Permit processing time: Time is money. Reducing permitting time will reduce permitting costs. One goal of the Regulation II/VIII revision is to reduce the time it takes to get a permit.

- Permit requirements. Permitting and new source review regulations set pollution limits via permit conditions. Examples include the installation of pollution control equipment, use of low pollution materials, and record keeping and reporting. Meeting permit requirements costs money.

- Permit fees. Permit fees allow the APCD to ensure that sources in the county comply with pollution control requirements. The APCD's permitting program represents the core of its air pollution control program. Fees should be kept at the bare minimum necessary to allow the APCD to implement and enforce its permitting program. Reducing fees is a final cost objective of the APCD revision to its Regulation II and VIII rules.

These cost elements are highly interrelated. For example, reducing permit requirements also shortens the time it takes to obtain a permit, because the permit is less complex. Permit fees are related to permit complexity and will experience a decrease as well.

The following table summarizes the aggregate estimated effect of the proposed revisions. Following sections describe the cost implications of the proposed revisions in greater detail.

Table 4.1
Cost Implications of Proposed Revisions

Rule	Change	Costs - Permitting Time	Costs - Permit Requirements	Costs - Fees	Cumulative Cost Effect[1]
201	Combined Authority to Construct Permit to Operate for small sources and small modifications at existing sources	Decrease	Neutral	Decrease	Decrease
202	Decrease in the size of aggregate exemption limit per equipment category	Increase	Increase	Increase	Increase
202	Addition of new exemptions	Decrease	Decrease	Decrease	Decrease
202	Elimination of the drill rig exemption	Negligible due to the statewide portable	Negligible due to the statewide portable	Negligible	Negligible

[1] This column indicates the likely direct impact of the proposed change on sources directly affected by the change from the perspective of the source..

Table 4.1
Cost Implications of Proposed Revisions

Rule	Change	Costs - Permitting Time	Costs - Permit Requirements	Costs - Fees	Cumulative Cost Effect[1]
		equipment program	equipment program		
208	Permit streamlining, reduced processing times	Decrease	Neutral	Neutral	Decrease
802	Change in emission growth allowed before Best Available Control Technology for nonattainment pollutants is triggered.	Decrease	Decrease	Decrease	Decrease
803	Change in emission growth allowed before Best Available Control Technology or attainment pollutants is triggered.	Decrease	Decrease	Decrease	Decrease
802	Change in emission growth allowed before emission offsets are required for nonattainment pollutants	Increase	Increase	Increase	Increase[1]
803	Change in emission growth allowed before emission offsets are required for attainment pollutants	Decrease	Decrease	Decrease	Decrease
802	Change in emission offset ratios	Neutral	Decrease	Neutral	Decrease
806	Banking of emission reduction credits	Neutral	Neutral	Neutral	Decrease
Total	Sum of all changes	Decrease	Decrease	Decrease	Decrease

4.1 Permit Processing Time

One cost of the APCD's permitting program to industry is permitting time. Longer permitting times generally indicate more review cycles and complex requirements which consume more resources than shorter permitting timelines and less complex requirements. The proposed rules contain a number of provisions which affect or may affect permitting timelines.

Rule 201. Standardizing the issuance of combined authority to construct and permit to operate permits for small sources (see Rule 201.E.3) will eliminate one entire permit cycle and substantially reduce permitting time for qualifying sources. In aggregate, the changes to 201 are expected to reduce permitting time for the average source.

Rule 202. The addition of the proposed new exemptions will eliminate additional equipment/activities from permit (for example, see Rule 202.P and T). Less equipment on a permit makes a permit less complex. The proposed reduction in the aggregate amount of

[1] The emission growth trigger for nonattainment pollutants was changed in several ways. For the largest sources that have experienced emission growth since 1979, the changes will allow more source growth than allowed under the current rule. However, this condition applies only to a handful of sources. For most sources the proposed changes will reduce the emission growth allowed before emission offset requirements are triggered.

exempt emissions allowed per stationary source and equipment category may result is additional equipment/activities being subject to permit. Such a change would primarily affect larger sources and tend to increase permit complexity for these sources The elimination of the drill rig exemption will require sources obtain a registration from the state or a permit from the APCD. However, the registration program was established by the state to reduce permitting time and costs for portable equipment operators, including drill rig operators.

Rule 208. Rule 208 contains provisions implementing a state mandated permitting program that will reduce the time the APCD has to issue permits for qualifying small and medium sized sources. The rule reduces the time the APCD has to act on a permit application once the application has been deemed complete by 50 to 80 percent (see Rule 208.E.3 and E.4). Proposed revisions also allow an applicant to appeal incompleteness determinations to the APCD Board (see Rule 208.D.3).

Rule 802. Changing from an hourly to a daily offset trigger is more stringent for sources that operate more than 10 hours a day but less stringent for sources that operate less than that. The addition of new exemptions in Rule 202 could decrease the number of sources requiring new source review while the gatekeepers could increase that number. On balance, the changes to the new source review thresholds and Rule 202 exemptions are expected to have a neutral effect on the cost of the APCD permitting program

Rule 803. With one exception, the implications of the changes to new source review requirements for attainment pollutants mirror the implications of the change to APCD's new source review requirements for nonattainment pollutants discussed above (Rule 802). The emission offset trigger for attainment pollutants has been relaxed as well which will also reduce permit complexity for any sources that trigger offset requirements for attainment pollutants.

4.2 Permit Requirements

Until air pollution regulations were implemented, air pollution costs were kept external to companies that generated air pollution. Costs were borne by those affected by the air pollution in terms of adverse health impacts, and materials and agricultural damage. Air pollution regulations therefore by their nature internalize the costs of pollution for the pollution generators. This is accomplished in a variety of ways. A primary regulatory method of reducing pollution is the permit to pollute, also known as the authority to construct and permit to operate. There are a variety of costs associated with permits to pollute. All permit holders are required to maintain some form of records to assure they don't pollute by more than they are allowed. Hence, adding equipment and/or additional requirements will tend to increase recordkeeping costs. All new source review requirements have cost implications such as installing and maintaining air pollution control equipment, obtaining emission offsets, and implementing ambient air quality monitoring and modeling requirements. By internalizing the cost of air pollution, permitting requirements act as an incentive to pollute less.

Rule 202. Equipment under permit is normally subject to recordkeeping and reporting requirements. The new exemptions proposed in Rule 202 will tend to reduce recordkeeping and reporting costs while the provisions that may add equipment to permit (decrease in the sourcewide exemptions allowed) may increase these costs. Recordkeeping and reporting are needed to assure a source complies with applicable regulatory requirements.

Rule 802. As indicated above, the emission trigger for Best Available Control Technology has been increased for nonattainment pollutants and will result in fewer companies having to undergo review for Best Available Control Technology. Compliance with Best Available Control Technology requires companies to engage in a comprehensive evaluation of control technology options.

The proposed changes will, for most sources, decrease the amount of growth allowed for nonattainment pollutants before emission offset requirements are triggered, and may result in additional companies needing to comply with emission offset requirements. The proposed change to emission offset ratios may result in higher or lower costs for companies needing offset credits depending on the location of the proposed source and the location of the offset credits.

Rule 803. The implications of the proposed changes to new source review requirements for attainment pollutants are essentially the same as for nonattainment pollutants discussed above. The exception is again that the emission offset trigger for attainment pollutants has been relaxed which will reduce the probability of a source triggering offset requirements for attainment pollutants.

Rule 806. Proposed new Rule 806 (Emission Reduction Credits) will allow companies to bank emission reductions for later use or sale and may facilitate the ability of companies to locate or expand in the county. Although ERC certificates will not create a preexisting right to emit air pollution, ERC certificates may generate appreciable revenues for the companies that bank emission reduction credits.

It is difficult to generate a quantitative estimate of the effect of the proposed rule changes on costs. Estimating the effect of the proposed changes on permit exemptions requires firm data on exempt equipment which the APCD does not have because exempt equipment is not subject to the same recordkeeping and reporting requirements as permitted equipment. Estimating the impact of the proposed changes on new source review would require a prediction of the location, size and type of stationary source growth, the size, type, and location of sources that generate emission reduction credits, the cost of emission reduction credits, and the cost of BACT. Qualitatively, APCD staff expect the changes in aggregate to result in less equipment being subject to permit requirements, and fewer permits being subject to new source review requirements which should reduce industry's cost of complying with the proposed rule changes.

4.3 Fees

The cost of cleaning the air and keeping it clean is placed on the sources that cause the pollution. Autos are heavily regulated by the Air Resources Board and pay state and local fees for air pollution. APCD regulates stationary sources and charges fees for services provided. Larger sources represent a heavy burden on air quality and pay higher fees.

The fees the APCD collects must be directly related to regulatory work the APCD performs. For this reason, the APCD employs different fees for different purposes. The fees most likely affected by the proposed rule changes are the APCD's permit processing fees and annual emission fees. The APCD charges permit processing fees to support its permit processing program. It charges annual emission fees (including both annual emission and Air Quality Attainment Plan fees) to support ongoing regulatory programs such as enforcement, rule development, ambient air quality monitoring, and regional air quality plan development. The permit fees are in general based on the complexity of a source while the emission fees are based on the amount of pollution generated by permitted equipment at the facility.

Annual emission fees, including both the Air Quality Attainment Plan and Annual Emission fees, are based on either permitted or actual emissions from permitted equipment/activities. Emission fees are calculated by summing emissions per stationary source, and multiplying the emissions by a fee rate that is expressed in dollars per ton. Proposed changes that subject additional equipment to permit will tend to increase emission based fees and those provisions that exempt additional equipment will reduce these fees.

There are two types of permit processing fees: a filing fee and an evaluation fee. There are two types of evaluation fees, fee schedule and reimbursable fees. Sources subject to fee schedule based reevaluation fees (generally the less complex sources) pay a fee that is based on the amount of polluting activity at a source. Under the reimbursable fee provisions a source is billed for the actual labor APCD staff spends on the source's permit.

Rule 201. The APCD expects a reduction in fees as a result of permit streamlining provisions that allow for the consolidation of Authority to Construct and Permit to Operate and shortened processing times based on facility size and complexity. The loss of revenue to the APCD, i.e. the savings to industry, is estimated below under the assumption that all small sources are able to take advantage of the combined authority to construct/permit to operate permit:

Average annual number of permits issued (authority to construct and permit to operate) 1990-94	361
Estimated fraction of small source permits issued:	50 percent
Estimated average number of small source permits issued:	180
Estimated reduction in permits issued due to rule change:	90
Fee reduction (filing fee) per permit action:	231
Estimated industry cost savings/APCD revenue reductions	$19,170

Rule 202. Reducing equipment and activities exempt from permit will increase permit and emission based fees. Increasing the permit exemptions will of course have the opposite effect. While new exemptions are proposed and may decrease source's total permitted emissions, the exemptions were added because the equipment has minimal emission potential. Hence, any decrease in permitted emissions will be very small. The reduction in the aggregate amount of exemptions allowed per source may result in additional equipment being subject to permit at larger sources and hence a slight increase in emission based fees.

The addition of new exemptions will reduce the evaluation fees because less equipment will be subject to permit. The reduction in the aggregate exemption limits may increase evaluation fees because more equipment may be subject to evaluation fees. Staff expect these changes in total to result in small changes to permit fees effecting only a few of the larger sources in the county.

Rule 802. The increase in the Best Available Control Technology trigger will result in fewer sources being subject to Best Available Control Technology which will reduce permit fees for sources subject to this requirement. The decrease in the emission offset trigger for nonattainment pollutants may result in some additional sources being subject to offset requirements and permit fees related to these requirements. The intent of both requirements is to reduce emissions. Thus, the increase in emission threshold for Best Available Control Technology may result in increased emissions and hence increased emissions based fees while the decrease in the emission trigger for offsets may reduce emissions and smaller emissions based fees for companies subject to offset requirements.

Rule 803. The fee implications of the proposed changes to new source review requirements for attainment pollutants will again follow those changes described above for nonattainment requirements (Rule 802). The proposed offset trigger for attainment pollutants is more relaxed than the current trigger, which could result in higher emissions and higher emissions based fees.

Industry has argued that lowering the aggregate amount of exemptions allowed per source would not improve air quality, but only serve to increase fee revenues by putting additional equipment on permit. Staff differs with industry's contention. Many APCD programs such as air monitoring, regional air quality planning, emission inventory, and rule development are needed because of air pollution emitted by sources in the county. Making only those companies that are subject to emission control requirements pay for the entire cost of these programs is unfair. These costs should shared by all who pollute.

Lowering exemption thresholds and putting additional equipment on permit will also tend to lower the amount of pollution emitted by the equipment. Putting exempt equipment on permit will subject the equipment to permitting and annual emission fees. The APCD has witnessed many instances where the regulated community has gone to great lengths to avoid costs associated with air pollution permits and fees. Lowering exemptions would put these powerful forces to work at cleaning up emissions from currently exempt equipment.

5. District Staffing

Changes in APCD staffing that may result from the proposed revisions are comprised of two components: start-up and ongoing staffing requirements.

5.1 Start-up Staffing Requirements

The proposed revisions contain substantial changes to the APCD's permitting and new source review rules, and establish new regulatory programs (for example, Rule 806 - Emission Reduction Certificates).

Implementation of the new and revised rules will be carried out by the Engineering Division of the APCD. In anticipation of these rules, progress is currently under way to accommodate many of these changes. Complete implementation will take considerable time and will include the following tasks:

Table 5.1 Staffing and Implementation Impacts

Rule	Rule - Issue	New Task?	New - Revised Forms?	New - Revised Procedure?	Staff and Outreach Training?	Cumulative Effect - Short-term Staffing
201	Consolidated ATC/PTO for qualifying sources	No	Yes	Yes	Yes	Increase
202	Change in exemptions	No	Yes	Yes	Yes	Increase
208	Expedited permits	No	Yes	Yes	Yes	Increase
802	Change in emission triggers for Best Available Control Technology and emission offsets for nonattainment pollutants.	No	Yes	Yes	Yes	Increase
803	Change in emission triggers for Best Available Control Technology and emission offsets for attainment pollutants	No	Yes	Yes	Yes	Increase
806	Emission Bank	Yes	Yes	Yes	Yes	Increase
Total	Sum of changes	-	-	-	-	Increase

As indicated, the proposed revisions will require substantial work by the APCD to implement. The majority of these tasks will be accomplished within six months following the adoption date. Shortly after rule adoption, APCD staff plan to hold implementation workshops on the revised rules. APCD staff project 1.0 staff person will be needed over a six month period to develop the infrastructure necessary to successfully begin implementing the proposed rule changes.

5.2 Ongoing Staffing Requirements

The proposed revisions to Regulations II and VIII contain some provisions that may decrease the long-term need for permitting staff while other provisions may increase this need. Expected implications of the proposed changes on the APCD's ongoing staff needs are summarized below.

Table 5.2 Ongoing Staffing Requirements

Rule - Requirement	Effect on Long-Term Staffing
Rule 201 - Consolidated ATC/PTO	Decrease
Rule 202 - Change in Exemptions	Neutral
Rule 208 - Expedited Permits	Decrease
Rule 802 - Change in emission triggers for Best Available Control Technology and offsets for nonattainment pollutants	Neutral
Rule 803 - Change in emission triggers for Best Available Control Technology and offsets for attainment pollutants.	Neutral
Rule 806 - Emission Reduction Credits	Increase
Cumulative Change	Neutral

A quantitative assessment of the effect of the proposed rule changes on APCD long-term staffing needs would require complete information on exempt equipment and accurate predictions of the type and size of future growth. Such changes are beyond the APCD's capabilities to predict. In general, the APCD's qualitative estimate is that the proposed changes will streamline many aspects of the APCD's permitting process resulting is a decreased demand for APCD staff labor. This saving may be offset primarily due to staff labor needed to implement the proposed source register. The actual outcome will depend on how much the source register is used. Any increase in staffing that may result is adequately covered by the fee provisions of Rule 210. Staff is therefore not proposing a revision to Rule 210 in response to the proposed rule revisions at this time.

6. Proposed Rules

The following subsection describes the proposed rule revisions. An overview of the permitting process illustrating key interrelationships between rules and regulations is depicted in Figure 6.1 (figures are given at the end of the chapter). Full text of the proposed revisions is given in the Attachment. The proposed rule text contains a number of annotations clarifying the nature and source of most proposed rule changes.

6.1 Proposed Rule 102. Definitions

The proposed rule begins with a reference that explains that definitions can be found in three places: in Rule 102 if they apply to the entire rule book, in the rule itself if they apply only to that rule, and in the first rule of a regulation if they apply to the entire regulation.

Most of the definitions added to proposed Rule 102 are from existing Rule 205.C. Other definitions were added at the direction of USEPA (e.g. air quality related value, construction, federally enforceable, major modified stationary source, secondary emissions). The rest of the new definitions were designed by District staff. For example, "small source", "medium source", and "large source" were designed to allow faster and easier permit processing for relatively less complex and lower emitting sources.

Several definitions were deleted. "Best Available Control Technology", for example, is now defined with the provisions that trigger it. In its place in Rule 102 is a reference to the appropriate rules. "Cancellation of Application" was moved to Regulation II. "CARB" was changed to "Air Resources Board." "Stationary Source" was replaced with the existing definition from 205.C.

Some definitions were modified. To ensure consistent enforcement, test methods were added to definitions containing physical characteristics that require testing to be determined. The reference toJalama Creek in the definition of "Zones of Santa Barbara County" divides the ocean into North and South Zone so that the zone of a tideland or Outer Continental Shelf source can be determined for offset purposes.

The APCD's approach to defining "replacement" has been subject to considerable comment by U.S. EPA. The issue of "replacements" affects Rule 102, Regulation II and Regulation VIII. Because the rules are interrelated with respect to replacements, the rule changes for replacements are discussed here.

In the current rule the replacement of a piece of equipment with an identical piece of equipment is exempt from permit provided emissions are not increased and there is no potential for violating any ambient air quality standard (202.A.6). Also under the present rule, "equivalent replacements" are subject to permit review but are not subject to new source review requirements provided the replacement:

- Has an operating design capacity or actual demonstrated capacity less than or equal to that of the original equipment [205.C.1.a.21)]

- Does not replace a piece of equipment that is subject to permitted emission limits. [205.C.1.a.21)]

U.S. EPA commented on rule section 202.A.6 and stated that identical replacements may not qualify as an allowable exemption and the net emission increase associated with a replacement must therefore be evaluated before the APCD can determine no permit is required[1]. U.S. EPA also commented on rule section 205.C.1.a.21) indicating that the APCD cannot exclude replacement from its definition of modification because replacements may not be routine and may constitute a comprehensive life extending project which are the very changes new source review was intended to cover[2]. In short, the only exemptions allowed by U.S. EPA are "routine replacements[3]".

In response to U.S. EPA comment and federal mandates, APCD staff is proposing to revise its approach to "replacements." Staff is proposing to revise the definition of "modification" in Rule 102 to provide that "non-routine replacements" shall constitute a modification. Staff also added a new exemption in Rule 202 that exempts "equivalent routine" replacements from permit review and new source review. Under the proposed approach, replacements will need a permit unless the replacement constitutes an "equivalent routine" replacement. Staff does not believe that this change represents a major departure from the district's current approach to "replacements." For more details on this provision please refer to Rule Clarification Issues, Section 8 of this staff report.

6.2 Regulation II. Permits

Regulation II contains the administrative rules that guide applicants through the APCD permitting system. It addresses the fundamentals of what needs a permit, what is exempt, when and how to apply for a permit, permit application contents, standards, and timeframes for submittal of materials and actions by the APCD and the applicant. A tabular comparison of current and proposed revisions to Regulation II is given in Table 6.1(attached at the end of the chapter due to its length). A tabular comparison of the major elements of the proposed revisions to rules of other local districts, either adjacent to Santa Barbara County or with similar air quality problems is given in Table 6.2 (also attached at the end of the chapter).

The proposed changes to Regulation II are many, and in sum, amount to a major overhaul of the permitting rules. The proposed revisions simultaneously accomplish several goals:

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1 Letter from MattHaber, U.S. EPA Region IX, to Doug Allard, APCO, SBCAPCD, p. 2, March 23, 1995.

2 ibid.. at pp. 5-6.

3 40 CFR 52.21.(b)(2)(iii)(*a*)

- Broad sections of proposed new Regulation VIII (New Source Review) consist of language until now located in Regulation II. Many other changes to Regulation II are necessary to accomplish compatibility with proposed new Regulation VIII.

- The Permit Streamlining Act (AB 2781, Sher), now Health and Safety Code Section 42320 *et seq*., necessitates revisions to Regulation II.

- The APCD recognizes the need to provide relief in the form of new exemptions for certain small sources of emissions, while at the same time heeding necessary guidelines and recommendations of the U.S. Environmental Protection Agency, California Air Resource Board, and the California Air Pollution Control Officers Association.

- Staff and industry have, over the years, identified many issues relating to format, organization, clarity and consistency with other APCD rules and regulations that need to be addressed.

6.2.1 Rule 201 (Permits Required)

Proposed Rule 201 has been reformatted to begin with an applicability section, and as previously, defines who must obtain an Authority to Construct (ATC) and a Permit to Operate (PTO). The Source Compliance Demonstration Period (SCDP), is now more specifically defined and described.

An option is provided for a consolidated authority to construct/permit to operate for certain sources. An internal Policy & Procedure will be prepared to implement consolidation for modifications where there will be no construction of new equipment, the emission increase does not trigger Best Available Control Technology, there is no air quality impact, and no need for a source compliance demonstration period. A source meeting these criteria that wishes to take advantage of the consolidated ATC/PTO would file a combined ATC/PTO application. Only one application and evaluation fee would be required.

Language more appropriate to permit application contents has been moved to proposed Rule 204 (Applications), i.e., former Section 201 C. now resides at proposed Section 204 E.

New language is proposed on requirements for Permit Reevaluation, Notification to Officials, Posting of Authority to Construct or Permit to Operate, Absence of Permitted Equipment, andInoperability of Permitted Equipment.

New text has is proposed that clarifies APCD permitting requirements for dredges and pipeline and derrick barges: such activities are subject to permit.

6.2.2 Rule 202 (Exemptions to Rule 201)

Rule 202 lists sources, equipment, and activities exempt from permit under Regulation II and from new source review under Regulation VIII. Equipment and activities exempt under

Rule 202 do not count towards net emission increase or potential to emit except when aggregate de minimis is zeroed by adding the emissions to a source's permitted emissions and net emissions increase. Key provisions of Rule 202 are illustrated in flowchart format in Figure 6.2.

Proposed Rule 202 has been reformatted to begin with a section on applicability, and as previously, defines who is exempt from the requirement to obtain an authority to construct or a permit to operate. The rule has been reformatted to group similar categories of equipment together.

New exemptions are provided for a number of new equipment/activities included but not limited to temporary equipment, amusement rides, air shows, portable steam cleaning equipment, fuel cells, architectural coating application, rail cleaning, air brushing, aerobic wastewater treatment equipment, stenciling and dyeing, paving activity, contaminated soil bioremediation, safety flares, and barbecue equipment. Exemptions for certain semiconductor manufacturing operations have been added subject to a one ton per year per equipment category emission limit.

A 25 ton per year gatekeeper has been provided for combustion equipment. Other exemptions (besides those subject to the 1 ton or 25 ton gatekeeper) are subject to a 10 ton per year gatekeeper.

The de minimis modification exemption has been revised to reflect daily emission limits, rather than hourly limits. Language has been added clarifying how this provision will be implemented and restrictions on its use.

Exemptions for engines on work-over rigs and drilling rigs are deleted. Text has been added to indicate that the equipment is exempt until the California Air Resources Board has its portable equipment regulation in place. At that time, the equipment must either comply with the state's regulation or be under APCD permit.

Rule text has been added that allows the use of actual emissions with recordkeeping or potential to emit without recordkeeping for the purpose of determining if equipment at a source qualifies for exemption (i.e., is less than an applicable gatekeeper).

6.2.3 Rule 203 (Transfer)

Proposed Rule 203 has been reformatted to begin with a section on applicability. The rule is changed from a one-sentence requirement to several paragraphs which cover change in business name only, transfer of ownership only, change in operator only and review of permit conditions. Also included is language based on Health & Safety Code Section 42301(f) requiring compliance with all applicable rules and regulations.

6.2.4 Rule 204 (Applications)

Proposed Rule 204 has been reformatted to begin with a section on applicability. The rule is now a comprehensive summary of information that may be required to be submitted with

an application. Much of Section E. is language formerly located in Rule 201, Section C. and includes information which applies only to those sources whose emissions trigger requirements for sources subject to Best Available Control Technology (Best Available Control Technology), Air Quality Impact Analysis (AQIA), Description of Emission Reduction Credits (ERCs), and Health Risk Assessment (HRA).

6.2.5 Rule 205 (Standards for Granting Applications)

Proposed Rule 205.C has been largely superseded by Regulation VIII. The definitions pertaining to New Source Review now appear in Rule 102, if they apply to the entire rule book, or in Rule 801, if they apply only to Regulation VIII. The remaining language has been left fairly intact, with some clarification. Language has been added pertaining to the requirements of CEQA and the rules in effect at the time of application completeness.

Sections of Rule 205 that dealt with resource recovery and cogeneration have been deleted from the rule since they are no longer treated differently than other industrial processes as there is no growth allowance in the Clean Air Plan for these sources. This addresses a major inadequacy US Environmental Protection Agency identified in the current rule.

6.2.6 Rule 208 (Action on Applications - Time Limits)

Proposed Rule 208 has been reformatted to begin with a section on applicability. Much of the language is new and was developed in response to permit streamlining legislation requirements for expedited permit processing times. Definitions of "Large", "Medium", and "Small" sources are in Rule 102. Permit processing and applicable time lines are illustrated below. Note that the determination of which category a source fits into depends not only on the quantity of emissions from the source, but also on the complexity of the source. Permit processing times for large sources remain unchanged, processing times for medium and small sources have been shortened as indicated by the following Table. The permitting process and timelines are depicted graphically in Figure 6.2.

Table 6.3 Permit Processing Time Limits

ACTION	LARGE SOURCE (days)	MEDIUM SOURCE (days)	SMALL SOURCE (days)
Application completeness determination	30	30	30
Additional Information to Correct Incompleteness	120	120	120
Appeal of Second Incompleteness Determination	60	60	60
Final Action on Complete Application for an ATC	180	90	30
Final Action on Complete Application for Permit to Operate	120	60	NA combined ATC/PTO

Small sources electing to review drafts of their permits are subject to medium source processing time, and permits are not automatically issued if the APCD fails to meet the 30 day deadline.

6.3 Regulation VIII. New Source Review

Regulation VIII is the APCD's New Source Review regulation and describes the permitting requirements applicable to larger new or modified sources of nonattainment and attainment pollutants. It also contains the APCD's proposed Rule 806, Emission Reduction Credits. A comparison between the current and proposed rules for major rule elements is given in Table 6.4 (end of chapter). An inter-district comparison of these same requirements is given in Table 6.5 (end of chapter).

6.3.1 Rule 801 (New Source Review)

Proposed new Rule 801 states general requirements and other aspects of general applicability of the APCD's new source review rule (Regulation VIII).

Section C provides definitions of terms used throughout Regulation VIII. New definitions have been added to clarify requirements. For example, definitions of net emission increase, federally enforceable, permanent, quantifiable, and surplus were added to this end.

6.3.2 Rule 802 (Nonattainment Review)

Proposed new Rule 802 is composed predominantly of the new source review provisions of Section C of existing Rule 205. It provides the main requirements which new or modified sources of nonattainment pollutants must meet. The requirements of Rule 802 are depicted in flowchart format in Figure 6.4. A comparison employing numerical examples demonstrating the implications of the proposed revisions are given in Table 6.6 (attached at end of chapter). Additional clarifications of many of the key requirements of Rule 802 are provided in Section 8.

The Best Available Control Technology trigger has changed (for criteria pollutants) from source Net Emission Increase of 2.5 pounds per hour to a 25 pounds per day for a new stationary source or project at an existing source. Hence, some cases that currently trigger Best Available Control Technology would not do so under the proposed rule. Replacements with a potential to emit over 25 pounds per day that do not qualify as "equivalent routine" replacements have the same obligation as other equipment installations to minimize emissions via Best Available Control Technology. A reconstructed source, however, is subject to full NSR analysis. A reconstructed source is one that costs over 50 percent of a comparable entirely new source.

A change to the offset threshold is also proposed. The magnitude of the threshold would change from 5 pound per hour (if AQIA shows air quality standard interference), 10 pound per hour, 240 pounds per day, or 25 tons per year to 55 pound per day, or 10 tons per year. Although this appears to decrease the thresholds, it is important to note that the Net Emission Increase is the sum of emission changes since November 15, 1990 instead of 1979, resulting in a smaller Net Emission Increase for sources with emission increases before November 1990.

Staff is proposing to change the emission offset ratios for nonattainment pollutants.

Table 6.7 Offset Ratios

Issue	Existing Approach	Proposed Rule
Zones	North and South County	Same as existing
Minimum Offset Ratio	1.2:1 within 15 miles of the proposed source	1.2:1 within 7.5 miles of the proposed source
Maximum Offset Ratio	Up to 6:1 depending on the distance	1.5:1 within zone 6.0:1 between north and south
Intercounty Offsets	Allowed between South County and Ventura County	6.0:1 contemporaneous
North - South County Offsets	Not allowed	Allowed at 6:1

The three major proposed changes to the offset ratios follow:

- Minimum offset ratio: Under the existing rule, the minimum offset ratio of 1.2:1 is allowed for offset sources located within 15 miles of the new or modified source needing offsets. Under the proposed rule, the minimum offset ratio would remain at

1.2:1, however, the minimum ratio would apply only to those offset sources located within 7.5 miles of the source needing offsets.

- Maximum offset ratio: Under the existing rule, the offset ratio varies by distance, and can reach 6:1. Under the proposed rule changes, the maximum offset ratio is also 6:1. The new maximum ratio applies to offset trades between the North and South zones of the air district and for offsets originating in adjacent portions of Ventura County.

- Intracounty offsets: Under the existing rule, trading offsets for non-attainment pollutants between North and South county is not allowed. Under the proposed rule, such trading is allowed at 6:1. This change is recommended because of the body of scientific evidence which indicates that air pollution is transported between north and south county.

It is difficult to determine if the proposed ratios are less and more stringent than the existing requirements. All ratios are designed to result in net air quality benefit. The issue is therefore whether the new ratios will result in equivalent or greater benefit than current requirements. It is difficult to provide a quantitative assessment because such an analysis would depend on predictions of the location and size of sources needing offsets and the location of size of sources providing offsets. Such predictions are beyond the APCD's scope. Staff compared the offsets requirements of the old and new rule for projects that triggered offsets requirements in the past. The new rule would have produced fewer NOx emission reductions but more ROG reductions.

6.3.3 Rule 803 (Prevention of Significant Deterioration)

Proposed new Rule 803 is essentially the same as the Prevention of Significant Deterioration provisions of Section C of existing Rule 205. USEPA has delegated to the District jurisdiction to administer the Prevention of Significant Deterioration program. The requirements in this rule are consistent with requirements made necessary by the federal delegation. A graphic depiction of Rule 804 is given in Figure 6.5.

The hourly Best Available Control Technology thresholds would be eliminated for criteria pollutants. This reduces the ability of the District to prevent emission "spikes" but the reduced recordkeeping is a substantial benefit to industry. Energy, economic and environmental concerns would be factored into the Prevention of Significant Deterioration Best Available Control Technology analysis under the change to this definition requested by USEPA. This change incorporates a USEPA administrative appeal decision that requires consideration of the effects of a given control alternative on emissions of toxics or hazardous pollutants. Section 803.F.3 implements 40 CFR 52.21(p) by requiring analysis of impact on air quality related values as identified by the Federal Land Manager.

The nature of the offset threshold would change in that Net Emission Increase would be the sum of emission changes since 1990 instead of 1979. The magnitudes of the thresholds and the offset liabilities remain unchanged. However, three new pollutants have been added to the Prevention of Significant Deterioration list in response to comment by the US Environmental Protection Agency comment. These waste incineration pollutants that

trigger full Prevention of Significant Deterioration review have been added in accordance with 40 CFR 52.21.(b)(23). The threshold for Visibility, Soils and Vegetation Analysis has been changed from 20 pounds per day to the various threshold quantities in accordance with 40 CFR 52.21(o).

Federal requirements to apply Best Available Control Technology to any project within 10 kilometers of a Class I area that would have an impact exceeding 1 microgram per cubic meter and to analyze the impact on air quality related values have been added. Other provisions in this rule are substantively unchanged from existing Rule 205.C.

6.3.4 Rule 804 (Emission Offsets)

This rule sets out the conditions required to fulfill an offset obligation once it has been triggered by Rule 802 or 803. Existing Rule 205 used the term "tradeoffs" to refer to emission reductions used to offset emission increases. To avoid confusion, all references to "tradeoffs" have been eliminated in favor of the term "offsets". No change in meaning is achieved or intended.

Although most of the provisions of this rule are unchanged from existing Rule 205.C, some federal requirements that have evolved since 205.C was last substantially modified were added. For example, the requirement that emission reductions proposed as offsets be surplus, enforceable, quantifiable and permanent is new. Also, the transport mitigation provisions of the federal Clean Air Act have been added. Although new, prohibitions on credit for shifts-in-load and inelastic demand arise from state and federal requirements that creditable decreases be actual decreases, which must be “real”.

The conditions under which offsets outside the County may be used have been changed. New provisions require the county where the offsets are obtained to have the same or worse air quality than Santa Barbara County, and that the applicant demonstrate that the emissions in the adjacent county where the offsets are obtained contribute to the air pollution problem in Santa Barbara County. Consistent with these requirements, the rule allows offsets from the adjacent area of Ventura County (Oxnard coastal plain) at a ratio of 6 to 1 provided the emission reductions are contemporaneous.

6.3.5 Rule 805 (Air Quality Impact Analysis and Modeling)

This rule applies to both attainment and nonattainment pollutants, but only once the amount of either have already triggered AQIA under Proposed new Rules 802 or 803. The requirements of the proposed rule exist already in current Rule 205. The only substantive change is the updated USEPA Modeling Guideline document, and the language that provides for use of the current version, eliminating the need to revise the rule each time the method is updated. The definition of stack height has been conformed to USEPA guidance. The mechanism by which modeling costs incurred by the APCD are reimbursed is described in Section D.1.

6.3.6 Rule 806 (Emission Reduction Credits)

The main purpose of an emission reduction credit rule is to preserve the baseline calculation for "actual emissions." No other right is granted by the Rule and no preexisting right to pollute is created by adoption of the Rule.

Emission reduction credit systems are widely considered to be a way to encourage voluntary emission reductions. An ERC system provides a way to convert emission reductions that meet certain eligibility requirements to credits that can be used as emission offsets. The existing offset process requires that reductions be processed at the same time as the permit for the emission increase. An ERC system makes this contemporaneous processing unnecessary by providing a way to officially establish offsets for future use.

A system for creating and managing emission reduction credits is being added to the current NSR rule. As such, the rule is entirely new. The APCD does not hold ERCs while they are not being used. Rather, the APCD ERC system is a ledger, called the Source Register, that tracks who was issued how much credit for what type of pollutant.

The rule establishes eligibility requirements for emission reductions proposed for use as offsets. Applications for credit must be complete before a reduction occurs so that the amount of reduction may be quantitatively determined. ERCs as well as offsets must be surplus, permanent, quantifiable, enforceable and must otherwise meet the requirements of APCD rules and the US Environmental Protection Agency in order to be eligible. In order to use reductions currently recognized under existing banking contracts with the District, the reduction must meet the conditions of the old banking agreement and the requirements of Rule 806. If a source is exempt from permit and the operator wishes to get ERCs for emission reductions from that source, a permit must be obtained for the reductions. In those instances where the source of the ERCs is exempt from APCD permit by statute, a contract between affected parties is required. Also, the US Environmental Protection Agency requires that ERCs be discounted by Reasonably Available Control Technology at the time of use. This ensures that the ERCs remain "surplus" to any air quality plans necessary to achieve attainment of the health standards.

A shutdown disincentive in the form of discounting by Best Available Control Technology or 20 percent is also proposed. ERC processing is similar to permit processing. Public notice thresholds track the offset requirements for attainment and nonattainment pollutants. The rule provides further for issuance of certificates, renewal, and transfer. ERC processing is financed through existing District cost reimbursement provisions (i.e. Rule 210).

6.4 Changes to Rules that Reference Rule 102 or Reg. II

Several District rules contain references to existing Rule 102 or Regulation II. Staff is recommending changes to those rules to update the references where the rule or regulation being referenced has been changed. The proposed new rule language is given in the Attachment in strikeout/underline format. The following table summarizes the changes staff is proposing:

Table 6.8
Required Changes to Other APCD Rules

Rule Number-Page	Rule Section	Existing Text	Revised Text
1301-3	Section C. Definition of "Federally Enforceable Requirement"	"District Rule 205.C requirements in the state implementation plan approved by the USEPA..."	"District New Source Review Rule (Currently Titled as Rule 205.C, being proposed as Regulation VIII) requirements in the state implementation plan and approved by the USEPA..."
1301-4	Section C. Definition of "Insignificant Activities"	"**Insignificant Activities**" mean those equipment, operations and activities listed as exempt from District permitting pursuant to Sections A.1., A.2., C, D, E and F of District Rule 202 (Exemptions to Rule 201).	"**Insignificant Activities**" mean those equipment, operations and activities listed as exempt from District permitting pursuant to Sections D.3., D.4., and F through G of District Rule 202 (Exemptions to Rule 201).
1301-4	Section C. Definition of "Insignificant Emission levels"	"**Insignificant Emissions levels**" mean the emissions levels: (a). specified as exempt from District permitting pursuant to Section A.3. of District Rule 202; or, (b). de minimis levels of HAP emissions which do not trigger any Part 70 permit modifications.	"**Insignificant Emissions levels**" mean the emissions levels: (a). specified as exempt from District permitting pursuant to Section D.6. of District Rule 202; or, (b). de minimis levels of HAP emissions which do not trigger any Part 70 permit modifications.
1301-5	Section C. Definition of "Net Emission Increase"	**"Net Emissions Increase"** for a Part 70 source means the net emissions increase as defined under the District New Source Review Rule 205.C.	**"Net Emissions Increase"** for a Part 70 source means the net emissions increase as defined under the District New Source Review Regulation VIII
1301-9	Section C. Definition of "Significant Part 70 Permit Modification"	A Part 70 permit modification allowing a net emissions increase from a Part 70 source that equals or exceeds any of the threshold limits triggering public review, listed in the District's NSR Rules 205.C.5.b.1)a)(2)(c) and 205.C.5.c.6)	A Part 70 permit modification allowing a net emissions increase from a Part 70 source that equals or exceeds any of the threshold limits triggering public review, listed in the District's NSR Rules 802.G.1.b.2) and 803.K.6.
333-4	Section D.5.C Requirements, Alternate Emission Control Plan.	The required tonnage of emission reductions shall be calculated using a 90% (80% for lean burn engines) reduction from an uncontrolled emission factor of 2000 lb. of NOx/MMSCF fuel used, with the baseline fuel usage calculated in accordance with Rule 205.C.4.a.3.	The required tonnage of emission reductions shall be calculated using a 90% (80% for lean burn engines) reduction from an uncontrolled emission factor of 2000 lb. of NOX/MMSCF fuel used, with the baseline fuel usage calculated in accordance with Rule 802.F.2.

Table 6.8
Required Changes to Other APCD Rules

Rule Number-Page	Rule Section	Existing Text	Revised Text
333-5	D.5.g Requirements Alternate Emissions Control Plan	Provide that the emissions reductions for any engine required under Rule 205.C. shall not be used to reduce the emission reductions of any other engine.	Provide that the emissions reductions for any engine required under Regulation VIII, New Source Review, shall not be used to reduce the emission reductions of any other engine.
333-5	D.5, Paragraph near bottom of section.	The AECP may be modified at a future date to incorporate equivalent replacement engines which meet the requirements of Rule 205.C.1.a.21)c).	The AECP may be modified at a future date to incorporate equivalent replacement engines which meet the requirement of Rule 202.D.7.
339-2	C.8. Definition of "Exempt Compounds"	"**Exempt Compounds**" means those compounds listed as exceptions in the definition for ROC in Rule 102.PP. (Note: These compounds are under review and may be subject to control at a later date.)	"**Exempt Compounds**" means those compounds listed as exceptions in the definition for ROC in Rule 102. (Note: These compounds are under review and may be subject to control at a later date.)
342-1	B.1.d Exemptions	Equipment that does not require a permit under the provisions of Rule 202 Section D.	Equipment that does not require a permit under the provisions of Rule 202.
210-1	B.1 Evaluation Fee	...(1) the application is for a source which the District determines has the potential to require offsets (or trade-offs), air quality impact analysis, computer modeling or monitoring pursuant to Rule 205 C, ...	...(1) the application is for a source which the District determines has the potential to require offsets (or trade-offs), air quality impact analysis, computer modeling or monitoring pursuant to Regulation VIII, ...
210-6	D.1.a	a. Pursuant to Rule 205 A., prior to the issuance or reissuance of any permit.	a. Pursuant to Rule 205 D., prior to the issuance or reissuance of any permit.
210-8	F.1.a.	All holders of District permits for Authority to Construct (ATC) or Permit to Operate (PTO) whose stationary source, as defined in Rule 205.C.1.a.32).	All holders of District permits for Authority to Construct (ATC) or Permit to Operate (PTO) whose stationary source, as defined in Rule 102.
210-10	H.2.	2. For stationary sources evaluated under Rule 205 C., the annual fee due for each contaminate shall be reduced by the "increment fee" as specified in Rule 205.C. paid for that contaminate during the prior twelve months.	2. For stationary sources evaluated under Regulation VIII, the annual fee due for each contaminate shall be reduced by the "increment fee" as specified in Regulation VIII paid for that contaminate during the prior twelve months.

Table 6.8
Required Changes to Other APCD Rules

Rule Number-Page	Rule Section	Existing Text	Revised Text
316-7	J.4.	4. ...For the purpose of Rule 201 and 205, installation of hold open latches shall not be considered to be a modification.	4. ...For the purpose of Regulation II and Regulation VIII, installation of hold open latches shall not be considered to be a modification.
321-8	J.2	...aggregate liquid surface area of all degreasers at a stationary source, as defined in Rule 205.C., covered by this exemption is greater than 0.93 square meters (10 square feet).	...aggregate liquid surface area of all degreasers at a stationary source, as defined in Rule 102., covered by this exemption is greater than 0.93 square meters (10 square feet).

7. Options for Meeting Emission Offset Mandates

As stated in the beginning of the staff report, state and federal laws which require the implementation of rules to regulate the permitting of new and modified sources of air pollution allow for the flexible application of those mandates. The APCD recognizes that there is more than one strategy for complying with federal and state emission offset requirements for nonattainment pollutants, and the recommended proposal presents one such option.

This section provides alternatives to the proposed option. APCD staff feel that the options provided below would give the same overall balance between flexibility and protection of air quality as the currently proposed rules while at the same time complying with state and federal mandates.

Option 1.

Section 40918 of the California Health and Safety Code requires the establishment of a permit system which ensures *no net emission increase* from new or modified sources with a potential to emit 25 tons per year or more of non-attainment pollutants. The simplest manner to achieve this result, and the strategy adopted by most other districts, is to require offsets for all emission increases for sources with a potential to emit 25 tons or more of a non-attainment pollutant.

This option would comply with both state and federal mandates. It would also confine the application of offsets to the biggest sources of air pollution in the County. One advantage of this strategy would be to allow for unmitigated growth in the small and medium size industry sector of the economy while ensuring that growth in the larger major polluting source industry sectors is mitigated.

Another factor to be considered is that most major sources of air pollution emit air pollution at such magnitudes that they would typically be able to find reductions at their facilities at the time they would be making modifications. Thus, by balancing out the increases of emission with reductions, the requirement for offsets could be avoided if the resulting net emission increase is below threshold levels. Also, most of the greater than 25 ton per year sources are in the petroleum industry that is a declining industry due to the depletion of petroleum reserves and relatively low price of the heavy crude oil produced in Santa Barbara County. Consequently, it is unlikely that these industries will be seeking to expand their operations. However, one source which would be affected by this option is Vandenberg Air Force Base. This space vehicle launching facility is planning on significant growth due to commercial space applications and the consolidation of military installations across the nation.

One effect of this strategy is that the entire burden for growth mitigation would be borne by a small minority (approximately 30) of the largest pollution sources in the county. However, the new emission reduction credit registration system should assure that required offsets are available.

Although the staff is recommending a different alternative, staff has no reservations about implementing this option should the Board direct us to do so.

Option 2.

The APCD has received comments requesting that the Board adopt permitting regulations which include the concept of a "rolling" net emission increase used by the US Environmental Protection Agency. What this means is that increases and decreases in permitted emissions would drop off the calculation of net emission increase after some specified time period (e.g. 5 years). The effect of this policy is that a source may grow up to the offset threshold, then wait until the accumulated Net Emission Increase drops off and then start with a blank slate and grow up to the threshold again without mitigating the growth. This method could result in unlimited unmitigated air pollution growth in the county.

To prevent such pollution growth when a "rolling" Net Emission Increase is used, EPA requires a net emission increase calculation that subtracts a source's actual emissions from its potential emissions, thus dramatically increasing its offset liability. For instance, if a source has a process with a current permitted emission rate of 100 tons per year and the actual emissions are only 50 tons per year and they apply for a 10 ton per increase so that the permitted emissions would be 110 tons per year, the offset liability for the modification would be 60 tons per year, the difference between the current actual emissions and the new permitted emission limit. US Environmental Protection Agency requires this method of calculating Net Emission Increase because clean air plans are based on actual emissions, not permitted emissions, and the existence of significant potential emission growth within existing permits may interfere with an area's ability to meet the goals of its clean air plan and attain the health standards. Also, by setting a new baseline based on actual emissions at the time of each modification, the potential for "infinite pollution growth" is limited.

This optional program would have the effect of significantly reducing the amount of permitted emissions in the county as sources which apply for modifications would have a strong incentive to decrease their offset liability as much as possible. For example, the Vandenberg Air Force Base STS Power plant has permitted emissions of approximately 27 tons per year NO_x but actual emissions of about 20 tons. A modification to bring the plant's capacity up to the 27 tons per year emission limit would give them an offset liability of about 7 tons. In another example, a mineral processing line with a permitted emission rate of 50 tons per year but which is limited by a "bottleneck" in the line to 20 tons per year would incur an offset liability of 30 tons per year if they de-bottlenecked the line to increase production to the permitted limit. Because most of the sources with permitted emission rates over 25 tons per year have actual emissions significantly lower than permitted emissions, the implementation of this strategy would comply with the state mandate to ensure no emissions growth in the sources with a potential to emit of over 25 tons per year.

The APCD has three major concerns with this strategy. First, and most importantly, even though the county may realize a benefit of a substantial reduction in countywide permitted emissions (or large amounts of offsets for small actual increases), there would still be a

potential for unmitigated growth from new sources and sources with permitted emissions close to actual emissions. Second, it could produce higher offset requirements for modified sources. Finally, there would be a significant increase in the complexity involved in calculating the Net Emission Increase. Sources would be required to maintain accurate and precise data (beyond the currently required accuracy and precision standards) on the actual emissions from all existing processes. Thus, there would be an increase in the level of record keeping needed to ensure sufficiently detailed actual emissions data is available should a source need to perform the Net Emission Increase calculation at some future point in time. Staff has indicated that more time would be required to process applications and that sources could expect delays due to lack of data. Also, the APCD costs of processing permit applications could rise significantly. Therefore the APCD does not recommend the adoption of this option.

8. Clarification of Rule Issues

During public meetings and through discussions with in-house staff, members of the regulated community and staff raised questions about the intent of certain rule provisions. The following text provides clarification of frequently asked questions as well as discussion of specific items requested by the Community Advisory Council Subcommittee. To help the reader locate a specific issue, a table of contents is provided below.

Table 8.1 Rule Clarification Issues

Rule 201

Cancellation of Permits

Question: Under what conditions can a permit be canceled?

A Permit to Operate can be canceled upon request, or an ATC can be canceled for lack of use, however revocation or suspension can occur only for non-compliance with permit conditions or non-payment of fees.

Nonroad Engines

Question: Does the APCD have the authority to regulate "nonroad" engines that are subject to regulation by USEPA of the federal Clean Air Act Amendments?

Rule text (201.D.2.) specifically requires permits for dredges, pile drivers, pipe laying and derrick barges. The APCD has the authority to permit such sources pursuant to the federal nonroad engine legislation at 40 CFR 89. In the preamble to this legislation (IV. Definition of nonroad engine), EPA states..*Nothing in section 209 of the CAA prohibits local pollution control districts from regulating the operation of nonroad engines, such as the hours of usage, sulfur limits in fuel (state fuel restriction may in some cases be precluded under section 211), daily mass emission limits, and Title 1 operating permits. In addition, local districts can impose a permitting fee consistent with the costs incurred for various operational expenditures, such as monitoring usage and administrative functions. EPA believes that utilization of this option will assist local districts in achieving their targeted emission levels."* Language has been included to clarify that BACT is not required if preempted by federal law.

In response to request from industry, the APCD reviewed an ATC for one of the newer oil and gas processing facilities that included installation of platforms and pipelines. Based on potential as well as actual emissions, derrick barges and pipe-laying vessels are extremely large emitters of air contaminants. The potential emissions associated with this one project from pipe-laying and derrick barges totaled more than 500 tons of NOx. The APCD concludes that all permit requirements not preempted by state or federal law, are appropriate for emissions of this magnitude.

Examples of activities that would require a permit under 201.D.2 include:

- Non-emergency dredging of Santa Barbara Harbor with diesel equipment on a barge.
- Pipeline laid between OCS or state platforms.
- Pipeline laid between unpermitted sources in state or federal waters

- Installing or extending piers in Santa Barbara County.
- Pile driving sheet piles for beach restoration or erosion prevention projects.
- Any abandonment activity (platform, wells, pipeline).

Registered Professional Engineer

Question: Why does the rule text indicate that the APCO may require disclosures to be certified by a registered engineer?

The APCD has encountered situations involving, for example, ventilation systems which were improperly designed and failed to function in compliance with permit conditions. The delay and subsequent added expenses for the applicants could have been avoided by engaging an engineer properly qualified to design and review such systems.

Rule 202

Agricultural Operations

Question: Are agricultural operations exempt from APCD permit?

Under state law, equipment must be "incidental" to the agricultural operation to be exempt from permit. Equipment that is not incidental to agricultural operations requires a district permit unless otherwise exempt.

Changes to the De minimis Exemption

Question: Why was the de minimis exemption (202.D.6) revised and what are the changes?

The de minimis exemption has been revised for clarification:

- The term "emission unit" has been added to clarify that the exemption applies to the project in the broadest sense, not to individual components of equipment such as a single valve or a single flange.

- The exemption has been expanded to apply to the addition of new equipment.

- The emission thresholds have been revised to a daily, rather than hourly basis and apply only to emissions increases, rather than all changes.

- The baseline date was modified to be consistent with the new source review rules.

- The aggregate tally is simply the sum of the individual de minimis events.

- Aggregate emissions are zeroed out once the de minimis tally is added to the permit and the net emissions increase for the source.

- Text was added to clarify that only the increase is reviewed and netting out is not allowed. For obvious reasons, an emissions unit which was previously added as a de minimis in the aggregate and which is subsequently removed, may zero itself out.

- Exclusion added for equipment subject to an Air Toxic Control Measure for consistency with 202.D.7. (Stationary Source Permit Exemption).

- Text was added to clarify that the de minimis calculations are based on potential to emit. Prior reference to air pollution control equipment was deleted.

- A documentation requirement, including supporting calculations, was added to address problems encountered during APCD audits of exemption claims.

De Minimis Exemption and NSPS and NESHAP Standards

Question: Rule section 202.D.6.c (March, 1996 draft) seems to suggest that if a source is subject to a NSPS or NESHAP standard that the source cannot take advantage of the de minimis exemption. Is this the intent?

No. A source can take advantage of the de minimis exemption provided that the de minimis modification itself is not subject to a NSPS or NESHAP standard. This is current APCD practice. New proposed language clarifies the intent.

De minimis Exemption - Examples

At industry request, the APCD reviewed de minimis reports from a large oil and gas facility that includes offshore platforms. Tracking of additions was accomplished on a standardized form, was not onerous, and did not result in any single or cumulative exceedance of the de minimis threshold at the onshore facility or on the platforms. The following examples clarify how the de minimis exemption is applied:

1. An owner of an existing offshore oil and gas platform wishes to expand their existing gas compression system. There will be many new components (valves and connectors) in hydrocarbon service. Emissions will be 2.1 pounds per day of ROC (the potential to emit is based on controlled emission factors since the new components will be subject to the existing I&M program which is included in a federally enforceable permit). All the new components are part of an existing emissions unit, the gas compression system, and are all used to determine whether the exemption applies. The modification is considered *de minimis* and is exempt from permit. The emissions increase of 2.1 pounds per day is added to the source's *de minimis* aggregate tally.

2. An existing medical device manufacturing company needs to install a small spray booth for applying a specialized Teflon coating to one of their production lines (Product X) that is not subject to District permit requirements. The Teflon coating contains up to 20 percent ROC by weight, the potential to emit is 1.5 pounds per day and there are no applicable RACT control measures. The emissions unit is the production line that produces Product X, which will now include the new spray booth. The modification is considered *de minimis* and is exempt from permit. The emissions increase of 1.5 pounds per day is added to the source's *de minimis* aggregate tally.

3. A new source wishes to add a solvent wipe cleaning workstation to the facility. The uncontrolled actual emissions are estimated to be 2.0 pounds per day (0.26 tons per year) of ROCs. The plant manager requests that the workstation qualify for the *de minimis* exemption. The *de minimis* exemption does not apply to new sources (see definition of *New Source* in Rule 102). However, the Section D.7 (Stationary Source Permit Exemption) is applicable since the actual emissions will be below one ton per calendar year.

4. An existing source has documented ten *de minimis* increases with a resulting aggregate *de minimis* tally of 23.00 pounds per day of ROC. A new *de minimis* modification is being planned that will put the source over the 24.00 pound per day aggregate *de minimis* limit. What options are available to the operator? A number of options are available. They include:

   (a) submit an ATC permit application for modification at hand (keeping *the de minimis* aggregate tally alone).

   (b) zero out the *de minimis* aggregate by submitting a combined ATC/PTO permit application to add the 23.00 pounds per day of ROC to the source's NEI. Depending on the prior NEI for the source, offsets may or may not be required from the Source Register. The modification at hand can then occur as *de minimis* and the aggregate tally is restarted.

   (c) permanently remove from service one or more of the equipment items that comprised the ten inputs into the aggregate tally. Other than including the aggregate *de minimis* increases into the source's NEI, this is the only valid way to decrease the aggregate tally. In essence, the prior *de minimis* increase(s) ends up "zeroing" itself out, thus no netting occurs.

5. A source will be installing an emission control device (e.g., a fixed-bed carbon adsorption unit) to an existing permitted process line to reduce the issuance of ROC compounds. The plant manager requests that this modification be considered *de minimis* since emissions from the process will

be reduced. The modification does not qualify for the *de minimis* exemption and an ATC permit is required pursuant to Rule 201.D. Equipment used to eliminate or reduce or control the issuance of air contaminants do not qualify for permit exemption. The only exception is for emission control equipment directly attached to equipment exempt under Rule 202 (re: Section D.12).

6. An existing source wishes to replace an emissions unit with an equivalent emissions unit. The potential to emit of both emission units are the same (e.g., 20 pounds per day). Is this a *de minimis* modification? No. The purpose of the *de minimis* exemption is to exempt small emission increases from the requirements of the permit process. As such, only the increase of the new or modified equipment is evaluated. In this example, the replacement itself exceeds the *de minimis* threshold by an order of magnitude. The replacement may, however, qualify for permit exemption if it is an equivalent routine replacement pursuant to the provisions of Section D.9.

Drilling Rig Exemption

Question: What equipment are covered by the drill rig exemption in Rule section 202.F.2?

Drilling equipment includes drill rig, workover rig and exploratory rig engines. Temporary engines that are ancillary to the drilling rig or workover operation - such as wireline unit engines, nitrogen skid unit engines, pump skid engines - are considered drilling equipment. Emissions from platform engines such as crane engines and well-kill pump engines are not included in the drilling equipment exemption.

Equipment Category

Question: Do the gatekeepers in each section (e.g. 25 tpy in Section G. and 10 tpy in Section H.) apply to each of the equipment categories listed in each section (e.g., H.1)?

Each line item within a section is a separate equipment category. For example, item L.1. Heat exchangers is an equipment category, however shell-and-tube heat exchangers are *not* a different equipment category than fin-fan heat exchangers.

Exemptions and Relation to Net Emission Increase and Potential to Emit

Question: Do emissions from exempt (Rule 202) activities/equipment count towards Potential to Emit and Net Emission Increase used to determine:

- If a source qualifies for the stationary source exemption?
- If a modification qualifies for the modification exemption?

- If a source triggers any applicable New Source Review requirements (for example, Best Available Control Technology, emission offsets, air quality impact analysis)?

Emissions from equipment exempt under Rule 202 do not count towards the stationary source exemption or modification exemption provided by Rule 202 (202.D.6 and D.7). However, if the aggregate emissions from the source exempted by the De Minimis exemption (D.6) exceed the aggregate exemption limit given in D.6 then the emissions count towards NEI and PTE. If this happens, and the emissions have been added to NEI and PTE then the aggregate emissions per D.6 is reset to zero.

Health Risk Assessment

Question: Does the Health Risk Assessment referred to in Section D.13 pertain to a Health Risk Assessment performed pursuant to the requirements of AB 2588?

The Health Risk Assessment referred to in 202.D.13 is not the health risk assessment performed pursuant to the requirements of AB 2588, but is the Health Risk Assessment required by the permitting engineering evaluation for an APCD permit (204.E.6)

Portable Equipment

Question: What kinds of equipment will be affected by the statewide portable equipment registration rule? Is rental equipment exempt?

Equipment being proposed as eligible for statewide registration includes portable engines used for well drilling, service or workover rigs, power generation, pumps, compressors, diesel pile-driving hammers, welding, cranes, woodchippers, dredges, and military tactical support engines. Construction equipment could include such items as jackhammers, and many of the portable units, such as welders and cranes. An unregistered piece of equipment that does not meet the temporary limits for emissions or time must get a permit. Some overlap of temporary and portable equipment is inevitable. Rental equipment is treated like any other equipment and does not qualify for any exemption based only on the fact that it is rented. See discussion under temporary equipment below for examples of typical temporary equipment that would qualify for the exemption at 202.D.5.

Routine

Question: Language has been added that exempts equivalent routine replacements from permit. What is routine?

Staff intends to rely on EPA's concept of "routine", i.e., that it does not regain or increase capacity or extend the expected useful life of an emission unit and there is

no increase in emissions (EPA 10/2/96 fax communication from Bob Baker to Larry Rennacker).

Replacements - Notification

Question: Rule text indicates that the APCD must be notified of equivalent routine replacements. What type of notification is required for identical replacements?

No notification is required if the routine replacement is identical, i.e. same make and model. However the source must maintain records demonstrating the replacement is routine and identical.

Replacements - Fees

Question: Rule text requires notification for equivalent routine replacements. Will a fee be charged for covering the APCD's review of such notices, including those sources on cost reimbursable basis?

No. Sources whose fees are structured on a cost reimbursable basis will not be charged an additional fee.

Structural change

Question: Rule Section 202.D.8 indicates a permit is not required for repair or maintenance of permitted equipment not involving structural changes. What is a structural change and why isn't it defined in the rule?

Rule text language is taken from the Health and Safety Code (Section 42310) and therefore has specific statutory use. In general, structural change refers to any change to an existing piece of permitted equipment that affects, or may affect the issuance of air quality contaminants.

Temporary Equipment

Examples of temporary activities that qualify for the temporary equipment exemption (202.D.5) include, but are not limited to:

1. ICE's from cranes, welders, jack hammers, etc. used during the demolition of a source or part of a source.

2. Replacement or use of equipment during a breakdown situation.

3. Demonstration equipment being used to determine feasibility (not lab test equipment).

4. Any short-term, one-time project that requires equipment that pollutes is eligible if it meets the 1 ton criteria of all affected pollutants. The Portable Equipment

Registration Rule is intended to handle portable equipment that emits more and is used for longer periods of time.

5. While written notification is required, the project may commence as soon as notification is made without waiting for approval from the APCD. However, if a project commences with equipment that is later found not eligible for the exemption, the commencement will constitute a violation of the APCD's Rules and Regulations

Rule 204

BACT Emission Units

Question: Does Rule section 204.E.3.a.7, as modified at industry request, always allow an alternative to both an emission cap and an emission concentration limit?

The alternative BACT emission limit language was added to address the rare case where the emission cap and operating capacity limits are not appropriate. The intent is to follow USEPA guidance which requires that BACT emission limits be met on a continual basis at all levels of operation, demonstrate protection of short-term ambient standards and be enforceable as a practical matter.

Exemptions - notification requirements

Question: Section E.1.f. requires an applicant seeking an exemption to supply the APCD with enough information to determine whether the exemption applies. Does this mean that in order to qualify for an exemption the owner/operator must submit a written request to the APCD?

Section E.1.f pertains to information needed for an authority to construct permit or a permit to operate. Such applications must list all affected equipment, including exempt equipment. In order to determine whether or not a piece of equipment is exempt, the APCD must have access to enough documentation to confirm its exempt status at the time the permit application is being evaluated. This is not the same as a written request for an exemption, and there is no fee pursuant to 210.F.

Health Risk Assessment - When Required

Question: Section E.6 specifies data requirements for a health risk assessment. Specify which sources and under which circumstances these provisions would be triggered.

A health risk assessment may be required for sources of toxic pollutants, based on factors such as proximity to sensitive receptors (schools, hospitals, day-care centers), the potency and quantity of the toxic air pollutants emitted, and the distance between the emissions unit and the facility boundary.

Currently, the APCD requires health risk assessments for contaminated soil remediation projects because such projects emit benzene, are frequently located in populated areas, and therefore pose a potential significant health risk. In general, the APCD is concerned about proposed projects which may pose a significant health risk due to emissions of toxic air contaminants and has established permit information requirements to assure the APCD meets its obligations under the Health and Safety Code (i.e., protect the public's health). Excluding contaminated soil projects, the APCD has not established explicit criteria for determining when a health risk assessment is required as part of the permitting process. This does not, however, preclude the APCD from performing health risk assessments for projects that, in the APCD's judgment, may have significant adverse health effects. APCD staff have targeted Air Toxics New Source Review as one rule change that may be warranted during the next year to clarify the APCD's permitting requirements for toxic air contaminants.

Timing of the Processing of ERC and ATC Applications

Question: If a proposed new source needs emission reduction credits, do the emission reduction credits have to be approved before the APCD can deem the application for the construct for the source permit complete?

No. As indicated in section 204.E.5, the APCD must have information necessary to determine the adequacy of the Emission Reduction Credits before it can determine if the authority to construct permit is complete. At a minimum, this means the APCD must deem the application for the Emission Reduction Credit Complete before it can deem the Authority to Construct complete, and the application for the Emission Reduction Credits must be approved before the Authority to Construct is approved.

Rule 801

Applicable SIP

Question: In the definition of permanent, what is the applicable SIP?

Several provisions of Rule 801 use the term "Applicable State Implementation Plan." For example this term is used in the definition of permanent. What is meant by the term "Applicable State Implementation Plan" as used in Rule 801?

Several sections of Regulation VIII contain provisions pertaining to "applicable State Implementation Plan." The definition of "State Implementation Plan," depends on how it is used. For example, the definition of "surplus" in Rule 801.C indicates that only those emission reductions "surplus" to the State Implementation Plan can be used as offsets. In this context, State Implementation Plan refers to the Clean Air Plan and APCD Rules and Regulations that have been promulgated into the State Implementation Plan by the US EPA.

The definition of "permanent" in Rule 801.C states that in order for emission reductions to qualify as emission reduction credits, the reductions must be federally enforceable. One way for the reductions to be federally enforceable is the through the State Implementation Plan. In this context, the State Implementation Plan refers to APCD rule provisions governing the enforceability of the emission reductions used as emission reduction credits, primarily the provisions of Rule 806. Once Rule 806 is incorporated into the State Implementation Plan, it will be federally enforceable.

Certification Statement

Issue: Clarify why operator must show other facilities in state are in compliance.

This requirement is in the current New Source Review Rules and is mandated by the Clean Air Act, 42 US Section 7503. The APCD will follow EPA's guidance on the application of this requirement.

Net Air Quality Benefit

Question: The rule defines net air quality benefit as "...a net improvement in air quality resulting from actual emission reductions impacting the same general area affected by the new or modified source and which will be consistent with reasonable further progress." What does this mean? Please elaborate.

This means that the emission reductions used to offset the proposed project are quantifiable and enforceable, are within the same geographic region, are surplus and permanent and will result in an overall net improvement in air quality.

The term actual emission reductions is defined in rule 102 and ensures that emission reductions are quantifiable and enforceable. The requirement for the same general area is met through the appropriate offset ratios stated in Proposed Rule 802 for New Source Review. For Prevention of Significant Deterioration the requirements for the same general area are met through the requirements set forth in Rule 803 Section E.2, Location of Offsets and Offset Ratios. Surplus means that the emission reductions are not required by any local, state or federal regulation. Examples include local control rules, clean air plan control measures, reductions relied upon in the clean air plan, federal and state RACT measures, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants. Permanent means that the change that created the emission reductions is not reversed, for example removing emission control equipment. The term permanent is also used to address shift in load such as removing an emission unit but maintaining facility production by increasing throughput and emissions in another emissions unit.

Net Emissions Increase Calculations

Please explain how the net emissions increase ("NEI") calculation works. How are emission decreases accounted for in the calculation of net emission increase?

Answer: The definition of NEI now resides in Rule 801. The two significant changes to the definition are: (a) a change in the baseline date to 11/15/90 and (b) a clarification that the PTO issuance date is used for determining the NEI. No other significant changes were made to how the NEI calculation is applied.

To aid the user, the NEI definition was amended to clarify how the calculation works. The most important clarification is the inclusion of two equations for calculating the NEI. The first equation applies to an entirely new stationary source:

Net emission increase = I Equation #1

Where

I = Potential to emit of the new source

The use of this equation is fairly self evident. Simply put, the NEI equals the potential to emit ("PTE") of the equipment subject to permit.

The second equation applies to existing stationary sources:

Net emission increase = I + (P1 - P2) - D Equation #2

Where

I = Potential to emit of the modification.

P1 = All prior increases in potential to emit resulting from permit actions at the stationary source where the emission unit creating the increase was permitted on or after November 15, 1990 and where the permit action was subject to New Source Review.

P2 = All decreases in potential to emit resulting from permit actions at the stationary source, including the proposed modification where the modification reduces the potential to emit of the emission unit, and where the emission unit creating the decrease was permitted on or after November 15, 1990 provided the emissions were included in P1 above.

D = Decreases in actual emissions resulting from permit actions at the stationary source provided the emissions are not included in P2 above and are not included in the source register or used as a source of emission offsets.

The second equation reflects the basic steps on how NEI was calculated under the prior rule (205.C) and thus the new rule does not reflect a change in that approach. The *I* term is the PTE of the new or modified emission units and can only be

comprised of positive values. The I term includes only the requested increase(s) in the PTE for the emission unit(s). The (P1 - P2) expression addresses the prior NEI of the source. P1 includes all increases in emissions since the baseline date that were subject to New Source Review. P1 would not include emissions from previously exempt emission units since these emissions would not be subject to NSR. P1 can only be comprised of positive values. The P2 term is included to allow for decreases in the term P1 and is based on the PTE of the emission unit(s). P2 should not be confused with decreases allowed in the term D since the latter can only be based on actual emissions and not PTE. P2 is used in very specific situations. Namely, P2 allows for decreases in the P1 emissions such that ghost NEI emissions are not left on the books. Thus the effect of P2 is to zero out any corresponding NEI increase that is included in P1 for the same emissions unit where that emissions unit is removed from service or where the emission unit's PTE is reduced. The D term allows for decreases in emissions and can only be comprised of negative values. D is based on an actual emissions baseline and not the PTE of the emissions unit. Double counting is not allowed, so if the emissions unit is used as a decrease in the P2 term, then it cannot be used in the D term. In determining the emissions baseline for D, the same procedures and criteria used for qualifying an emission reduction credit are used. This includes use of a three year baseline and quantifying emissions at actual historical loads (which may necessitate source tests if prior tests were not representative of these operational loads). In general, the decrease must be real, surplus, quantifiable, enforceable and permanent. Finally, negative NEI is not allowed. If a source calculates a negative NEI, then the NEI is set to zero and the balance should be banked in the Source Register for future use (it is the source's responsibility for registering these reductions).

A few examples are provided:

Example #1:

Scenario: An application for a new cement batch plant is submitted to the APCD. The company submitting the application is not permitted by the APCD. The company's application lists the potential daily and annual emissions of PM_{10} at 20 lb/day and 5 tpy respectively. No other pollutants will be emitted.

Analysis: Because this application is for an entirely new stationary source, Equation #1 is used and the requested increase (I) is equal to the potential to emit of the new cement batch plant. Therefore, the NEI equals 20 lb/day and 5 tpy respectively for PM_{10}. BACT and offsets are not required.

Example #2:

Scenario: An application for a new boiler is submitted by an existing source. All existing equipment under permit was installed prior to 1990. The potential emissions from the new boiler are 50 lb/day and 9 tpy of NO_x (this example ignores the other pollutants). No decreases in emissions are proposed by the source.

Analysis: This is an application for an existing source, so Equation #2 is used. The increase (I) is equal to 50 lb/day and 9 tpy. There is no prior NEI at the source, so the P1 and P2 terms are zero. No decreases are proposed, so the D term is zero. The NEI in this case is equal to *I*, since all other terms are zero. NEI equals 50 lb/day and 9 tpy. BACT is required for NO_x, a nonattainment pollutant.

Example #3

Scenario: An application for a new boiler (Unit D) is submitted by an existing source. The source has three existing boilers (Units A, B, C). Unit A was permitted prior to 1990 and Units B and C were permitted afterwards and were subject to NSR. The potential emissions from Unit D are 20 lb/day and 4 tpy of NO_x (this example ignores the other pollutants) and 15 lb/day and 3 tpy for Units A, B and C. The actual emissions from Unit A have been verified as being 10 lb/day and 2 tpy. The source is proposing to remove Units A and C from service.

Analysis: This is an application for an existing source, so Equation #2 is used. The increase (I) is equal to 20 lb/day and 4 tpy. There is prior NEI at the source. P1 is equal to the PTE for Units B and C. Because Unit C is being removed from service, P2 is equal to the PTE for that unit. Decreases are proposed for the removal of Unit A, so the D term is 10 lb/day and 2 tpy.

NEI = $I + (P1 - P2) - D$

I = 20 lb/day, 4 tpy
P1 = 30 lb/day, 6 tpy
P2 = 15 lb/day, 3 tpy
D = 10 lb/day, 2 tpy

NEI = 25 lb/day, 5 tpy

BACT and offsets are not required for the new boiler (note: since NAR BACT is based on PTE on a per project basis, BACT is not required even though the NEI is 25 lb/day).

Calculating NEI from November 15, 1990 to Date of Rule Adoption

Question: When calculating NEI from the November 15, 1990 baseline date to the date of Rule adoption will the District calculate NEI sequential with each permit action and discard any resultant negative NEIs?

To calculate NEI at date of rule adoption, staff will sum all permitted increases and decreases in NEI from Nov. 15, 1990 to date of rule adoption. If the resulting NEI is negative, then the source's NEI we be set to zero. The negative value may not be banked. If the NEI is positive, then that is the value of the NEI as of that date. Subsequent permit actions after rule adoption will either be added or subtracted

from the NEI value as of the date of rule adoption. Decreases below zero may be banked.

Calculating NEI based on ATC or PTO date.

Question: After Rule adoption, is NEI calculated on the date of the issuance of the ATC or the PTO? The comment resulted from a concern that if the NEI is based on the PTO date the District could process a PTO for a decrease before a PTO for an increase thereby resulting in a negative NEI which would then be set to zero (unless entered into the source register) before the increase is added.

When the District issues an ATC for an emission increase, it is giving the stationary source the right to pollute by the amount listed on the ATC. However, when a source comes in for an emission decrease, the District cannot legally enforce that decrease until the PTO is issued. Therefore, to calculate the resultant NEI, the District will base it on the ATC date for an emission increase and the PTO date for an emission decrease. The table below provides an example of how the District will handle the concern stated in the comment.

Date	Action	NEI Balance
Beginning		2
1997	ATC1 +6	8
1998	ATC2 -4	8
1998.5	PTO2	4
1999	PTO1	4

Project, Clarification of the Definition

The term "project" is used to determine when a source must do a determination of best available control technology. Explain how project is used, what constitutes a project and provide examples.

The term "project" is used in Rule 802.C.1 (*Requirements - Best Available Control Technology*), the requirement for NAR BACT is based on the concept of a project. The term "project" is defined in Rule 801 as follows:

"Project" means any article, machine, equipment or contrivance belonging to the same emission unit at a stationary source and applied for in one or more applications for an Authority to Construct permit. Project shall not include any article, machine, equipment or contrivance described in any application for an Authority to Construct permit submitted more than 12 months after issuance of the Permit to Operate.

Emission Unit is defined in Rule 102 as follows:

> **"Emission Unit"** means any identifiable piece of equipment or activity that is part of a stationary source which emits or would have the potential to emit any affected pollutant.

In other words, an emission unit is an aggregation of components dependent upon each other to perform a necessary function or activity. Typically, these activities are composed of production or process lines within the source (i.e., they are part of the source). Examples of an emission unit are (also see the discussion under *de minimis* for more examples): a cogeneration system; auto body spray booth (including associated prep/touch-up and solvent usage); non-metallic mineral processing line (crusher, furnace, calciner, classifier, packing); sulfur recovery train (amine unit, sulfur recovery unit, tail gas unit).

The term "project" was introduced to provide a more innovative way of addressing BACT in the New Source Review rule for modifications to existing sources. Under the current rules, once a facility exceeds the NEI threshold for BACT, then all subsequent applications, regardless of size, also require BACT review. This resulted in some uncertainty and additional level of effort on the part of the applicant and the APCD as to what BACT was for small emission increases. Indeed, often BACT for such small modifications was determined to be no stricter than RACT. With the change from an NEI-based BACT threshold to the 25 pound per day PTE-based BACT threshold, much of the prior problems with small emissions increases disappears. The term "project" is intended to provide more clarity for both the applicants and the APCD by focusing the review on emission units. The resulting change is that BACT review is no longer required for modifications to existing sources for projects with small emissions increases. The term project is not applicable to new sources.

It is important, therefore, to know how the definition of "project" is applied. Examples are provided below to illustrate the intent of the rule. Some generalities, however, can be made when assessing what constitutes a "project". These are:

- A project is typically composed of all the equipment listed in an Authority to Construct or Permit to Operate application whereas a modification to existing sources typically involves one emission unit at a time.

- All modified equipment that is part of the same emission unit is the same project.

- A project incorporates equipment using the broadest scope of activities. Projects are not intended to be individual components of a process but rather to include all components or units within the process or production line.

- Projects are not intended to be individual components of a process, but rather to include all such components or units within the broad scope of a single project.

- Modifications to a project prior to or during the SCDP are considered the same project as defined in the underlying ATC permit and supporting documentation.

- Any modifications to the affected emissions unit which occurs within 12 months of receiving a PTO for that emission unit are considered the same project.

Example #1:

An applicant at an existing facility wishes to add a new vapor degreaser; this addition is not associated with another project that received a PTO within the past 12 months. The "project" for this example would be the vapor degreaser. (If the application was associated with similar processes that were permitted within the past 12 months, then the "project" would include the prior project's emission units and the new vapor degreaser).

Example #2:

An operator for an existing oil and gas plant seeks a permit to add a bypass line for one of their gas production streams. The equipment involved includes the addition of a small number of piping components in hydrocarbon service. The facility-wide permit for the plant contains federally enforceable permit conditions regarding the implementation of an Inspection and Maintenance Program. The "project" for this example would include all piping components associated with installation of the new by-pass line. Since the facility-wide permit already ensures that the I&M Program is federally enforceable, a *de minimis* exemption via Rule 202.D.6 can be requested with the potential to emit based on controlled emission factors from implementation of the existing I&M program on the new piping components.

Example #3a:

An existing sand, rock and gravel plant seeks to add a new concrete recycling facility. The equipment includes: hoppers, screens, crushers, transfer belts, stacker belts and baghouses. The "project" for this example would be all the equipment comprising the new concrete recycling facility.

Example #3b:

As a follow on to the above example, two months after the Permit to Operate for the concrete recycling facility is issued, the operator submits a new ATC permit application to expand to capacity of the facility. The "project" for this example would include the original concrete recycling facility plus the new equipment associated with the expansion, as the application for the new equipment occurred within one year of the Permit to Operate issuance of the original project. (If the ATC application for the new equipment is submitted 3 years after issuance of the PTO permit, the "project" would be the new equipment only.)

Example #4:

An applicant seeks a permit for an exploratory oil and gas program. The equipment includes: drilling rig engines and associated service engines, temporary Baker tanks, separation vessels, flare, and piping components in hydrocarbon service. The "project" for this example would include all the equipment listed in the application because the aggregation of the listed equipment comprises an identifiable activity.

Example #5:

An existing non-metallic mineral processing plants seeks to add a new bag packing facility. The equipment includes: bag packing machines, hoppers, cyclones, bins, transfer belts and a baghouse. The "project" for this example would be all the equipment comprising the new bag packing facility.

Example #6:

An applicant seeks to install a new paint spray booth at an existing facility. The booth and its related solvent emissions constitute a new process at the facility. The "project" for this example includes the paint spray booth and the related solvent emissions.

Example #7:

An existing electronics manufacturing/assembly plant wishes to relocate a business unit from another company-owned site located outside Santa Barbara County. The new business unit utilizes solvent emitting equipment such as: degreasers, photoresist units, solvent work stations and a carbon adsorption unit. The equipment will be moved into an existing building alongside existing operations. The "project" for this example includes all the equipment utilized by the new business unit.

Example #8:

An existing offshore oil and gas platform operator requests to add a new skid-mounted gas compressor system. The equipment involved includes a substantial number of components in hydrocarbon service (including the compressor, valves, flanges and vessels). No other changes are proposed by the applicant. The "project" for this example would be the new skid-mounted compressor unit and all associated components. (If the application was for a entirely new oil and gas platform, part of which includes a skid-mounted compressor unit and associated components, the "project" would, in that case, be the entire platform).

Rule 802

Approved SIP

Question: Sources may be subject to rules that are in the approved SIP even if those rules are not current district rules. If there are two versions of a rule, one SIP approved and submitted for inclusion in the SIP, which version of the rule does a facility have to comply with?

Rule 802 Section G.5 states "The control officer shall issue an Authority to Construct for major new stationary source or major modification to a stationary source, which is subject to this rule, only if all District Regulations contained in the State Implementation Plan *submitted to* the EPA are being carried out in accordance with that plan." However, EPA has authority to enforce the SIP *approved* version of a rule. Therefore, in cases where there are two versions of a rule, one approved into the SIP and the other submitted by the District to EPA awaiting approval into the SIP, sources must comply with both versions of the rule. Where the rules are in conflict, the source must comply with the most stringent provisions of both rules. EPA has been working with Santa Barbara APCD to prioritize EPA review of rules that have been submitted for SIP approval. This should help to minimize disparities between district rules and SIP approved rules.

Banked emission reductions vs. netting

Question: Do all emission reductions have to clear through the bank or can an operator use on-site emission reductions to meet emission reduction requirements?

This question is really one of netting. Can a source "net out" of emission offset requirements by using on-site emission reductions to reduce the net emission increase of a modification to below the emission threshold that triggers offsets? The answer is yes. However, be aware that for nonattainment pollutants the APCD uses the dual source definition. This means that for the modification, an operator cannot use on-site emission reductions to net out of an offset requirement. Such reductions may, however, be used as offsets at the offset trading ratio. For a new modification where the modification does not trigger nonattainment offset requirements by itself, but where the entire source may trigger offsets, and for attainment pollutant offset requirements, an operator can use on-site reductions to avoid offsets. See the later discussion in this section on the issue of netting.

Emission increases, grandfather provisions.

Question: For offsets, is any grandfathering proposed? For example, a source could have a net emission increase above 10 tons per year since 1990 which would not require offsetting under current rules. However, under the proposed rule any emission increase at such source would require the source offset the full 10 tons per year.

The source would be required to offset the full net emission increase.

Netting for nonattainment pollutants

Question: Can a source net out of Best Available Control Technology for nonattainment pollutants?

No. Netting pertains only to new source review triggers that are based on net emission increase. Netting therefore cannot be used for nonattainment Best Available Control Technology because a trigger based on potential to emit is proposed for use as the Best Available Control Technology trigger for nonattainment pollutants.

Question: Can a source net out of offset for nonattainment pollutants?

The dual source definition applies to the offset trigger for nonattainment pollutants. This is current APCD practice. Thus, the determination of whether offsets are triggered for nonattainment pollutants is a two step process. First, the net emission increase of a proposed modification is calculated. If the modification by itself triggers offsets, then offsets apply. If the modification by itself does not trigger offsets, then the net emission increase from the modification is added to net emission increase for the entire source. If the net emission increase for the entire source exceeds the offset trigger, then offsets are required. Netting is allowed on the calculation of source wide net emission increase. That is, creditable decreases at a source can be used to reduce the net emission increase resulting from a modification to avoid triggering emission offset requirements.

Question: Do the proposed rules allow a source to subtract the actual emissions of the equipment being replaced when calculating the NEI of the modification in the first step of the dual source calculation?

A source **can** subtract actual emissions (based on the definition of Actual Emission Reductions in Rule 102) of the equipment being replaced provided the new equipment is the same type as the old. For example, a boiler replacing a boiler, or an I.C. engine for an I.C. engine. Netting out is not allowed in the case of one emissions unit type 'x' replacing emission unit type 'y' under the guise they both perform the same function. For example a source would not be allowed to subtract emissions from a boiler if they were replacing it with a turbine even though both products produce steam. This is the only exception allowed under the dual source definition. As always, deductions are always allowed for all reductions in calculating the facility wide NEI.

Question: Would the APCD require a source with pre-rule-adoption NEI greater than the threshold to offset its NEI even when it applies for an emission decrease?

With the new lower offset trigger there may be sources that already have pre-existing NEI's greater than the threshold that have never been mitigated through

offsets. Any source in this situation will be required to offset the entire NEI at their next modification. However, sources are not required to offset their NEI if they apply for a modification that results in a decrease in emissions.

Examples of the replacement netting out policy follow (note in the following examples the replacement does not qualify for exemption under the "equivalent routine" exemption provided by Rule 202D.9).

Example 1

Given: 1990 NEI = 0 (source was all pre 1990)
Boiler X 15 tpy PTE, 10 tons actual
Boiler Y replacement boiler, 15 tpy PTE

Find: If offsets are required.

Solution:

First find NEI of Modification (Step 1)

Mod NEI = 15 - 10 = 5
Offsets not triggered.

Next find Facility Wide NEI = I + (P1 - P2) -D (Step 2)

FW NEI = 15 + (0 - 0) - 10 = 5 tpy
offsets not triggered

Example 2

Given:

Source's NEI before modification = 15 tpy (from equipment other than X & Y)

Boiler X Pre 1990, 12 tpy actual, 20 tpy of permitted emissions

Boiler Y replacement boiler, 11 tpy permitted emissions

Find: If offsets are required.

Solution:

First find NEI of Modification (Step 1)

11 - 12 = -1 tpy.

Since the NEI of the modification is less than the Offset threshold no offsets are required by the modification half of the dual source definition.

Next find facility wide NEI = I + (P1 - P2) - D (Step 2)

FW NEI = 11 + (15 - 0) - 12 = 14

14 tons is greater than the trigger level offsets are required, but since the modification itself was a decrease (-1 tpy), no offsets would be required.

Example 3

Given: NEI = 20 tons per year (from equipment other than X & Y)

Boiler X Pre 1990, 15 tpy PTE, 6 tpy actual emissions
Boiler Y replacement, 15 tpy PTE

Find: If offsets are required.

Solution:

Modification NEI (Step 1)

NEI Mod = 15 - 6 = 9
Offsets not triggered

Facility Wide NEI = I + (P1 - P2) - D (Step 2)

15 + (20 - 0) - 6 = 29 Offsets Triggered
29 tons must be offset

Offset Liability.

Question: If a source triggers offsets, does it have to offset just the amount of the net emission increase above 10 tons per year, or the full net emission increase?

The source must offset the full net emission increase. However, a source must only provide offsets for increases that have not already been offset. If source with a 12 tpy NEI proposes a project that would result in an additional 2 tpy NEI, the source must offset all NEI that has not already been offset. Thus if source has already offset the 12 tpy NEI, they must now offset the additional 2 tpy.

Determining Offset Ratios

Question: When measuring the distance from the source supplying offsets to the source using offsets to determine offset ratios, will the APCD measure between emission units or stationary source boundaries?

When determining if the location of offsets is within 7.5 miles of the location of the ATC source as specified in Rule 802 Table 4, the distance is determined by measuring between the two stationary source boundaries.

Rule 803

Netting for Attainment Pollutants

Question: Can a source net out of Best Available Control Technology and emission offsets for attainment pollutants?

Yes. New source review requirements for attainment pollutants are triggered based on emission increases at the entire stationary source and creditable emission decreases at the source can be used to reduce the source's net emission increase for the purpose of avoiding Best Available Control Technology and emission offsets.

Rule 804

Relationship between emission offset requirements and emission reduction credits

Question: Do all emission reductions used to comply with offset requirements have to be certified as emission reduction credits pursuant to Rule 806.

Yes.

Third Party Beneficiary

Issue: Clarify the meaning of Section D.8.b which allows the use of a contract with the APCD as a third party beneficiary for sources which are otherwise exempt from permit.

This section meets federal regulations by requiring emission reductions to be used as ERC's to be enforceable by the APCD. In the case where a source is exempt by statute, such as agricultural internal combustion engines, a source would be required to enter into a contract with the new source operator or owner which designates APCD a third party beneficiary and allows the APCD to enforce the emission reductions. If a source is exempt from permit requirements pursuant to Rule 202 and the source wishes to obtain emission reduction credits by controlling emissions at the source, the source would be required to get a permit for the units to be controlled. For example, if a source proposed to install catalysts on several 20 horse-power engines to get emission reduction credits, the source would be required

to obtain permits for the engines being controlled. The third party beneficiary provision would allow the APCD to enforce conditions ensuring that the emission reductions are real.

Rule 806

Discounting Emission Reduction Credits by Reasonably Available Control Technology

Question: How will the RACT discount of ERCs be applied?

EPA requires ERCs to be discounted by reasonably available control technology (RACT) at the time of use. RACT discounting of ERCs accounts for any advances in emission control techniques and ensures that emission reductions are consistent with APCD prohibitory rules and control measures relied upon in the clean air plan. To comply with this requirement, the District will apply the RACT discount to ERCs as they are entered into the source register and, if RACT changes between the date the ERCs were deposited and the date used, again before the ERCs are used to reflect any change in the amount of the RACT discount. This allows the value of ERCs in the source register to reflect close to their actual value instead of an inflated value that has yet to be reduced by applicable RACT discounts. In the event that an applicable RACT requirement is relaxed, the ERCs will be adjusted accordingly at the time of use.

Post-1990, pre-Rule 806 adoption, emission reduction credits

Question: Can a source use/bank post-1990, pre-rule adoption emission reduction credits?

No. To qualify as an emission reduction credit, an application must be submitted to the APCD and found to be complete before the emission reductions take effect (see Rule 806.D.3). This provision is essential to assuring that the ERCs meet the core requirements for banking (that is, that the ERCs are surplus, quantifiable, enforceable, and permanent.)

Pre-1990 emission reduction credits

Question: Can a source use/bank pre-1990 emission reduction credits?

The source can use the credits only if the credits were specifically identified as a credit (growth allowance) in the 1994 Clean Air Plan, comply with Rule 804, and meet the requirements of the old banking agreement. To be banked, the emission reductions must also comply with Rule 806.

Status of emission reduction credits after use

Question: Can a banked emission reduction credit be returned to the bank at its full value?

Once a banked emission credit is put into use in order to meet an emission offset requirement, the emission reduction credit is retired from the bank. Should the source that is using the credit find it no longer needs the credit, say for example the source shuts down an emission unit, the operator must submit an application for an entirely new emission reduction credit, and the source of the reductions, in this example the shutdown of an emission unit, must qualify the reductions as emission reduction credits in accordance with the provisions of Rule 806.

Value of shutdown credits for petroleum extraction activities.

Question: Can sources in the petroleum production industry be shut-down and the emissions banked?

Yes, sources in the petroleum production industry can be banked. However, in accordance with Rule 806, and U.S. Environmental Protection Agency policy, the reductions must be permanent and surplus to the Clean Air Plan

9. Public Review

9.1 Public Participation

Workshops

The proposed revisions were publicly noticed in May of 1995 and four workshops were held in late May. Two in Santa Maria, and two in Goleta. In addition, staff held numerous meetings with industry groups and representatives and with environmental organizations. Numerous changes were made to the rules in response to public input received to date (please refer to Section 9.2).

Community Advisory Council

To facilitate the participation of the industry and the public in the development of the APCD's regulatory program, the APCD created the Community Advisory Council (CAC). The CAC is comprised of representatives appointed by the APCD's Board of Directors. Currently there are 22 members on the CAC. Its charter is, among other things, to review proposed changes to the APCD's Rules and Regulations and make recommendations to the Board of Directors on these changes.

Over the last two years, the APCD's Community Advisory Council (CAC), which meets monthly, has met 23 times on the proposed revisions to Regulation II and VIII. The CAC also established a subcommittee to facilitate its review, and the subcommittee met an additional 10 times.

Out of these meetings the CAC identified over 100 issues where the CAC expressed some type of concern with the proposed regulations. Staff and the CAC have been able to come to agreement on all except two issues. These issues are given below:

1. The CAC recommended that the exemption for drill rigs be reinstated, and that the exemption be reevaluated once the state's portable equipment regulation is adopted (scheduled for March 27, 1997).

2. Staff disagrees and believes that drill rigs are a significant source of pollution and should be regulated either by the state's registration program or by APCD permit (sources have the option of registering with the state or complying with local district permit requirements).

3. The CAC recommended that new rule text at 201.D.2 be deleted. Text at 201.D.2 would subject dredges, pile driving equipment, pipe-laying barges, and derrick barges to permit. Similar to the concern above, the CAC concluded that it wanted to wait for the state's portable equipment registration program to be adopted before taking any action on the dredges, barges and pile driving equipment. The state subsequently approved the state's portable equipment registration regulation on March 27, 1997 and sources operating in state or federal waters are not eligible for registration. Staff recommends

that this equipment be subject to permit and new source review because dredges, pipeline barges and pile driving equipment can be substantial emission sources for example, the 26,000 horsepower pipe-laying barge "Lorelay" emitted 42 tons of Nox in six weeks of operation.

9.2 Rule Changes

In response to comments received on the draft rules, staff made numerous revisions to the proposed rule revisions. A listing of some of the more salient changes are provided below.

Rule 102

- The maximum emission for classification as a "small source" was raised from a 2.5 ton/year aggregate of ROC, NOx, PM_{10} to 5 tons/year of each of the following: ROCs, NOx, PM_{10}, TSP, SOx, and 25 tons/year for CO.

- The maximum emission for classification as a "medium source" was raised from a 10 ton/year aggregate of ROC, NOx, PM_{10} to 10 tons/year of each of the following: ROCs, NOx, PM_{10}, TSP, SOx, and 25 tons/year for CO.

- The definition of "replacement" was eliminated.

- The phrase "abandonment, removal, demolition was deleted from the definition of construction. This was done because the District can no longer require offsets from deconstruction activities. However, sources involved in demolition activities may be subject to APCD permit or statewide portable equipment registration

Rule 201

- Portable Equipment was exempted from the anti-sham-permit provision (201.J).

- Text limiting the APCO's ability to issue a combined Authority to Construct and Permit to Operate to small sources (E.3) was changed allowing this provision to be used by any size source.

- Text which requires that permitted equipment be at all time at site specified in the source's permit (J) was eliminated.

Rule 202

- The draft regulation presented at workshops in 1994 was absent the list of over sixty Rule 202 exemptions for miscellaneous pieces of process equipment. The District's rationale at the time was to make the exemption rule consistent with the CAPCOA

model rule language, which contained no such exemptions. Additionally, EPA had voiced objection over the 150 lb/day (>27 tpy) limit for each such exemption. Based on vigorous objection from industry, the entire list was reinstated. Subsequent input from industry resulted in the reorganization of miscellaneous sections of the rule into fifteen categories of similar equipment:

H. Abrasive Blast Equipment
I. Coatings Application Equipment and Operations
J. Drycleaning and Fabric Related Equipment and Operations
K. Food Processing and Preparation Equipment
L. General Utility Equipment and Operations
M. Glass, Ceramic, Metallurgical Processing and Fabrication Equipment and Operations
N. Laboratory Equipment and Operations
O. Material Working and Handling Equipment and Operations
P. Miscellaneous Equipment and Operations
Q. Mixing, Blending and Packaging Equipment and Operations
R. Plastics, Composite and Rubber Processing Equipment and Operations
S. Printing and Reproduction Equipment and Operations
T. Semiconductor and Electronics Manufacturing Equipment and Operations
U. Solvent Application Equipment and Operations
V. Storage and Transfer Equipment and Operations

The aggregate emission limits for each category may be aggregated in terms of actual emissions with recordkeeping requirements or in terms of Potential to Emit with no usage records required.

- The 1994 draft also proposed to eliminate the construction exemption of existing Rule 202.C.3 to be consistent with CAPCOA guidance. The construction exemption was also reinstated based on public input.

- The 1994 draft proposed to reduce the boiler exemption from 5 to 2 MMBtu/hr based on CAPCOA guidance. The 5 MMBtu/hr limit has been reinstated, subject to a 25 ton per year aggregate (excluding small equipment <1 million Btu/hr) (see 202.G).

- The exemptions for equivalent replacements and identical replacements were returned to the rule. In order to address EPA concerns, a requirement that replacements must be routine was added.

- A list of many new exemptions specifically requested by industry has been evaluated and added to proposed Rule 202.

- Exemptions have been added for fuel cells and for seasonal events such as fairs and airshows.

- The emission baseline for modification de minimis (D.6.b) has been changed from 1988 to 1990 to be consistent with the Clean Air Plan.

- Language in D.6. was modified to clarify that the exemption applies to the de minimis physical change and not the entire source.

- The exemption in F.1.d for emergency generators has been reinstated to 200 hours.

- The tank capacity on the diesel tank exemption has been eliminated (V.2).

- An exemption has been added for fire training/prevention activities (P.11).

- New section D.12 has been added to clarify when the relocation of a emission unit within a source is exempt from permit.

Rule 208

- The consolidation of authority to construct/permit to operate, a permit streamlining measure in proposed Rule 208, has been expanded, at industry request, to apply to small modifications of existing sources as well as to new sources as originally mandated.

Rule 801

- The definition of Net Emission Increase was expanded to provide greater clarity.

- At the suggestion of the Community Advisory Council, we have deleted the term local air quality standards from the definition of ambient air quality standards because Santa Barbara does not have any local ambient air quality standards. If the APCD Board chooses to adopt any local ambient air quality standards in the future, this definition can be revised at that time.

- We have revised the definition of "Project" to clarify what will be included in determining if a modified source exceeds the BACT threshold. The definition used in the March draft of the proposed rules relied upon the definition of common operations in the stationary source definition. This would have included all operations at the stationary source which was not the intent. This helps to relieve the source of the required to make a BACT determination for small projects for which BACT is typically determined to be the same as Reasonably Available Control Technology.

Rule 802

- The Best Available Control Technology threshold for nonattainment pollutants was changed from source Net Emission Increase to the potential to emit of the project (C).

- Text requiring air quality impact analysis for ozone precursors (D) has been deleted.

- The offset ratios have been modified to address concerns expressed by industry and identified in the EIR. The new offset ratios include a 1.2 to 1 ratio for sources within

7.5 miles, 1.5 to 1 for trades within the same zone (north and south zones), 6 to 1 for trades between north and south zones except that no trades will be allowed between the Cuyama area and the south zone, and 6 to 1 for contemporaneous emission reductions procured from the adjacent areas of Ventura County including the Oxnard coastal plane to offset a project in the south zone.

Rule 803

- Submittal of permit evaluations to CARB and USEPA was eliminated for projects that net out of review and projects that are less than 10 kilometers from a Class I area.

- Prevention of Significant Deterioration offset ratios were reduced from between 1.5:1 and 3:1 to 1.2:1 (E.2)

Rule 806

- Discounts for emission reduction credits previously recognized by the District (806.D.7) were eliminated.

- The BACT discount for offsets was changed such that only emissions reduction credits from equipment that has not been controlled by Reasonably Available Control Technology are discounted by BACT.

- The offset discount for the community bank was deleted at recommendation of the Community Advisory Council.

- Text allowing the APCO to put a moratorium on the banking of emission reduction credits (K) has been changed to a moratorium on the use of emission reduction credits.

Rule 807

Rule 807, Community Emission Bank, was deleted pursuant to a recommendation from the Community Advisory Council.

9.3 Public Comment

Staff received extensive comment on draft rules that were released during March of 1996, and provided written responses to these comments. The comments and responses are available from the APCD. Comments received during the formal 35 day public comment period preceding the Board adoption hearing on the proposed rule changes, and staff's response to these comments, will be presented to the APCD Board of Directors as part of the rule adoption process.

10. California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires that projects that may significantly affect the quality of the environment be analyzed and disclosed in an environmental impact report so that significant adverse effects may be reduced or eliminated. It is the responsibility of the "lead agency" of such a project to do the analysis or to establish the basis for a finding that such an analysis need not be done. In this case, Santa Barbara APCD is the lead agency.

The APCD prepared an Environmental Impacts (EIR) report on the proposed rule revision because the initial study disclosed a potential for a significant adverse impact. The EIR uncovered one potential Class II impact (significant but avoidable with suitable mitigation): the proposed replacement of hourly triggers for Air Quality Impact Analysis with daily triggers could allow a source to cause a violation of the an ambient air quality standard. Revised language implementing the mitigation has been added to the proposed rule text.