

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

DRAFT STAFF REPORT

PROPOSED AMENDED RULE 317 – CLEAN AIR ACT NON-ATTAINMENT FEES

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EXECUTIVE SUMMARY

Proposed Amended Rule 317 – Clean Air Act Non-attainment Fees promulgates the mandatory requirements for air basins in the South Coast Air Quality Management District (SCAQMD) that are not in attainment with the federal one-hour standard for ozone as contained in Sections 182(d), 182(e), 182(f) and 185 of the 1990 amendments to the Clean Air Act (CAA). Major stationary sources of Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x), both pollutant precursors of ozone, must either reduce these emissions or otherwise pay a CAA non-attainment fee in lieu of reductions. The CAA non-attainment fee is assessed for both VOC as well as for NO_x emissions from subject sources. CAA non-attainment fees are based on actual VOC and NO_x emissions that exceed 80% of the baseline.

The SCAQMD encompasses the South Coast Air Basin (SOCAB) along with portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). For air basins classified as “Severe 17” (SSAB) the attainment year is 2007; for those classified as “Extreme” (SOCAB) the attainment year is 2010. For the purposes of PAR 317 the MDAB is designated as unclassified attainment and there is no set attainment date.

CAA non-attainment fees would be assessed in an assessment year which would be each calendar year beginning with the year following the attainment year and due the year following the assessment year. Furthermore, a major stationary source that does not mitigate emissions of VOC and NO_x below 80% of the source’s baseline emissions will be required to pay the VOC and NO_x CAA non-attainment fees annually for the amount of the source emissions that exceed 80% of the baseline emissions. Such fees are required to be paid annually until the Administrator of the United States Environmental Protection Agency (U.S. EPA) designates the air basin as being in attainment with the federal one-hour ozone standard. CAA non-attainment fees shall be due to the AQMD in the year following the assessment year in accordance with the current provisions regarding payment of emissions fees as contained in Rule 301(e)(10). Late and non-payment of CAA non-attainment fees are also subject to the fee surcharge and permit revocation provisions of Rule 301(e)(10).

Before any fees are assessed however, the Administrator of the U.S. EPA or the Executive Officer must make a finding that the basin is actually not in attainment of the federal one-hour standard for ozone. For the purposes of this rule a non-RECLAIM major stationary source is defined, as a source having a potential (or permitted) to emit (PTE) of greater than 25 tons per year in the SSAB and 10 tons per year in the SOCAB. RECLAIM sources are defined as major stationary sources, based on the source PTE, pursuant to paragraph (b)(2) of Rule 3001 – Applicability. CAA non-attainment fees received by the AQMD in compliance with these rule requirements will be used for air quality improvement programs.

On December 5th, 2008 the Governing Board adopted Proposed Rule (PR) 317 with the provisions of the rule applicable only to the SSAB. At the same time the Governing Board directed staff to further review and report back to the Board on the issues of alternative baselines, emissions averaging, and fees.

Staff has analyzed a wide range of possible scenarios focusing on alternative baselines that would likely be consistent with the CAA and an U.S. EPA guidance memo. Rules adopted by

two other California air districts were also reviewed. In addition, staff has reviewed substantial input by stakeholders including input from industry and environmental groups. Based on this review and analysis staff provided two modified rule options for the Board's consideration at the April 3, 2009 Public Hearing; Option A and Option B. Option A would adopt the same rule language for the SOCAB as adopted by the Governing Board on December 5, 2008 for major stationary sources in the SSAB by amending the definition of Basin currently in the rule to include the SOCAB. Option A would define baseline for an existing major stationary source as the actual source emissions of VOC/NO_x (as applicable) in the attainment year. Option B is identical to Option A, with the exception that a source may petition the Executive Officer to be classified as a cyclical source by submitting a plan demonstrating it is cyclical. The plan must include a statistical "t-Test" method, as described in Appendix 2 of this staff report, demonstrating that a source has cyclical emissions after a downward adjustment of emissions to account for any/all adopted local, state and federal rules or regulations that would have restricted the sources ability to both operate or emit a particular pollutant that existed during the five (5) consecutive years immediately preceding the attainment year for which the demonstration of cyclical operations/emissions is being made. The same downward adjusted average emissions from the five (5) consecutive years immediately preceding the attainment year must also be used to calculate the alternative VOC/NO_x emissions (as applicable) baseline. A source that is determined to be a major stationary source of either VOC or NO_x emissions that are cyclical, is considered for the purposes of this rule to be a cyclical major stationary source.

Based on direction received at the April 3, 2009 Public Hearing staff has developed a third option, Option C, for the Boards consideration. Option C would allow sources, in lieu of using the attainment year emissions as their baseline emissions, to use the average of two consecutive years out of the ten years prior to and including the attainment year. Sources requesting consideration of an alternative source baseline must use emissions that have been discounted for any mandated emissions reductions in calculating the alternative optional baseline. In addition, the rule option contains a "Clean Unit" or Best Available Control Technology (BACT) Permit Unit emissions exemption. Emissions from permitted units that meet BACT requirements as of the later of 2010 or the year the permit to construct was issued for the unit, may be excluded from the calculation of CAA non-attainment fees. A plan must be filed for consideration by the Executive Officer for both the alternative optional baseline and the Clean Unit exemption. However, no guarantee is provided that review of a plan filing shall constitute acceptance by the District until so approved by the Executive Officer. Furthermore, should the Administrator of the U.S. EPA find that the fee provisions of this rule option are deficient in terms of meeting the requirement of the CAA or U.S. EPA, unpaid fees plus accrued interest may be collected by the Administrator pursuant to CAA provisions. Should the U.S. EPA approve an equivalent program submitted by the District or Congress amends the Clean Air Act such that Section 185 fees, or an equivalent program, are no longer required, this rule option would become inoperative.

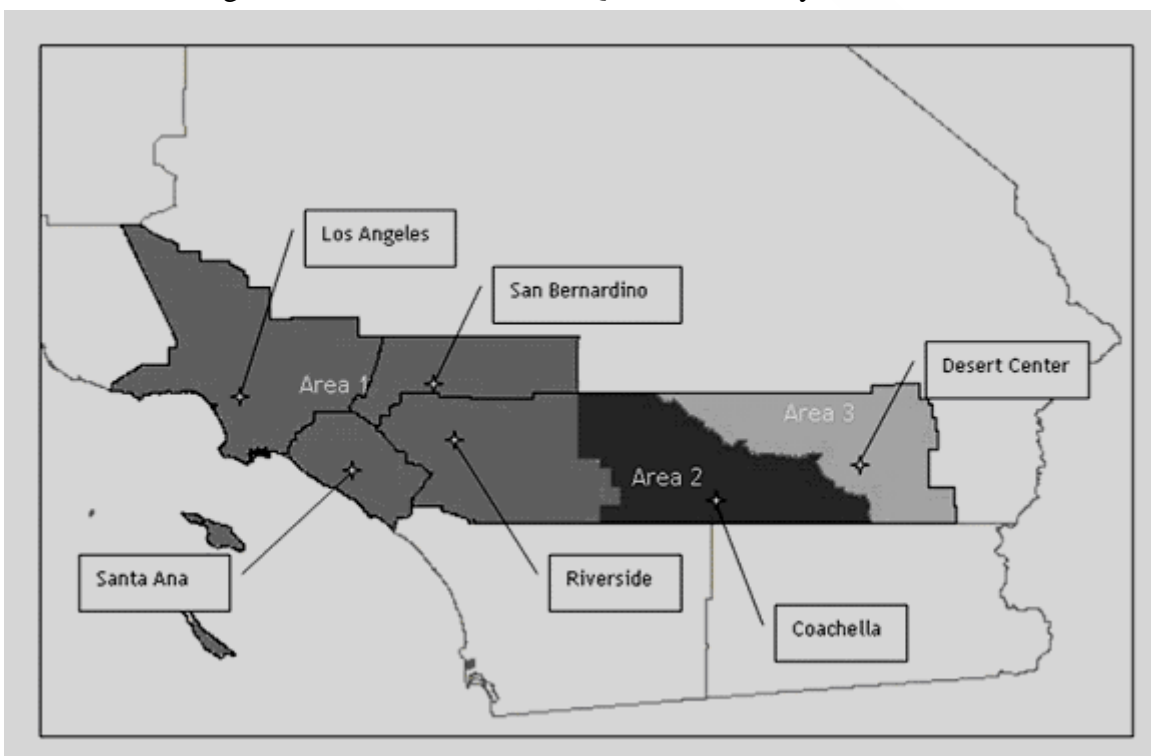
BACKGROUND

PAR 317 promulgates mandatory requirements of the CAA regarding air basin attainment deadlines for ozone and required mitigation in the absence of such attainment. Figure 1 shows air basins in the AQMD's jurisdiction. Area 1 is the portion of the AQMD in the SOCAB, Area

2 is the Riverside County portion of the SSAB in the AQMD and Area 3 is non-Palo Verde, Riverside County portion of the MDAB in the AQMD. The air basins are also overlaid onto county boundaries for reference. Geographically, for the areas in the AQMD's jurisdiction, air basins and counties generally correspond as follows:

- SOCAB (Area 1) - generally corresponds to metropolitan Los Angeles, Orange, western Riverside and south-western San Bernardino counties.
- SSAB (Area 2) - generally corresponds to the central portion of Riverside County.
- MDAB (Area 3) - generally corresponds to the eastern portion of Riverside county up to the Palo-Verde area.

Figure 1 – Air Basins in the AQMD and County Boundaries



Based on the criteria in Section 181(a) of the CAA - Classification and Attainment Dates for 1989 Non-attainment Areas and 1990 ozone readings the AQMD's basins are classified as shown in Table 1. For air basins classified as Extreme the CAA requires attainment with the federally established one-hour standard for ozone no later than 2010. For air basins classified as Severe 17 the CAA requires attainment with the federally established one-hour standard for ozone no later than 2007. [Note: The U.S. EPA has revoked the one-hour standard for ozone, so there is no longer a CAA requirement to attain the standard. However, the federal court of appeals has held that the mandatory fee requirements of this rule must still be imposed in severe

and extreme one-hour areas not meeting the one-hour standard.] If the air basin is not in attainment by the applicable attainment date then a major stationary source must either reduce emissions of VOC/NO_x as applicable, or pay a CAA non-attainment fee. The MDAB (Area 3) has a status of unclassified attainment, and so PAR 317 does not apply to the sources in this basin.

Table 1 – CAA Classification and Attainment Dates for Air Basins in the AQMD

Air Basin	Attainment Status	Mandatory CAA Attainment Year (1-Hour Ozone Standard)
SOCAB (Area 1)	“Extreme” non-attainment	2010
SSAB (Area 2)	“Severe 17” non-attainment	2007
MDAB (Area 3)	Unclassified Attainment	Not Applicable

For the purposes of this rule a source qualifies as a major stationary source based on the PTE (permitted emissions level or “allowables”) of VOC/NO_x for all permitted units at the source or RECLAIM credits held. For sources located in the SOCAB (Area 1) this is any stationary source with a PTE of 10 or more tons of either VOC or NO_x (not combined), annually. For sources located in the SSAB (Area 2) this is any stationary source with a PTE of 25 or more tons of either VOC or NO_x (not combined), annually. There is currently no threshold for sources located in the MDAB since this basin is classified as attainment/undesignated.

For the purposes of this rule a Non-RECLAIM major stationary source, based on the source PTE, is defined in Sections 181(b)(4)(B) and 182(d) of the CAA and as shown in Table 2. Also, where applicable a Non-RECLAIM major stationary source is also the same as a Major Polluting Facility as defined in Rule 1302(s) – Definition of Terms.

A unique feature of the AQMD is the Regional Clean Air Incentives Market or RECLAIM program. RECLAIM is a special cap and trade program established for medium to large sized emitters of NO_x and SO_x located in the SOCAB. This program allows sources in the program to trade credits with other sources in the program. Due to the fluid nature of RECLAIM trading emissions credits (RTCs), special provisions have been crafted for Title V applicability and PTE. To recognize and continue this unique program, specific language for RECLAIM sources subject to this rule has been crafted. These provisions deal with the issues of PAR 317 applicability to and baseline emissions for RECLAIM sources. For the purposes of this rule, a RECLAIM source is a major stationary source subject to PAR 317 if, the source PTE is greater than or equal to 10 tons prior to the attainment year or the year the PTE became greater than or equal to 10

tons if this first occurs during or after the attainment year, based on the current Title V RECLAIM program definition of PTE as found in paragraph (b)(2) of Rule 3001 – Applicability. Paragraph (b)(2) of Rule 3001 defines PTE for a RECLAIM facility as either the higher of the starting allocation plus nontradeable credits or, RTCs that are held in the allocation account after trading.

Each RECLAIM facility is assigned a cycle – Cycle 1 or Cycle 2. Cycle 1 facilities have a compliance year of January 1 through December 31 of each year, and Cycle 2 facilities of July 1 through June 30 of the following year. Accordingly, emissions from RECLAIM facilities are based on their compliance year for purposes of assessing RECLAIM compliance. However, to be consistent with the non-RECLAIM facilities, for the purpose of this rule, baseline emissions for RECLAIM facilities will be determined by calendar year. For example, the baseline emissions for the 2010 attainment year for a Cycle 1 facility would coincide with the 2010 compliance year emissions. For Cycle 2 facilities, the baseline emissions would be the sum of the third and fourth quarters of compliance year 2009 (January 1 – June 30, 2010) and the first two quarters of compliance year 2010 (July 1 – December 31, 2010).

Regardless of which cycle a RECLAIM facility belongs, the NO_x baseline for a NO_x RECLAIM facility is defined as the larger of either the NO_x RTCs held on January 1 of the attainment year eligible for use during that year, or the actual NO_x emissions during the attainment year (not to exceed eligible NO_x RTC holdings at the end of the reconciliation period). By way of example, for the case of a 2010 attainment year (extreme non-attainment area), the NO_x RTCs held on January 1 of the attainment year and eligible for use during that year are the sum of all RTCs held by the facility on January 1 which fall into any of the following categories:

- A. Active Cycle 2 Compliance Year 2009 RTCs held in the facility's allocation account which were not needed for compliance purposes during July through December 2009;
- B. Active Cycle 1 Compliance Year 2010 RTCs held in the facility's allocation account; and
- C. Active Cycle 2 Compliance Year 2010 RTCs held in the facility's allocation account.

Table 2 – Definition of Major Stationary Source Based on Permitted Source Emissions (PTE)

Air Basin	Attainment Status	Potential to Emit/Permitted Source Emissions of Either VOC or NOx
SOCAB (Area 1)	“Extreme” non-attainment	10 or more Tons Per Year
SSAB (Area 2)	“Severe 17” non-attainment	25 or more Tons Per Year
MDAB (Area 3)	Undesignated	Not Applicable

Table 3 below provides some examples of whether a source qualifies as a major stationary source or not. Note that a source located in the SOCAB must have the potential to emit at least 10 tons of VOC or the potential to emit at least 10 tons of NOx per year in order to qualify as a major stationary source for the purposes of PAR 317. A source located in the SSAB must have the potential to emit at least 25 tons of VOC or the potential to emit at least 25 tons of NOx per year in order to qualify as a major stationary source for the purposes of PAR 317.

Table 3 – Examples of Whether a Source Qualifies as a Major Stationary Source (TPY)

Air Basin	Source VOC PTE	Source NOx PTE	Qualifying VOC PTE	Qualifying NOx PTE	Major Stationary Source
SOCAB	5	7	10	10	NO
SOCAB	59	1	10	10	YES for VOC
SOCAB	6	58	10	10	YES for NOx
SOCAB	25	11	10	10	YES for BOTH
SSAB	24	20	25	25	NO
SSAB	51	6	25	25	YES for VOC
SSAB	11	25	25	25	YES for NOx
SSAB	450	427	25	25	YES for BOTH
MDAB	N/A	N/A	N/A	N/A	Not Applicable

PAR 317 INVENTORY

An estimated projection of the PAR 317 Inventory was generated using a data set obtained by cross referencing the AQMD's Annual Emissions Reporting (AER) inventory data and Title V database and based on the following assumptions:

1. All sources with a potential (or permitted) to emit 25 or more tons per year of either VOC or NO_x emissions annually and located in the portion of the SSAB that is in the jurisdiction of the AQMD, are major stationary sources and included in this estimate.
2. All other sources with a potential (or permitted) to emit 10 or more tons per year of either VOC or NO_x emissions annually and located in the SOCAB (in the jurisdiction of the AQMD), are also major stationary sources and included in this estimate.
3. Sources are classified as major stationary sources based on their potential to emit or permitted level of emissions. However, fee amounts are based on actual emissions in the applicable fee assessment year.
4. Actual, FY 06-07 and prior fiscal years VOC and NO_x emissions data reported through the District's AER program are used as a proxy for and assumed equivalent to actual CY 2006 and prior years source emissions of these same pollutants, respectively.
5. Actual emissions include permitted (RECLAIM and non-RECLAIM) and non-permitted (fugitive) source emissions, where applicable.
6. The CPIF provides a CPI inflation based increase in the initial \$5,000 per ton fee based on the CPI for the given assessment year for each ton of VOC and for each ton of NO_x emitted in excess of 80% of the major stationary sources baselines for these air contaminants.
7. The set of major stationary sources remains static from 2006 through 2011. No new major stationary sources are permitted and no existing major stationary sources drop out of the current list (see Appendix 1) during this time period. This last assumption is highly unlikely so the figures presented should be regarded as one of a set of possible projections of CAA revenues.

[Note – this analysis was done for benchmarking and estimation purposes. The results obtained will likely not be representative of actual emissions or fees. It cannot be determined, a priori, what actual results will be in the 2007 to 2010 time frame.]

As of July 2008, there were 585 potential major stationary sources in the AQMD; 584 in the SOCAB and 1 in the SSAB (Imperial Irrigation District, ID#62862). It is currently projected that out of the 584 major stationary sources in the SOCAB, 85 major stationary sources will not pay a CAA non-attainment fee in 2012 because they do not currently have any air emissions of VOC or NO_x. For the remaining 499 major stationary sources in the SOCAB the highest combined (VOC and NO_x) major stationary source fee paid by a major stationary source in 2012 is projected to be approximately \$2.7 million while the lowest combined CAA non-attainment fee is projected to be approximately \$472. The average combined major stationary source CAA

non-attainment fee in 2012 is projected to be approximately \$60,138. These figures assume no annual reduction in either VOC or NOx emissions from the reported FY 06-07 annual emissions inventory data for the major stationary sources which this analysis is based on.

Tables 4 and 5 below show the projected range of estimated revenues from CAA non-attainment fees based on assumed aggregate rates of annual emission reductions from major stationary sources after the attainment date. These percent reductions are simply an example of possible revenues if aggregate emissions from all major stationary sources are reduced as specified. They are not an attempt to predict actual reductions. It is unknown to what extent facilities will reduce their emissions rather than pay fees. Table 4 shows estimated projected revenues from the only major stationary source currently located in the SSAB (Imperial Irrigation District, ID#62862) for which the first assessment date is 2008 and the first fee due date is 2009. Major stationary source(s) in the SSAB would continue to pay fees annually beyond 2008 until the Administrator of the U.S. EPA determines the air basin is in compliance with the federal one-hour ozone standard. Table 5 shows the cumulative projected revenue for the major stationary source in the SSAB paying their 2012 annual CAA non-attainment fee as well as for major stationary sources in the SOCAB that will be paying their 2012 annual CAA non-attainment fee based on their 2011 fee assessment and their 2010 baseline emissions. Facilities in the SOCAB would also continue to make annual CAA non-attainment fee payments beyond the initial 2012 CAA non-attainment fee payment until the Administrator of the U.S. EPA finds the SOCAB is in compliance with the federal one hour standard for ozone.

PAR 317 annual CAA revenues are not projected for future years past 2012. While Appendix 1 is a list of all currently identified and active major stationary sources potentially subject to PAR 317 the list could, and likely will, change by 2010 and in the years beyond. An existing major stationary source may agree to take a permit condition prior to the attainment date to lower their allowable or permitted emissions of VOC and NOx below the major source threshold, in which case the source would not be considered a major stationary source, or an existing major stationary source may discontinue operations. In contrast, new facilities may begin operations in the AQMD or existing non-major stationary sources may expand to become a major stationary source. An example is a new electrical generating facility coming online in 2011. Any of these changes to the current list of major stationary sources and their associated emissions will affect the revenues estimated in this report.

Table 4 – CY 2009: A Range of Estimated Projected Revenues From PAR 317 CAA non-attainment fees (SSAB Only)

Annual Percentage Reduction in Overall Emissions	VOC Total Revenue (\$)	NOx Total Revenue (\$)	VOC and NOx Total Revenue (\$)
0.0%	0	11,864	11,864
2.0%	0	10,464	10,464
4.0%	0	9,112	9,112

Table 5 – CY 2012: A Range of Estimated Projected Revenues From PAR 317 CAA non-attainment fees (SSAB and SOCAB)

Annual Percentage Reduction in Overall Emissions	VOC Total Revenue (\$)	NOx Total Revenue (\$)	VOC and NOx Total Revenue (\$)
0.0%	15,800,000	19,500,000	35,300,000
2.0%	13,100,000	16,200,000	29,300,000
4.0%	10,800,000	13,300,000	24,100,000

BASELINE ALTERNATIVES

Rule 317 currently defines the baseline emissions of either VOC or NOx for a major stationary source as the amount of these emissions in the attainment year (based on the Basin in which the source is located), for VOC and NOx respectively. At the December 5, 2008 Governing Board meeting staff was directed to analyze various possible alternative baselines for the Board’s consideration when amending the rule to apply to the SOCAB.

Staff began by considering Section 185(b)(2) of the CAA where “...the Administrator [of the U.S. EPA] may issue guidance authorizing the baseline amount to be determined in accordance with the lower of average actuals or average allowables, determined over a period of more than one calendar year”. Furthermore, that “Such guidance may provide that such average calculation for a specific source may be used if that source's emissions are irregular, cyclical, or otherwise vary significantly from year to year.”

Further guidance was outlined in a U.S. EPA memo dated March 21, 2008 from William T. Harnett, Director, Air Quality Policy Division (C539-01), U.S. EPA which stated that “In some cases, however the amount calculated for a particular source in the attainment year may not be considered representative of the source’s normal operating conditions. In these cases, the CAA allows for use of an alternative calculation method for sources whose annual emissions are ‘irregular, cyclical, or otherwise vary significantly form year to year.’ We believe an acceptable alternative that could be used for calculating the “baseline amount” for such sources would be the method for calculating ‘baseline actual emissions’ found in EPA’s regulations for Prevention of Significant Deterioration of Air Quality (PSD) (40 CFR 52.21(b)(48)).” Under the PSD regulations, sources may generally use the relevant source records for any consecutive 24 months within the past ten years (“2-in-10” concept) and any consecutive 24 months within the past five years (2-in-5 concept) for electric generating facilities, to calculate an average actual annual emissions rate. In the context of PSD, U.S. EPA has determined that the 2-in-10 concept and 2-in-5 concept provide a reasonable method of computing baseline actual emissions since they take into account variations in actual emissions over a full business cycle representing emissions due to the normal operation of the respective source categories during the time period. However, the memo also states that the study establishing these alternative baseline concepts resulted from an examination of the business fluctuations for certain source categories using industry output data for the years 1982 to 1994, inclusive, based on the Office of Management and Budget SIC codes

for individual industries. Whether such data and analysis is currently valid and to what extent for the purposes of establishing a possible alternative baseline is questionable.

Another issue arises in that while the guidance memo suggests that a source might potentially calculate its baseline rate using emissions data from a period other than the attainment year it also further states that there must be adequate source information for the selected consecutive 24 month period to substantiate the proposed alternative baseline. Furthermore, where such data is available adequacy should also be determined on a case by case basis, by performing a downward adjustment of the baseline emissions to account for any emissions currently non-compliant and also for the most currently enforceable emissions limitations that might restrict the sources ability to currently emit a particular pollutant or to operate at levels that existed during the consecutive 24 month period that is selected. Such an analysis would have to include, but not be limited to, an examination on a case by case basis of any District, State, or Federal requirements such as Reasonably Available Control Technology (RACT), Best Available Control Technology (BACT), Lowest Available Emissions Reduction (LAER), New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAPS), processing limits, fuel limitations, or other limitations voluntarily accepted by the source for netting emissions offsets or the creation of emissions reduction credits. As stated earlier in this report, staff has estimated that over 500 major stationary sources will likely be subject to PAR 317 during the initial implementation year for the SOCAB. A case by case analysis of baseline, with each source potentially having a different baseline is simply not feasible given the resource burdens that would be placed on the agency. Neither the CAA or U.S. EPA guidance place an obligation on states or by extension individual air districts to adopt alternative baselines for the purpose of implementing Section 185 rules; rather they suggests that such alternative baselines may be more appropriate in certain circumstances.

Staff also performed an extensive nationwide survey of other air Districts, including areas that were designated Severe 15 and Severe 17 non-attainment for the federal one-hour ozone standard. Only two air districts, the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the San Joaquin Valley Air Pollution Control District (SJVAPCD), both designated Severe 15 non-attainment, have to date adopted such rules. Baseline in the SMAQMD, Rule 307 – Clean Air Act Fees, is defined as actual emissions in the attainment year. SJVAPCD Rule 3170 – Federally Mandated Ozone Non-Attainment Fee, provides that for each major source, the Baseline Period shall be one of the following periods: The two consecutive calendar years consisting of the attainment year and the year immediately prior to attainment year; or at least two consecutive calendar years within the five years immediately prior to the end of the attainment year, if those years are determined by the APCO as more representative of normal source operation. It should be noted that the SJVAPCD rule has not been federally approved. Staff's understanding is that there may be federal approvability issues with the rule.

The SMAQMD has estimated that about 14 major stationary sources would be impacted by Rule 307. While SJVAPCD Rule 3170 does contain a case by case review by the APCO, staff at this agency estimates that about 16 major stationary sources will be affected by the rule. The number of rule impacted major stationary sources in both cases is far less then the number projected to be impacted by PAR 317, again making a case by case review provision in PAR 317 very labor intensive.

Based on information obtained and analyzed staff considered two core issues in assessing the viability of an alternative baseline as follows:

- 1) Since a case by case determination of baseline for a major stationary source is not very labor intensive, what statistical test should be used to determine if a “source's emissions are irregular, cyclical, or otherwise vary significantly from year to year”? After consideration of a number of approaches the “t-Test” methodology (Appendix 2) was chosen for determining if a source’s emissions are cyclical. This method was chosen since it is a widely known established basic statistical test method and can easily be referenced in numerous publicly available sources. The method is fairly simple to use and well suited to working with smaller data sets. The chosen “t-Test” methodology compares both the VOC and NOx emissions in the 2006 proxy baseline year to the VOC and NOx emissions in a given n number of prior years (for n = 3, 4, and 5), respectively. The resulting value of this statistic can be used together with a table of the t-distribution to express a degree of confidence about the likelihood that baseline year emissions might be significantly different from prior years’ emissions. A “t” value for this test that is outside the chosen confidence bounds is taken to indicate that baseline year emissions deviate significantly from the prior year emissions and the source is cyclical. Analysis was performed at the 90%, 95% and 99% confidence levels and the 95% level was chosen as the most representative based on the data set characteristics.
- 2) Over what time period should this data or test statistic be evaluated? Both U.S. EPA guidance and SJVAPCD Rule 3170 allow for averaging emissions for a representative time period during a certain number of prior years. Since, it is very resource intensive and therefore, less desirable to conduct a case by case review of all major stationary sources in the SOCAB, staff determined that on an aggregate basis for all major stationary sources, selecting an extended period of time for averaging (such as those suggested in U.S. EPA’s March 2008 guidance) would not be appropriate due to the expected fluctuations in emissions resulting from the aggressive control programs in the AQMD. Therefore, in an effort to minimize potential interference with the control strategy, a five (5) year time period was chosen for this analysis. As a sensitivity analysis, however, staff did consider alternative baseline scenarios using both a three and four year averaging also. Various scenarios were then considered for a three, four and five year averaged alternative baseline.

An estimated projection of the PAR 317 Inventory for various alternative baseline scenarios (shown below) was generated using a data set obtained by cross referencing the AQMD’s Annual Emissions Reporting (AER) inventory data and Title V database and the following additional assumptions:

1. All sources with a potential (or permitted) to emit 25 or more tons per year of either VOC or NOx emissions annually and located in the portion of the SSAB that is in the jurisdiction of the AQMD, are major stationary sources and included in this estimate;
2. All other sources with a potential (or permitted) to emit 10 or more tons per year of either VOC or NOx emissions annually and located in the SOCAB (in the jurisdiction of the AQMD), are also major stationary sources and included in this estimate;

3. Sources are classified as major stationary sources based on their potential to emit or permitted level of emissions. However, fee amounts are based on actual emissions in the applicable fee assessment year;
4. Actual, FY 02-03 through FY 06-07 VOC and NO_x emissions data reported through the District's AER program are used as a proxy for and assumed equivalent to actual CY 2002 through 2006 source emissions of these same pollutants, respectively;
5. Actual emissions include permitted (RECLAIM and non-RECLAIM) and non-permitted (fugitive) source emissions, where applicable;
6. The CPIF provides a CPI inflation based increase in the initial \$5,000 per ton fee based on the CPI for the given assessment year for each ton of VOC and for each ton of NO_x emitted in excess of 80% of the major stationary sources baselines for these air contaminants;
7. The set of major stationary sources remains static from 2006 through 2011. No new major stationary sources are permitted and no existing major stationary sources drop out of the current list (see Appendix 1) during this time period. This last assumption is highly unlikely so the figures presented should be regarded as one of a set of possible projections of CAA revenues;
8. A cyclical major stationary source is a major stationary source where the annual VOC (or NO_x) emissions in the attainment year deviates [varies] significantly from the annual VOC (or NO_x) emissions during the n (where n = 3, 4, or 5) consecutive years immediately preceding the attainment year such that, the outcome of the standard Students "t-Test" results in a rejection of the null hypothesis that the baseline year VOC (or NO_x) emissions and the n (where n = 3, 4, or 5) consecutive years immediately preceding the attainment year VOC (or NO_x) emissions values is equal to zero (0), within a 95% level of confidence. A major stationary source that has cyclical annual emissions of either VOC, or NO_x, or both is, for the purposes of this rule, defined as a cyclical major stationary source. A further explanation of the "t-Test" methodology is given in Appendix 2 of this report; and
9. In order to make the analysis rigorous, only sources with complete emissions data for the chosen averaging period were used. For the proxy SOCAB baseline attainment year (FY 06-07) there were 509 sources with complete data. For the three, four and five year average there were 450, 427, and 401 sources with complete emissions data, respectively.

[Note – this analysis was done for benchmarking and estimation purposes. The results obtained will likely not be representative of actual emissions or fees. It cannot be determined, a priori, what actual results will be in the 2007 to 2010 time frame.]

Table 6 shows five possible scenarios for determining the baseline for an existing major stationary source and the resultant estimated fee revenues for each scenario. Fee revenues are estimated for each scenario based on 3, 4 and 5 years worth of annual emissions data. Moving down each year n column (n = 3, 4 or 5), the fee revenue for each scenario is also compared to the fee revenue in Scenario 1, the single attainment year baseline (either 2007 for sources in the

SSAB or 2010 for sources in the SOCAB). The comparison is provided as the total percentage reduction in revenues for a scenario as compared to the single year baseline revenue for all major stationary sources. Fee revenues for Scenario 1 are constant since there is no averaging of emissions. Scenario 2 through 5 are ranked in order of the decreasing revenues except for Scenario 5, which was only recently added. Both Scenario 4 and 5 are likely not feasible since they also allow averaging by non-cyclical sources.

Scenario 3, would allow a cyclical source the option of using either the single attainment year or alternatively the multi-year averaged emissions for either the 3, 4 or 5 years immediately preceding the attainment year as the baseline. Table 6 shows that regardless of the number of years used for averaging emissions Scenario 3, results in higher loss of the revenues, as compared to Scenario 2. This is due to the fact that under Scenario 3 the source may choose (subject to passing a “t”-Test analysis) whether to be a cyclical source or not, whereas under Scenario 2 a source is automatically designated as either cyclical or non-cyclical based on emissions data provided to the SCAQMD thorough the SCAMQD Annual Emissions Reporting (AER) program.

For comparative analysis, Scenario 1 and 3 largely mirror staff’s rule proposals Option A and Option B, respectively. It must be noted for any scenario using an alternative baseline, prior year emissions would have to be adjusted for future effective regulatory programs. That adjustment has not been made in these analyses.

Option C is not represented in any of the Scenarios. Option C requires a case-by-case analysis that is not amenable to aggregate analysis. Staff anticipates that in all scenarios, Option C will significantly reduce the fee revenue.

Table 6: PAR 317 - Analysis of Various Baseline Scenarios and Resultant Estimated CAA Non-Attainment Fee Revenues for Major Stationary Sources (MSS)

	3 Year Average		4 Year Average		5 Year Average	
a) MSS with complete AER FY 06-07 data	509		509		509	
	\$35.4M		\$35.4M		\$35.4M	
b) Sources with complete AER emissions data for all years averaged:	450	100%	427	100%	401	100%
Cyclic Sources	160	36%	202	47%	223	56%
Non-Cyclic Sources	290	64%	225	53%	178	44%
Scenario 1: All sources use their 2006 single year emissions as baseline	\$31.1M	0%	\$30.6M	0%	\$29.6M	0%
Scenario 2: If cyclical must use averaged emissions baseline	\$28.9M	-7%	\$27.7M	-9%	\$26.6M	-10%
Scenario 3: If cyclical use higher of 2006 single year or averaged emissions baseline	\$26.6M	-14%	\$24.4M	-20%	\$22.8M	-23%
Scenario 4: All sources use higher of 2006 single year or averaged emissions baseline	\$22.3M	-28%	\$20.7M	-32%	\$20.0M	-33%
Scenario 5: All sources must use averaged emissions baseline	\$26.4M	-15%	n/a	n/a	n/a	n/a
Sources with (2006 Baseline > Averaged Baseline)	180	40%	156	37%	139	35%
c) Estimated projected revenue reductions for scenarios above:						
Scenario 1: All sources use their 2006 single year emissions as baseline	\$0.0M		\$0.0M		\$0.0M	
Scenario 2: If cyclical must use averaged emissions baseline	\$2.2M		\$2.9M		\$3.0M	
Scenario 3: If cyclical use higher of 2006 single year or averaged emissions baseline	\$4.4M		\$6.2M		\$6.8M	
Scenario 4: All sources use higher of 2006 single year or averaged emissions baseline	\$8.7M		\$9.9M		\$9.6M	
Scenario 5: All sources must use averaged emissions baseline	\$4.7M		n/a		n/a	

Table 7 and Table 8 show the top ten cyclical major stationary sources (by four digit SIC code) that would be impacted by an alternative mandatory five (5) year averaged baseline as compared to a single attainment year baseline (Scenario 2). Not that some cyclical sources will pay less in CAA non-attainment fees while others will pay more.

Table 7 – Top 10 Cyclic Major Stationary Sources That Will Pay **Less** CAA Non-Attainment Fees Under Scenario 2

SIC	Major Stationary Source	Facility Id	Fees with 2006 Baseline	Fees with 5 Year Averaged Baseline	Savings
2911	CHEVRON PRODUCTS CO.	800030	\$2,705,858	\$842,829	\$1,863,029
3241	CALIFORNIA PORTLAND CEMENT CO (NSR USE)	800181	\$1,458,272	\$534,159	\$924,113
2911	BP WEST COAST PROD.LLC BP CARSON REF.	131003	\$2,118,987	\$1,256,889	\$862,098
2911	CONOCOPHILLIPS COMPANY	800362	\$844,716	\$542,547	\$302,169
4226	KINDER MORGAN LIQUIDS TERMINALS, LLC	800057	\$164,726	\$0	\$164,726
4953	COMMERCE REFUSE TO ENERGY FACILITY	37336	\$154,770	\$26,413	\$128,357
3312	TAMCO	18931	\$129,799	\$5,193	\$124,606
3221	OWENS-BROCKWAY GLASS CONTAINER INC	7427	\$116,367	\$19,068	\$97,299
4952	ORANGE COUNTY SANITATION DISTRICT	29110	\$193,106	\$106,633	\$86,473
3792	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	7949	\$108,915	\$24,421	\$84,493

Table 8 – Top 10 Cyclic Major Stationary Sources That Will Pay **More** CAA Non-Attainment Fees Under Scenario 2

SIC	Major Stationary Source	Facility Id	Fees with 2006 Baseline	Fees with 5 Year Averaged Baseline	Loss
2911	ULTRAMAR INC (NSR USE ONLY)	800026	\$854,544	\$1,240,826	(\$386,282)
4922	SO CAL GAS CO (EIS USE)	800128	\$529,718	\$796,542	(\$266,824)
2911	CONOCOPHILLIPS COMPANY	800363	\$1,659,268	\$1,847,716	(\$188,448)
2911	PARAMOUNT PETR CORP (EIS USE)	800183	\$445,365	\$623,024	(\$177,659)
5171	EXXONMOBIL OIL CORPORATION	800171	\$120,744	\$279,173	(\$158,429)
8071	QUEST DIAGNOSTICS INC	82657	\$82,831	\$225,893	(\$143,062)
4911	LA CITY, DWP VALLEY GENERATING STATION	800193	\$158,437	\$287,857	(\$129,420)
9199	LONG BEACH CITY, SERRF PROJECT	44577	\$615,504	\$741,282	(\$125,778)
4953	O C WASTE & RECYCLING	50418	\$101,870	\$212,519	(\$110,648)
2011	CLOUGHERTY PACKING LLC/HORMEL FOODS CORP	16978	\$66,872	\$173,619	(\$106,746)

Further analysis also reveals that certain industry groups (by two digit SIC code) would in the aggregate pay less in CAA non-attainment fees under Scenario 2 where cyclical sources would use an averaged baseline, while others would pay more. This may occur in the baseline year and beyond because within an industry grouping some cyclical sources using an averaged baseline may pay higher CAA non-attainment fees, since emissions in their single baseline attainment year are higher than in the previous years being used in an averaged baseline. Averaging a single highest emissions year with lower emissions years will always result in an averaged emissions baseline that is lower than the highest single year emissions baseline. Table 9 shows the net aggregate savings/(loss), using five (5) year averaged data versus a single attainment year baseline, by industry grouping showing the effect of summing revenue increase and decreases for all the sources within an industry grouping.

Table 9: Cyclical Major Stationary Sources with Net Savings/(Loss) in CAA Non-Attainment Fees for Scenario 2 by SIC Code Grouping

<u>SIC Code Grouping</u>	<u>Combined Grouping Resultant Net Savings/(Loss)</u>
29-- Petroleum Refining & Related Industries	\$2,268,691
32-- Stone, Clay, Glass & Concrete Products	\$1,192,658
27-- Printing, Publishing & Allied Industries	\$289,666
42-- Motor Freight & Warehousing	\$203,984
33-- Primary Metal Industries	\$186,716
37-- Transportation Equipment	\$180,495
25-- Furniture & Fixtures	\$99,702
23-- Apparel & Other Finished Products of Fabrics & Similar Materials	\$34,055
46-- Pipelines, Except Natural Gas	\$31,072
24-- Lumber & Wood Products, Except Furniture	\$30,568
79-- Amusement & Recreation Services	\$29,632
39-- Miscellaneous Manufacturing Goods	\$27,499
36-- Electronic & Other Electrical Equipment & Components	\$14,550
26-- Paper & Allied Products	\$13,462
47-- Transportation Services	\$6,259
45-- Transportation by Air	\$4,951
75-- Automotive Repair, Services & Parking	\$2,532
50--Wholesale-Durable Goods	(\$3,472)
82-- Educational Services	(\$9,938)
30-- Rubber & Miscellaneous Plastics Products	(\$11,089)
20-- Food & Kindred Products	(\$12,034)
76-- & 78-- Miscellaneous Repair Services	(\$12,791)
28-- Chemicals & Allied Products	(\$16,814)
38-- Measuring, Analyzing & Controlling Instruments; Photographic Goods; Watches & Clocks	(\$53,505)
94--, 96-- & 97-- Public Administration	(\$115,308)
34-- Fabricated Metal Products, Except Machinery and Transportation Equipment	(\$116,234)
91-- Executive, Legislative & General Government, Except Finance	(\$125,778)
13-- Oil & Gas Extraction	(\$143,701)
80-- Health Services	(\$177,091)
51-- Wholesale Trade - Non-Durable Goods	(\$188,443)
49-- Electric, Gas & Sanitary Services (EGFs)	(\$602,335)

Staff has continued to research various scenarios for baseline determination. Two additional scenarios were analyzed that provided for the use of the two highest consecutive emission years within the last five years. Those scenarios are presented below. In scenario 6, only cyclic sources may use the two highest years while in scenario 7, all sources may use the two highest years.

Baseline Emissions Option	Projected CAA Fee Revenue (Millions \$)	CAA Fee Revenue Loss Compared to Option A
Scenario 6 – ALL CYCLICAL sources MAY use the higher of <u>either</u> , the 2010 single attainment year, or the average of the 2 highest consecutive years in the 5 year period immediately preceding the attainment year (2006-2010); all non-cyclical sources will use the 2010 single attainment year as baseline	23	-35%
Scenario 7 – ALL sources MAY use the higher or <u>either</u> , the 2010 single attainment year, or the average of the 2 highest consecutive years in the past 5 year period immediately preceding the attainment year (2006-2010)	19.5	-55%

CALCULATING CAA NON-ATTAINMENT FEES

Air basins under the jurisdiction of the AQMD are defined in PAR 317 and must be in compliance with the both the federal one-hour (for the purposes of this rule) and current eight-hour standard for ozone by a specific date, the attainment date, as shown in Table 1. For air basins that are not in attainment by the attainment date, section 185(a) of the CAA mandates that a fee be assessed to major stationary sources located in those air basins for each excess ton of both VOC and NO_x emissions as further defined in Section 185(b) of the CAA. For the purposes of PAR 317 this is defined as a CAA non-attainment fee. However, in PAR 317, before the fee is actually assessed the Administrator of the U.S. EPA or the AQMD Executive Officer must find the basin (either the SOCAB or the SSAB) is not in attainment with the federal one-hour standard for ozone.

This CAA non-attainment fee is computed based on emissions of VOC and NO_x that are in excess of eighty percent of the baseline VOC and NO_x emissions, calculated separately for each air contaminant, as follows:

For sources subject to this rule **prior to** the attainment year, the baseline emissions shall be the amount of the actual emissions during either the attainment year or the average of the five (5) consecutive years immediately preceding the attainment year that do not exceed the permitted allowables.

For sources subject to this rule **during or after** the attainment year:

- (i) For a **non-RECLAIM** major stationary source the baseline emissions shall be the amount of emissions allowed under the applicable implementation plan (the permitted annual emissions levels).
- (ii) For an **existing RECLAIM** facility that subsequently qualifies as a major stationary source for the purposes of this rule the baseline emissions shall be the higher of the

RTC holdings at the beginning of the year the source becomes a major stationary source that do not exceed the RTC holdings at the end of the reconciliation period.

- (iii) For a **new RECLAIM facility** that qualifies as a major stationary source for the purposes of this rule the baseline emissions shall be the higher of the RTC credits purchased at the beginning of the attainment year or initial year of operation, as applicable, or actual emissions, not to exceed RTC holdings at the end of the reconciliation period.

Beginning with the year after the attainment year, and each year thereafter (fee assessment year) and until the Administrator of the U.S. EPA designates the air basin to be in attainment of the federal one-hour standard for ozone, both the VOC and NOx annual CAA non-attainment fees shall be assessed for all major stationary sources. It should be noted an extension of the assessment year could be granted in accordance with Section 185(c) of the CAA provided certain conditions are met including there is no more than 1 exceedance of the national ambient air quality standard level for ozone in the area in the year preceding the extension year. This condition was not achieved for the SSAB and undoubtedly will not be achieved in the SOCAB in 2010. Therefore, staff has not included this option in PAR 317.

CAA non-attainment fees will be billed and due in the year immediately following the assessment year in accordance with the annual emissions fee billing requirements as established in Rule 301(e)(10). A major stationary source that does not pay any or all of the required CAA non-attainment fees, by the specified due date, shall be subject to the late payment surcharge and permit revocation provisions of Rule 301(e)(10). For major stationary sources in the SSAB the calendar year for baseline emissions is 2007, the first assessment year is 2008 and the first year for remittance is 2009. For major stationary sources in the SOCAB the calendar year for baseline emissions is 2010, the first assessment year is 2011 and the first year for remittance is 2012.

A source qualifies as a major stationary source based on its PTE of VOC or NOx emissions (in tons per year) or for RECLAIM facilities as defined in paragraph (b)(2) of Rule 3001 - Applicability. CAA non-attainment fees for a major stationary source however, are assessed based on actual annual emissions from the source. A fee for each ton of VOC and for each ton of NOx emissions over eighty percent of the baseline emissions of the major stationary source is assessed. This CAA non-attainment fee is assessed at a CPI adjusted rate of \$5,000 per ton for each excess ton of VOC and for each excess ton of NOx in the assessment year(s). The CPI adjustment factor is based on the cumulative increase in the CPI from 1989 through to the assessment year in accordance with Section 185(b)(3) of the CAA and based on the index as specified in Section 502(b)(3)(B)(v).

Rule 317 fees will be collected concurrently with the Annual Emissions Reporting (AER) filings. AER is based on calendar year emissions and filings.

The PAR 317 VOC CAA non-attainment fee for each major stationary source is computed based on the following formula:

$$\text{Annual VOC CAA non-attainment fee} = \$5,000 \times \text{CPIF} \times [A - (0.8 \times B)], \text{ and}$$

The PAR 317 NO_x CAA non-attainment fee for each major stationary source is computed based on the following formula:

$$\text{Annual NO}_x \text{ CAA non-attainment fee} = \$5,000 \times \text{CPIF} \times [D - (0.8 \times E)]$$

Where,

Variable	Value
Applicable Fee Assessment Year =	CY 2008 for a major stationary source in the SSAB and CY 2011 for a major stationary source in the SOCAB.
Baseline Emissions =	Emissions in the attainment year; CY 2007 for a major stationary source in the SSAB and CY 2010 for major stationary source in the SOCAB, or as otherwise defined for sources that are not major stationary sources prior to the attainment year but become major stationary sources after the attainment year.
A =	The total amount of VOC emissions actually emitted during the applicable fee assessment year, in tons per year. If A is less than or equal to 80% of B; then there shall be no Annual VOC CAA non-attainment fee assessed for the subject year.
B =	The VOC baseline emissions as defined in this rule in tons per year.
D =	total amount of NO _x emissions actually emitted during the applicable fee assessment year, in tons per year. If D is less than or equal to 80% of E; then there shall be no Annual NO _x CAA non-attainment fee assessed for the subject year.
E =	The NO _x baseline emissions as defined in this rule in tons per year.
CPIF =	The annual Consumer Price Index adjustment factor, beginning with the 1989 change in the index up to and including the change in year prior to the year for which the fees are due, in accordance with Section 502(b)(3)(B)(v) and 185(b)(3) of the federal Clean Air Act. The CAA requires this CAA non-attainment fee be an amount equivalent to \$5,000 per ton of VOC and \$5,000 per ton of NO _x emissions adjusted by the cumulative increase in the Consumer Price Index (CPI) beginning in 1989 and up to and including the fee assessment year. For any calendar year the

	CPI is the average of the CPI for all-urban consumers published by the Department of Labor, as of the close of the 12-month period ending on August 31 of each calendar year or the revision of the CPI which is most consistent with the CPI for calendar year 1989 in accordance with Section 502(b)(3)(B)(v) and 185(b)(3) of the federal Clean Air Act.
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For CY 2009, the first year in which fees may be collected for sources in the SSAB and the CPI year reflecting the change in the 2008 fee assessment year, the adjustment factor is currently projected to be 1.664 (California Department of Finance), so that:

$$\$5,000 \text{ (in 1990 dollars)} \times \text{CPIF} = \$5,000 \times 1.664 = \$8,320 \text{ (in 2009 dollars)}$$

Currently, the following CPIF estimates are projected for CY's 2010 – 2012:

Fees Due in CY	CPIF	Adjusted Value of \$5,000
2010	1.713	\$8,565
2011	1.763	\$8,815
2012	1.816	\$9,080

Note that CPIF is not a constant and changes annually based on the annual change in the CPI.

The following are examples of PAR 317 CAA non-attainment fee calculations (rounded to the nearest dollar):

Example 1 – Non-Major Stationary Source in the SSAB; Pays No CAA Non-Attainment Fees

- Source is located in the SSAB and has a permitted VOC emissions limit (PTE) of 24 TPY in attainment year 2007. Source is not assessed a PAR 317 VOC CAA non-attainment fee in 2008 because it is not a major stationary source of VOC emissions for the purposes of PAR 317 (VOC PTE of 25 or more tons per year).
- Source has a permitted NOx emissions limit (PTE) of 20 TPY in attainment year 2007. Source is not assessed a PAR 317 NOx CAA non-attainment fee in 2008 because it is not a major stationary source of NOx emissions for the purposes of PAR 317 (NOx PTE of 25 or more tons per year).
- Total CAA Non-Attainment Fees (SSAB due 2010) = Source VOC CAA Non-Attainment Fee + Source NOx CAA Non-Attainment Fee
= \$0 + \$0 = \$0

Example 2 – Non-Major Stationary Source in the SOCAB; Pays No CAA Non-Attainment Fees

- Source is located in the SOCAB and has a permitted VOC emissions limit (PTE) of 5 TPY in attainment year 2010. Source is not assessed a PAR 317 VOC CAA non-attainment fee in 2011 because it is not a major stationary source of VOC emissions for the purposes of PAR 317 (VOC PTE of 10 or more tons per year).
- Source has a permitted NOx emissions limit (PTE) of 7 TPY in attainment year 2010. Source is not assessed a PAR 317 NOx CAA non-attainment fee in 2011 because it is not a major stationary source of NOx emissions for the purposes of PAR 317 (NOx PTE of 10 or more tons per year).
- Total CAA Non-Attainment Fees = Source VOC CAA Non-Attainment Fee + Source NOx CAA Non-Attainment Fee
(SOCAB due 2012) = \$0 + \$0 = \$0

Example 3 – Major Stationary Source for VOC; Pays a VOC CAA Non-Attainment Fee (SSAB/SOCAB)

- Source has a permitted VOC emissions limit (PTE) of 75 TPY in attainment year 2007 (or 2010 if located in the SOCAB), baseline (actual) VOC emissions of 60 tons in attainment year 2007 (or 2010 if located in the SOCAB) or for a cyclical source has a 3 year averaged baseline (B) and actual VOC emissions of 59 tons in assessment year 2008 (or 2011 if located in the SOCAB) (A). Source is a major stationary source of VOCs in the SSAB (PTE \geq 25 TPY) for the purposes of this rule and pays a PAR 317 VOC CAA non-attainment fee for 2008, due in 2009 in the amount of:

$$\begin{aligned} \text{VOC CAA Non-Attainment Fee} &= \$5,000/\text{ton} \times \text{CPIF} \times [A - (0.8 \times B)] \\ \text{(SSAB)} &= \$5,000/\text{ton} \times 1.664 \times [59 \text{ tons} - (0.8 \times 60 \text{ tons})] \\ &= \$8,320/\text{ton} \times 11 \text{ tons} \\ &= \$91,520 \end{aligned}$$

or, if source is a major stationary source of VOCs in the SOCAB (PTE \geq 10 TPY) for the purposes of this rule it pays a PAR 317 VOC CAA non-attainment fee for 2011, due in 2012 in the amount of:

$$\begin{aligned} \text{VOC CAA non-attainment fee} &= \$5,000/\text{ton} \times \text{CPIF} \times [A - (0.8 \times B)] \\ \text{(SOCAB)} &= \$5,000/\text{ton} \times 1.816 \times [59 \text{ tons} - (0.8 \times 60 \text{ tons})] \\ &= \$9,080/\text{ton} \times 11 \text{ tons} \\ &= \$99,880 \end{aligned}$$

- Source has a permitted NOx emissions limit (PTE) of 5 TPY in attainment year 2007 (or 2010 if located in the SOCAB). This source is not assessed a NOx CAA non-attainment fee in 2008 (or 2011 if located in the SOCAB) because it is not a major stationary source of NOx emissions for the purposes of PAR 317, regardless of the source location.
- Total CAA Non-Attainment Fees = Source VOC CAA Non-Attainment Fee + Source NOx CAA Non-Attainment Fee
(SSAB due 2009) = \$91,520 + \$0 = \$91,520
(SOCAB due 2012) = \$99,880 + \$0 = \$99,880

Example 4 – Major Stationary Source for VOC and NOx; Pays a VOC CAA Non-Attainment Fee and NOx CAA Non-Attainment Fee (SSAB/SOCAB)

- Source has a permitted VOC emissions limit (PTE) of 450 TPY in attainment year 2007 (or 2010 if located in the SOCAB), baseline (actual) VOC emissions of 420 tons in attainment year 2007 (or 2010 if located in the SOCAB) or for a cyclical source has a 3 year averaged baseline (B) and actual VOC emissions of 400 tons in assessment year 2008 (or 2011 if located in the SOCAB) (A). Source is a major stationary source of VOCs in the SSAB (PTE ≥ 25 TPY) for the purposes of this rule and pays a PAR 317 VOC CAA non-attainment fee for 2008, due in 2009 in the amount of:

$$\begin{aligned}
 \text{VOC CAA Non-Attainment Fee} &= \$5,000/\text{ton} \times \text{CPIF} \times [A - (0.8 \times B)] \\
 \text{(SSAB)} &= \$5,000/\text{ton} \times 1.664 \times [400 \text{ tons} - (0.8 \times 420 \text{ tons})] \\
 &= \$8,320/\text{ton} \times 64 \text{ tons} \\
 &= \$532,480
 \end{aligned}$$

or, source is a major stationary source of VOCs in the SOCAB (≥10 TPY) for the purposes of this rule and pays a PAR 317 VOC CAA non-attainment fee for 2011, due in 2012 in the amount of:

$$\begin{aligned}
 \text{VOC CAA Non-Attainment Fee} &= \$5,000/\text{ton} \times \text{CPIF} \times [A - (0.8 \times B)] \\
 \text{(SOCAB)} &= \$5,000/\text{ton} \times 1.816 \times [400 \text{ tons} - (0.8 \times 420 \text{ tons})] \\
 &= \$9,080/\text{ton} \times 64 \text{ tons} \\
 &= \$581,120
 \end{aligned}$$

- Source has a permitted NOx emissions limit (PTE) of 427 TPY in attainment year 2007 (or 2010 if located in the SOCAB), baseline (actual) NOx emissions of 400 tons in attainment year 2007 (or 2010 if located in the SOCAB) or for a cyclical source has a 3 year averaged baseline (E) and actual NOx emissions of 380 tons in assessment year 2008 (or 2011 if located in the SOCAB) (D). Source is a major stationary source of NOx in the SSAB (PTE ≥ 25 TPY) for the purposes of this rule and pays a PAR 317 NOx CAA non-attainment fee for 2008, due in 2009 in the amount of:

$$\begin{aligned}
 \text{NOx CAA Non-Attainment Fee} &= \$5,000/\text{ton} \times \text{CPIF} \times [A - (0.8 \times B)] \\
 \text{(SSAB)} &= \$5,000/\text{ton} \times 1.664 \times [380 \text{ tons} - (0.8 \times 400 \text{ tons})] \\
 &= \$8,320/\text{ton} \times 60 \text{ tons} \\
 &= \$499,200
 \end{aligned}$$

or, source is a major stationary source of NOx in the SOCAB (≥10 TPY) for the purposes of this rule and pays a PAR 317 NOx CAA non-attainment fee for 2011, due in 2012 in the amount of:

$$\begin{aligned}
 \text{NOx CAA Non-Attainment Fee} &= \$5,000/\text{ton} \times \text{CPIF} \times [A - (0.8 \times B)] \\
 \text{(SOCAB)} &= \$5,000/\text{ton} \times 1.816 \times [380 \text{ tons} - (0.8 \times 400 \text{ tons})] \\
 &= \$9,080/\text{ton} \times 60 \text{ tons} \\
 &= \$544,800
 \end{aligned}$$

- Total CAA Non-Attainment Fees = Source VOC CAA Non-Attainment Fee + Source NOx CAA Non-Attainment Fee
 (SSAB due 2012) = \$532,480 + \$499,200 = \$1,031,680

$$(\text{SOCAB due 2012}) \quad = \quad \$581,120 + \$544,800 = \$1,125,920$$

PROPOSED AMENDED RULES

Based on extensive analysis conducted by staff, three rule proposals, Option A, Option B and Option C are being presented for the Board's consideration.

Option A would adopt the same rule language for the SOCAB as adopted by the Governing Board on December 5, 2008 for major stationary sources in the SSAB by amending the definition of Basin currently in the rule to include the SOCAB. Currently Rule 317 is only applicable to major stationary source in the SSAB. Under Option A, baseline for all existing major stationary sources is defined as the actual source emissions of VOC/NOx (as applicable) in the attainment year. A major stationary source's emissions baseline would be determined based on emissions in the attainment year (2007 for the SSAB and 2010 for the SOCAB). No averaging or alternative baseline calculation is considered. In an effort to address concerns expressed regarding facilities with significant year to year variability in emissions, and with guidance and input from the Board, staff developed alternative options B and C.

Option B would allow a source, on an elective basis, to petition the Executive Officer to be classified as a cyclical source by submitting a plan demonstrating it is cyclical. The plan must include the application of the statistical "t-Test" method, as described in Appendix 2 of this staff report, demonstrating that a source has cyclical emissions after a downward adjustment of emissions to account for any/all adopted local, state and federal rules or regulations that would have restricted the source's ability to both operate or emit a particular pollutant that existed during the five (5) consecutive years immediately preceding the attainment year for which the demonstration of cyclical operations/emissions is being made. The same downward adjusted average emissions from the five (5) consecutive years immediately preceding the attainment year must also be used to calculate the alternative VOC/NOx emissions (as applicable) baseline. Staff has revised its earlier proposal to expand the years for determining an alternative baseline from three years prior to the attainment year to five years prior to the attainment year. Staff believes that this time frame provides a better balance between normal and recessionary economic environments so as to not skew emissions toward recessionary years. A five year window also provides more of a complete picture of a source's emissions and the longer averaging time will also provide for a more robust data set for analysis.

A cyclical source is defined as major stationary source where the annual VOC (or NOx) emissions in the attainment year deviates [varies] significantly from the annual VOC (or NOx) emissions during the five (5) consecutive years immediately preceding the attainment year such that, the outcome of the standard Student's "t-Test" results in a rejection of the null hypothesis that the baseline year VOC (or NOx) emissions and the five (5) consecutive years immediately preceding the attainment year VOC (or NOx) emissions values is equal to zero (0), within a 95% level of confidence. A major stationary source that has cyclical annual emissions of either VOC, or NOx, or both is, for the purposes of this rule, defined as a cyclical major stationary source. For sources that begin initial operation during or subsequent to the attainment year, the baseline emissions include unpermitted and fugitive emissions emitted during the time period the facility

is operational extrapolated (prorated) over one full calendar year. An existing major stationary source that is determined to be non-cyclical, or that does not opt to submit a plan for consideration as a cyclical source, would use the single attainment year emissions as the baseline. Once established, the baseline is fixed.

Option C would allow a source to use the average of any two consecutive years within the last ten years prior to and including the applicable attainment year as baseline if, the source files a plan certifying that it has emissions which are “cyclical, irregular or otherwise vary significantly from year to year” within the 10 year period. This option was crafted to closely mirror U.S. EPA guidance as provided in the form of a memo by William T. Harnett, dated March 21, 2008 and specific language in section 185(b) of the CAA. While this option allows for a ten year look back it also requires that emissions be discounted to recognize mandated reductions as recommended by U.S. EPA guidance. Emissions must be adjusted downward to account for any/all adopted local, state and federal rules or regulations that would have restricted the sources ability to both operate or emit a particular pollutant had they been in effect during the two years being averaged must be used for calculating the optional baseline. Option C does not require a source to use this optional baseline but, a plan must be submitted for such consideration and at a minimum must include all the following:

1. Certification by a source representative that based on the plan submitted the source emissions for the ten year time frame are in fact cyclical, irregular or vary significantly from year to year.
2. Sufficiently detailed analysis in the plan of adopted local, state, and federal rules or regulations that would have restricted the sources ability to either operate or emit a particular pollutant had they been in effect during the consecutive two (2) years selected;
3. Reporting of the calculated optional baseline, using downward adjusted/discounted emissions corrected for any/all adopted local, state and federal rules or regulations that would have restricted the sources ability to both operate or emit a particular pollutant had they been in effect during the selected time frame.

Option C also includes a “Clean Unit” or Best Available Control Technology (BACT) Permit Unit emissions exemption. A BACT Permit Unit is defined as a permit unit that has an emission rate or limitation that meets or exceeds the requirements of Health and Safety Code 40405 as of December 31, 2010, or the date the permit to construct for the unit was issued, whichever is later. Emissions from permitted units with BACT may be excluded from the calculation of CAA non-attainment fees. A plan approval is also required for this relief and must include an analysis of the uncontrolled and controlled emissions from the permit unit for the year(s) under consideration.

Plans must be filed in accordance with the fee provisions of Rule 306 including all of the required information on or before the later of March 31, 2011 or March 31 of the year following the initial attainment year for a BACT permit unit exemption or an alternative baseline period. Sources that are not deemed to have cyclical, irregular or otherwise vary significantly from year to year must use the emissions in the attainment year as baseline. No guarantee is provided that

review of a plan filing shall constitute acceptance by the District of the source's petition to exempt a clean permit unit or alternative baseline unless and until such time that a plan submitted by the source is so approved by the Executive Officer. Furthermore, should the Administrator of the U.S. EPA find that the fee provisions of Option C, do not meet the fee requirements of Section 185, or the SCAQMD is not administering and enforcing the fee as required, unpaid fees required plus interest required under Section 185 as specified in 26 United States Code §6621(a)(2) may be collected by the Administrator. Option C, shall become inoperative at such time as the U.S. EPA approves an equivalent program submitted by the District or Congress amends the Clean Air Act such that Section 185 fees, or an equivalent program, are no longer required.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SCAQMD staff has reviewed the proposed project pursuant to CEQA Guidelines §15002 (k)(1), the first step of a three-step process for deciding which document to prepare for a project subject to CEQA. The proposed project was determined to be exempt by statute because the project is mandatory pursuant to the federal Clean Air Act. The SCAQMD has also determined that the proposed project is exempt since it can be seen with certainty that there is no possibility that the proposed project in question has the potential to have a significant adverse effect on the environment. Therefore, the SCAQMD has determined that the proposed project is exempt from CEQA pursuant to CEQA Guidelines §15061 (b)(1) – Review for Exemption (Exemption by Statute), CEQA Guidelines §15061 (b)(3) - Review for Exemption (General Rule Exemption), and CEQA Guidelines §15268 (b)(1) – Ministerial Projects. If approved, a Notice of Exemption, prepared pursuant to CEQA Guidelines §15062 - Notice of Exemption, will be sent to the county clerks for each county in the district for filing.

DRAFT FINDINGS

Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the hearing. The draft findings are as follows:

Necessity - The AQMD Governing Board has determined that a need exists to adopt Rule 317 – Clean Air Act Non-Attainment Fees to comply with the requirements of the 1990 amendments to the Federal Clean Air Act.

Authority - The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections 39002, 40000, 40001, 40440, 40702, and 41508 and Section 182(d), 182(e), 182(f) and 185 of the 1990 amendments to the Federal Clean Air Act.

Clarity - The AQMD Governing Board has determined that Rule 317 – Clean Air Act Non-Attainment Fees is written and displayed so that the meaning can be easily understood by persons directly affected.

Consistency - The AQMD Governing Board has determined that the adoption of Rule 317 – Clean Air Act Non-Attainment Fees is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, federal or state regulations.

Non-Duplication - The AQMD Governing Board has determined that the adoption of Rule 317 – Clean Air Act Non-Attainment Fees does not impose the same requirement as any existing state or federal regulation, and the proposed amendments are necessary and proper to execute the powers and duties granted to, and imposed upon, the AQMD.

Reference - In adopting the Rule, the AQMD Governing Board references the following statutes which the AQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 40001 (rules to achieve ambient air quality standards), 40440(a) (rules to carry out the Air Quality Management Plan), and Sections 181, 182 and 185 of the 1990 amendments to the Federal Clean Air Act.

CONCLUSIONS and RECOMMENDATIONS

PAR 317 should be amended to comply with requirements set forth in the 1990 amendments to the Clean Air Act and also to implement control measure MCS-08 of the 2007 Air Quality Management Plan for major stationary sources in the SOCAB. Staff has presented three options (Option A, Option B and Option C) for the Board's consideration.

Option A would extend the provisions of the current Rule 317 to major stationary sources in the SOCAB. Option A does not provide any alternative method for determining baseline and all existing major stationary sources must use the single attainment year emissions as the baseline.

Option B was developed in an effort to address concerns expressed by facilities with significant year-to-year variability in emissions. Option B, provides a five (5) year averaged alternative baseline for sources that wish to submit a plan, petitioning the Executive Officer to make a demonstration that the source is cyclical. The plan must include a demonstration that the source has cyclical, irregular or otherwise widely varying annual emissions of VOC/NOx as applicable, based on the outcome of a "t-Test" (see Appendix 1). The source must use downward adjusted emissions taking into account any/all adopted local, state and federal rules or regulations that would have restricted the sources ability to both operate or emit a particular pollutant that existed during the five (5) consecutive years immediately preceding the attainment year, for which the demonstration of cyclical operations/emissions is being made. The same downward adjusted data used to demonstrate that a source is cyclical would have to be used to calculate the five (5) year averaged alternative baseline. Existing non-cyclical major stationary sources would have to use the single attainment year as the baseline. This alternative will provide a number of cyclical sources with reduced CAA non-attainment fees based on a recognition that their emission are better represented by an averaged baseline, while not allowing these same sources to double count emissions.

Option C while the most resource intensive for both sources and District staff, provides for an alternative baseline based on language from the "Harnett Memo" referenced herein and Section 185 of the CAA. It allows sources to submit a plan requesting a baseline derived from the average of two out of the ten years prior to and including the attainment year. The same

emissions, discounted for any/all mandated emissions reductions which would have occurred from later-adopted rules, had they been in effect during the years selected for averaging, must be used in calculating the alternative averaged baseline. In addition, it allows sources a clean permit unit exemption, excluding emissions from permitted units with BACT from the calculation of CAA non-attainment fees due. A plan must be filed for consideration by the Executive Officer for both the alternative optional baseline and the Clean Unit exemption. While Option C provides the greatest flexibility in determining baseline emissions, certain flexibility provisions of the proposal, such as the “Clean Unit” exemption, are yet to be approved by U.S. EPA. Therefore, the proposal includes language that alerts the impacted facilities that in the event the Administrator of the U.S. EPA finds that the fee provisions of this rule option are deficient in terms of meeting the requirement of the CAA or U.S. EPA, unpaid fees plus accrued interest may be collected by the Administrator pursuant to CAA provisions. Should the U.S. EPA approve an equivalent program submitted by the District or Congress amends the Clean Air Act such that Section 185 fees, or an equivalent program, are no longer required, this rule option would become inoperative.

COMMENTS and RESPONSE to COMMENTS

Up to and including the December 5, 2008 Public Hearing

- Comment: Delay the current proposed December rule adoption hearing for a few months in order to allow for consideration of anticipated new guidance from U.S. EPA.
- Response: There is currently a facility in the Riverside county portion of the Salton Sea Air Basin (SSAB) (in the District's jurisdiction) with a 2007 attainment year, a 2008 assessment year and with CAA non-attainment fees due in 2009 and any new major stationary source that might currently be permitted in the SSAB area would also be subject to these CAA provisions. The CAA requires that provisions to implement the CAA non-attainment fees be adopted and submitted for inclusion in the State Implementation Plan by December 31, 2000 (42 U.S.C. §175A(d)(3)). If the CAA non-attainment fee is considered a contingency measure to back up the "black box" for the one-hour ozone standard, it should have been submitted three years before it was to go into effect (42 U.S.C. §175A(e)(5)). It is imperative that at a minimum a rule be adopted prior to 2009 in order to satisfy the requirement of the CAA that, such a rule is actually in place. In addition, because of the rule making timeline it would not be an efficient use of resources to bifurcate the rule based on air basins. This would result in a duplication of rule development efforts with a significant drain on District resources. If significant U.S. EPA policy is forthcoming in the future the District will have the opportunity to revisit an amendment.
- Comment: The AQMD should consider alternative methods for establishing the baseline for a major stationary source in PAR 317 that allows for averaging over multiple years or on a rolling average. The U.S. EPA has issued a guidance memo on this subject and the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) has adopted a CAA non-attainment fee rule with an alternative method for establishing the baseline.
- Response: Section 185(b)(2) does allow for U.S. EPA to issue guidance for an alternative baseline determination for a major stationary source "if that source's emissions are irregular, cyclical, or otherwise vary significantly from year to year". However, under such a provision a major stationary source would have to clearly demonstrate that it meets these criteria. Furthermore, while the SJVAPCD has adopted a rule with such an averaging provision it has not been approved into the SIP by the U. S. EPA. The only SIP approved rule promulgating section 185 of the CAA is one adopted by an agency which does not contain an averaging provision. In addition, both the CAA and guidance issued by the U.S. EPA require that the baseline for a major stationary source be a set number based on the source's historical (pre-attainment year) emissions. The baseline for a major stationary source could therefore not be based on any rolling average of post attainment years or initial years of operation after the attainment year. However, staff is proposing for the Board's consideration an option which would allow

cyclical source to use the average three years preceding the attainment year as the baseline and an option allowing sources to use the average of two consecutive years out of ten.

Comment: How is the baseline for an existing major stationary source subject to the provisions of PAR 317 on or before the attainment year determined?

Response: Section 185(b)(2) of the CAA provides that the baseline shall “ be the lower of the amount of actual VOC [and NO_x] emissions (“actuals”) or VOC [or NO_x] emissions allowed under the permit applicable to the source.” A source may not have a baseline based on actual emissions if the actual emissions exceed the allowed emissions for the source.

Comment: How is the baseline for a new major stationary source that becomes subject to the provisions of PAR 317 after the attainment year determined?

Response: Section 185(b)(2) of the CAA provides that the baseline shall be “if no such permit has been issued for the attainment year, the amount of VOC [and NO_x] emissions allowed under the applicable implementation plan (“allowable”) during the attainment year” which is the source’s potential to emit.

Comment: My source has fugitive (or unpermitted) emissions that qualify it as a major stationary source and my permitted emissions are less than the fugitives (or unpermitted) emissions. The rule reads that actual emissions cannot exceed permitted emissions. Would that mean that my baseline would be based on just my permitted emissions and not include my fugitive (or unpermitted) emissions?

Response: No. The phrase “actual emissions not to exceed permitted” only applies to permitted sources. Baseline emissions include unpermitted, fugitive, and permitted emissions. Only that latter category is limited to emissions not to exceed permitted allowables. Otherwise, sources could violate their emissions limitation to inflate their baseline.

Comment: My actual emissions have historically been below the PAR 317 PTE amount and I do not anticipate reaching this level in the future. Can I have my PTE lowered to below the PAR 317 attainment threshold to reflect this?

Response: A source may agree to an enforceable condition in their Permit to Operate to limit their emissions below the applicable threshold. However, any subsequent emission increase may involve a full NSR analysis of the source including BACT and offsets. At this time it is unclear if U.S. EPA would accept an emissions cap solely for the purposes of this rule without NSR implementation.

Comment: RECLAIM major stationary sources should receive credit for the programmatic emissions reductions already achieved.

Response: There is no provision in the CAA for such a programmatic credit.

Comment: Major stationary sources within the same industry and under common ownership should be allowed to “bubble” or average aggregate emissions for the purposes of establishing a baseline and CAA non-attainment fee assessments.

Response: There is no provision in the CAA for such an averaging provision. The CAA is specific in that the provisions apply to specific sources or facilities. Sources in the AQMD are distinguished by a unique AQMD facility identification number.

Comment: What will AQMD do with the fees generated by PAR 317?

Response: While the CAA is silent on the use of fees collected under PAR 317, the goal of the AQMD is to apply these funds to air quality improvement programs that will result in the greatest overall benefits and emissions reductions on a case by case basis. Currently, it is anticipated that the most cost effective stationary source emissions reductions programs will receive priority funding. Language has been included in PAR 317 that stipulates the fees collected, less no more than five percent administrative costs shall be used for air quality improvement projects in the AQMD. Further, language has been added to require that a procedure approved by the Governing Board or its designee be developed for the selection of and distribution of funds for air quality improvement programs. Staff anticipates the draft procedures to be developed and presented to the Governing Board within the first half of 2009 and would welcome any suggestions from the impacted industries and other interested parties.

Comment: PAR 317 Fees should be directly re-invested in the facilities/sources that pay the fees.

Response: The District’s intent, which we believe is consistent with Section 185 of the CAA for the fees imposed, is that such fees should be applied to emissions reductions that will bring the Basin(s) into compliance with air quality standards as expeditiously as possible. Currently, it is anticipated that any/all sources/programs would be eligible to receive CAA funds for emission reduction projects based on the air quality improvement program(s) cost effectiveness. If a major stationary source has the most cost effective proposal then it may very well receive funding for the project. Staff has incorporated, at Governing Board direction, a resolution that the use of fee revenue shall be prioritized in this order – for use at the source, for use in the community adjacent to the source, for use at another source under common ownership, and clean air projects. Sources that have air pollution control projects can apply for the use of the fee revenue that was remitted.

Comment: Exclude emissions from equipment with BACT when calculating the CAA non-attainment fee amount.

Response: Although there is no provision in the CAA for such an exemption or credit, staff is including this provision in Option C. The CAA is very specific in requiring emissions reductions beginning in the attainment (or initial year of operation if the source becomes subject to PAR 317 after the attainment year) in which the facility becomes subject to PAR 317. A clean unit provision was included in a

rule from another California air district. That provision was cited by U.S. EPA as a cause for concern and the rule has not been SIP approved.

Comment: Exclude any emissions from electrical generating facilities/sources when calculating PAR 317 CAA non-attainment fees, if a system emergency has been declared.

Response: There is no provision in the CAA for such an exemption.

Comment: Allow for the surrender of RTCs or ERCs in order to defray a sources CAA non-attainment fees.

Response: The CAA mandates specific emission reductions in order to move towards attainment with air quality standards or payment of CAA non-attainment fees. There is currently no methodology for assessing the equivalency of RTCs/STERCs/ERCs to assessed CAA non-attainment fees.

Comment: Credit should be given for AER and other emissions fees already being paid by sources.

Response: We do not believe this would be consistent with the intent of the CAA which is that CAA non-attainment should be independent of and in addition to any other source fees to encourage emission reductions past the attainment date in order to more expeditiously attain stationary source standards.

Comment: PAR 317 may have unintended consequences by causing operators to flare digester gas or landfill gas rather than use it to generate power as flaring is a less polluting alternative. This would increase green house gas emissions.

Response: Staff does not anticipate a shift from utilizing landfill and digester gas from power generation to flaring. Such a shift would involve a write-off in current assets as well as forgoing the revenue stream from the sale of electrical power. Moreover, most sources are under contract to deliver the power generated from digester or landfill gas. Staff anticipates sources will seek the most cost effective approach to reduce emissions.

Comment: I am still confused about whether I am paying a NO_x CAA non-attainment fee, a VOC CAA non-attainment fee, or both.

Response: The rule language has been modified to clarify that a facility may have to pay a NO_x CAA non-attainment fee, a VOC CAA non-attainment fee, or both depending on whether the source is a major stationery source for NO_x, a major stationary source for VOC, or a major stationary source for both NO_x and VOC.

Subsequent to the December 5, 2009 Public Hearing and including the Public Consultation Meeting on January 22, 2009

- Comment: Staff should share with stakeholders the data and “T-test” methodology used to determine if a major stationary source is “cyclical”.
- Response: Staff has provided a detailed description of the “t-Test” methodology in this staff report and has also emailed this description and a MS Excel spreadsheet to stakeholders requesting such. Source representatives may determine if their source is cyclical using source emissions data. Furthermore, the rule provides the equation which may be used to compute source CAA non-attainment fees.
- Comment: The order in which various scenarios are shown tends to indicate that staff has a bias towards certain scenarios.
- Response: Staff has presented scenarios in terms of the projected estimated CAA non-attainment fee revenues for each alternative baseline scenario, in descending rank order, as compared to the current projected estimated single baseline year fee revenue scenario (Scenario 1). This has been done strictly for comparative purposes and does not indicate a predisposed bias towards a particular scenario. However, Scenario 2, the 3 year averaged baseline for cyclical major stationary sources will result in a net overall reduction in CAA non-attainment fee revenues due to reduced CAA non-attainment fees for cyclical sources.

Subsequent to the January 22, 2009 Public Consultation Meeting and the February 27, 2009 Public Consultation Meeting

- Comment: Three (3) years of annual emissions data is insufficient for a statistical look back test to determine if a major stationary source is cyclical or not.
- Response: Staff has endeavored to optimize the conflicting constraint of maximizing the number of data points to strengthen the validity of the “t-Test” procedure and the competing constraint of minimizing the number of data points to reduce any potential errors from using non-representative, non-discount annual emissions data. While using more data points in any statistical test would tend to make the results more robust, the additional data used must also be valid. If additional data only serves to introduce more or significant errors of deviation from a correct outcome than the use of more data points is not justified. Staff is however recommending that the number of annual emissions data points be increased from the current three (3) to a revised number of five (5) annual emissions data points for the “t-Test” procedure. Staff believes that this can be done and still provide a valid optimization of the data being sampled, based on the constraints.
- Comment: Economic business cycles should be the basis of any test to determine if a source is cyclical and not annual emissions data.
- Response: The District has a solid historical record of source by source emissions and can assess the pattern of these emissions based on unbiased analytical testing (using the “t-Test or other established numerical approach). Business records by contrast are proprietary at best, and even where available would require certified professional review and auditing due to their complex nature in order to determine if a source is cyclical or not. Staff does not have the resources or experience necessary to audit financial records and also does not believe that this is a

function it is prepared to take on. Furthermore, the CAA and U.S. EPA guidance clearly state variations in emissions, not business cycles.

Comment: The nation is in the midst of a recession which is projected to last beyond the 2010 attainment year for the SOCAB. Sources are having some of the worst years in their recent history financially. A 2010 baseline would result in an artificially low baseline and artificially high CAA non-attainment fees.

Response: Staff is proposing to extend the look back period for averaging from the current three years to a revised five years of annual emissions data in order to account for this. Also, staff has now offered Option C, which would allow sources to use the average of two consecutive years in the last ten.

Comment: Sources are experiencing severe financial strains in the currently depressed economy and any CAA non-attainment fees should be returned to source that will be paying such fees.

Response: Staff has incorporated, at Governing Board direction, a resolution that the use of fee revenue shall be prioritized in this order – for use at the source, for use in the community adjacent to the source, for use at another source under common ownership, and clean air projects. Sources that have air pollution control projects can apply for the use of the fee revenue that was remitted.

Comment: Multi-source companies and industries should be allowed some form of aggregate emissions baseline averaging.

Response: There is currently no provision in the CAA or in any official U.S. EPA guidance that allows for such an approach to determining baseline. Baseline is required to be determined on a source by source basis. However, U.S. EPA is working on alternative dollar or emissions reduction approaches for sources. When such official guidance has been provided staff will review such alternatives to see if another approach to determining baseline is optimal.

Comment: Will fees paid by sources result in equivalent dollar for dollar emissions reductions at the sources paying the fees?

Response: It is unlikely that this will occur however the language of the CAA specifically establishes the CAA non-attainment fee amounts and the types of sources (major stationary sources) that must remit these fees. There is also currently no official U.S. EPA guidance that would allow other alternatives. Staff has proposed that the fees be used to derive the maximum benefit for each dollar invested in emission reduction projects through a Carl-Moyer type program that would fund projects with the lowest cost per ton of pollutant reductions, with stakeholder input. In addition, staff has also committed to reviewing if returning a portion of the fee back to the source for emission reduction projects should be incorporated. Should other alternatives be allowed through either legislation or further official guidance staff will revisit CAA fee usage alternatives

Comment: Why does Option1* require mandatory emissions averaging for cyclical sources while Option 2* makes the application for classification as a cyclical source voluntary?

Response: Analysis of the mandatory averaging provision for cyclical sources shows that while in the aggregate cyclical sources are projected to benefit from a baseline averaging provision, not every individual source will do so. Option 2* was crafted in order to address this issue by allowing a source to pick whether it wanted to average over an allowed number of years or use a single year as baseline. However, to account for variability in emissions due to regulatory requirements, Option 2* includes mandatory downward correction of emissions used in such a voluntary averaging proposal for cyclical sources.

Comment: Certain sources listed in Appendix 1 of this report are no longer in business. The District's revenue estimates are likely overstated.

Response: As specified in this report, staff has used the best available data in an attempt to estimate values several years into the future. The latest available data set at the time the analysis was performed was FY 02-03 through FY 06-07 data. As such it is highly likely that some sources that were active during this period may no longer be so. The results presented in this report are therefore only an attempt to project future outcomes based on a window of past historical data and will certainly not be an exact representation of the future. The results in this report are intended only as rough approximation of possible future outcomes, and the report has been so caveated in numerous sections. In addition, other unknown and variable factors such as the CPI, specific source emissions, unknown source emissions control/renovation projects and source caps will definitely alter the estimated projected numbers in this report. These variables are in constant flux and any new or more recent estimated projections will include the similar uncertainty. As such, any values in this report should be used only as a general guide to overall outcomes and patterns and not for any specific resultant values.

Comment: The District should make an effort to seek legislative clarification on the intent of the provisions of Section 185 of the CAA.

Response: District staff has been in contact with Senator Waxman's office including a delegation that traveled to Washington DC to meet with the Senators staff. To date District staff has been advised that Senator Waxman's staff is studying the concerns and issues surrounding Section 185. District staff was requested to continue working with U.S. EPA. In addition, the District is a member of and participating actively in the Clean Air Act Advisory Committee (CAAAC) Section 185 Work Group process. The District is actively working towards obtaining further official guidance regarding Section 185 issues and acting accordingly when such guidance is officially issued. However the District must expeditiously adopt a SIP approval Section 185 rule pursuant to mandatory CAA requirements that required such a rule in place for the SOCAB in 2000.

Comment: The fee savings under Option 2* (now Option B) may be illusory because the staff fees under Rule 306 may be higher than the savings.

Response: Staff anticipates a substantial savings for any source opting to apply for an alternative baseline. Each ton reduced (relative to the 2010 baseline) results in approximately \$9,000 in savings for every year the fee is paid. The T&M rate under Rule 306 is \$112.30 per hour. Assuming that a facility conducts a complete analysis of its prior year emissions, staff anticipates that any review of such an analysis to be completed in a relatively short time frame, which will result in a reasonable one-time cost to the facility, and significant reduction in clean air act non-attainment fees that the facility will experience, starting the first year of the program and continuing every year thereafter.

Comment: Staff should do away with the “t-Test” and just allow sources to pick any two year period in the last 10 years as its baseline.

Response: Staff is analyzing baseline options for the proposed amended rule that are consistent with statutory language and U.S. EPA guidance. Staff is specifically reviewing the two highest year’s scenario.

Comment: Rule 317 disproportionately impacts small businesses.

Response: PAR 317 only impacts the largest emitters in the District. Of the approximately 20,000 facilities in the District, less than 600 are impacted by the Rule 317. Although some sources affected by Rule 317 may meet the definition of small business, they are still very large emitters.

APPENDIX 1
LIST OF POTENTIAL MAJOR STATIONARY SOURCES IN THE AQMD - July 2008
 (Alphabetically by Source Name)

<u>SOURCE ID#</u>	<u>NAME OF MAJOR STATIONARY SOURCE IN THE SSAB</u>
62862	IMPERIAL IRRIGATION DISTRICT/ COACHELLA

<u>SOURCE ID#</u>	<u>NAME OF MAJOR STATIONARY SOURCE IN THE SOCAB</u>
800088	3M COMPANY
13563	3M ESPE DENTAL PRODUCTS DIVISION
73635	ABLESTIK LABORATORIES
12362	ACCESS BUSINESS GROUP LLC, NUTRILITE
106358	ACCURATE METAL FABRICATORS INC
47084	ADVANCE PAPER BOX CO
57390	ADVANCE TRUCK PAINTING INC
45489	ADVANCED CARDIOVASCULAR SYSTEM
104017	AERA ENERGY LLC
104015	AERA ENERGY LLC
23752	AEROCRAFT HEAT TREATING CO INC
115394	AES ALAMITOS, LLC
115389	AES HUNTINGTON BEACH, LLC
42676	AES PLACERITA INC
115536	AES REDONDO BEACH, LLC
101667	AG-FUME SERVICE INC
106897	AG-FUME SERVICES INC
148236	AIR LIQUIDE LARGE INDUSTRIES U.S., LP
3417	AIR PROD & CHEM INC
101656	AIR PRODUCTS AND CHEMICALS, INC.
3704	ALL AMERICAN ASPHALT, UNIT NO.01
800289	ALLERGAN INC
140373	AMERESCO CHIQUITA ENERGY LLC
800196	AMERICAN AIRLINES INC (EIS USE)
152948	AMERICAN DOCK BOX
138285	AMERICAN REMEDIAL TECHNOLOGIES, INC.

59237	AMERICAN SECURITY PRODUCTS CO INC
59225	AMERICH CORP
149235	AMF ANAHEIM LLC
148615	ANDERSON PRINTING
11972	ANEMOSTAT-WEST, A MESTEK CO
16642	ANHEUSER-BUSCH INC., (LA BREWERY)
118314	ANTHONY, INC.
117140	AOC, LLC
222	ARCHITECTURAL WOODWORKING CO
800286	ARCO TERMINAL SERVICES CORP
800052	ARCO TERMINAL SERVICES CORP., TERMINAL 2
800051	ARCO TERMINAL SERVICES CORPORATION
11640	ARLON ADHESIVE SYSTEM/DECORATIVE FILMS
46646	ARLON, MATERIALS FOR ELECTRONICS DIV
110577	ARMORCAST PRODUCTS COMPANY
12155	ARMSTRONG WORLD INDUSTRIES INC
118379	ARROWHEAD REGIONAL MEDICAL CTR
100485	ATKINSON BRICK COMPANY
100500	ATLANTIC/PACIFIC SHUTTER CO INC
128819	AURORA MODULAR INDUSTRIES
117290	B BRAUN MEDICAL, INC
800016	BAKER COMMODITIES INC
147764	BALL AEROSOL AND SPECIALTY CONTAINER INC
117785	BALL METAL BEVERAGE CONTAINER CORP.
13618	BARRY AVE PLATING CO INC
14931	BAU FURNITURE MANUFACTURING, THOMAS BAU
40034	BENTLEY PRINCE STREET INC
119907	BERRY PETROLEUM COMPANY
118121	BERT-CO GRAPHICS, BERT-CO IND DBA
12129	BEVERLY HOSPITAL
113465	BFI WASTE SYS OF NA/AZUSA GAS SYS OPR
155474	BICENT (CALIFORNIA) MALBURG LLC
132068	BIMBO BAKERIES USA INC
20445	BIOLA UNIVERSITY
800209	BKK CORP (EIS USE)
113240	BLACK HILLS ONTARIO LLC
18814	BLACK OXIDE IND INC
62355	BLACKHAWK FURNITURE, INC
148535	BLUEGRASS FOLDING CARTON CO
140473	BOWNE OF LOS ANGELES INC

800395	BP WEST COAST PROD.,ARCO CARSON
800397	BP WEST COAST PROD.,ARCO COLTON
131003	BP WEST COAST PROD.LLC BP CARSON REF.
800396	BP WEST COAST PROD/ARCO VINVALE TERMINAL
131249	BP WEST COAST PRODUCTS LLC,BP WILMINGTON
132124	BP WEST COAST PRODUCTS, LLC/CARSON TERMI
98159	BREITBURN ENERGY CORP
111110	BRISTOL FIBERLITE INDUSTRIES, INC
52719	BROWNWOOD FURNITURE, INC.
1034	BUILDERS FENCE CO INC
119940	BUILDING MATERIALS MANUFACTURING CORP
25638	BURBANK CITY, BURBANK WATER & POWER
128243	BURBANK CITY,BURBANK WATER & POWER,SCPPA
72351	CAJOLEBEN, INC., GALASSO'S BAKERY, DBA
800387	CAL INST OF TECH
144590	CALIBER COLLISION CENTERS, CALIBER ACQUI
122410	CALIFORNIA NEWSPAPERS TNERSHIP/SB SUN
800181	CALIFORNIA PORTLAND CEMENT CO (NSR USE)
135729	CALIFORNIA SPECIALTY PAINTING
46268	CALIFORNIA STEEL INDUSTRIES INC
800022	CALNEV PIPE LINE, LLC
8309	CAMBRO MANUFACTURING CO
153992	CANYON POWER PLANT
22911	CARLTON FORGE WORKS
118406	CARSON COGENERATION COMPANY
141555	CASTAIC CLAY PRODUCTS, LLC
560	CATALINA YACHTS INC
16389	CEDARS-SINAI MEDICAL CTR
98492	CENTURY PLASTICS INC
37601	CENVEO ANDERSON LITHOGRAPH
800380	CERTIFIED ENAMELING INC
800272	CHEMOIL TERMINALS CORPORATION
800030	CHEVRON PRODUCTS CO.
800302	CHEVRON PRODUCTS COMPANY
2526	CHEVRON USA INC
800032	CHEVRON USA INC
135216	CHINO BASIN DESALTER AUTHORITY
56940	CITY OF ANAHEIM/COMB TURBINE GEN STATION
23194	CITY OF HOPE MEDICAL CENTER
139796	CITY OF RIVERSIDE PUBLIC UTILITIES DEPT

153420	CLOSETMAID
136155	CLOSETS BY DESIGN, INC
16978	CLOUGHERTY PACKING LLC/HORMEL FOODS CORP
141901	CMH MFG WEST INC, GOLDEN WEST HOMES DBA
80066	COATINGS RESOURCE CORP
123350	COLOR GRAPHICS INC
143597	COLORGRAPHICS
37336	COMMERCE REFUSE TO ENERGY FACILITY
800365	CONOCOPHILLIPS CO. L A TERMINAL
18503	CONOCOPHILLIPS COMPANY
800362	CONOCOPHILLIPS COMPANY
800363	CONOCOPHILLIPS COMPANY
800364	CONOCOPHILLIPS/COLTON TERMINAL-WEST CO
111814	CONOCOPHILLIPS/TORRANCE TANK FARM CO
126536	CONSOLIDATED FOUNDRIES - POMONA
10971	CONTAINER SUPPLY CO INC
2537	CORONA CITY, DEPT OF WATER & POWER
68042	CORONA ENERGY TNERS, LTD
19144	CORONET MFG CO INC
103864	COUNTRY AFFAIRE, INC
152707	CPV SENTINEL LLC
6961	CRAFTSMAN OFFICE FURNITURE
49327	CREATIVE PRESS HOLDINGS,LLC,DBA CREATIVE
118744	CREEL PRINTING COMPANY OF CALIFORNIA,INC
70220	CROWN CHROME PLATING INC
7949	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP
38911	CUSTOMCRAFT
104161	DANMER INC, DANMER CUSTOM SHUTTERS DBA
63180	DARLING INTERNATIONAL INC
3721	DART CONTAINER CORP OF CALIFORNIA
7411	DAVIS WIRE CORP
772	DEFT INC
69598	DELGADO BROTHERS CO
139304	DELTA PRINTING SOLUTIONS
9668	DELUXE LABORATORIES
7713	DELUXE PACKAGES
800037	DEMENNO/KERDOON
800189	DISNEYLAND RESORT
94529	DITTY CONTAINER INC
142220	DIVERSIFIED COATINGS, INC.

77641	DONAHUE PRINTING CO
98557	DOUBLE D ENTERPRISE INC
5723	DUCOMMUN AEROSTRUCTURES INC
140811	DUCOMMUN AEROSTRUCTURES INC
50869	DUNCAN BROS INC
13943	DUNN-EDWARDS CORP
45938	E.M.E. INC/ELECTRO MACHINE & ENGINEERING
136148	E/M COATING SERVICES
136173	E/M COATING SERVICES
13854	EAST LOS ANGELES COLLEGE
7417	EASTERN MUNICIPAL WATER DIST
19159	EASTERN MUNICIPAL WATER DIST
1703	EASTERN MUNICIPAL WATER DISTRICT
13088	EASTERN MUNICIPAL WATER DISTRICT
800264	EDGINGTON OIL COMPANY
133813	EI COLTON, LLC
115663	EL SEGUNDO POWER, LLC
8570	EMBEE INC
127568	ENGINEERED POLYMER SOLUTION, VALS
74060	ENGINEERED POLYMER SOLUTIONS INC
19194	EPPINK OF CALIFORNIA
136202	EPSILON PLASTICS INC
116931	EQUILON ENT LLC, SHELL OIL PROD. U S
117560	EQUILON ENTER, LLC-SHELL OIL PROD. US
117225	EQUILON ENTER. LLC, SHELL OIL PROD. U S
800372	EQUILON ENTER. LLC, SHELL OIL PROD. US
800370	EQUILON ENTER., LLC, SHELL OIL PROD. U S
800369	EQUILON ENTER.LLC , SHELL OIL PROD. U S
47643	EXECUTIVE OFFICE CONCEPTS
124838	EXIDE TECHNOLOGIES
152895	EXTREME CUSTOM TRAILERS, DIV LIPPERT COM
800092	EXXONMOBIL OIL CORP
800091	EXXONMOBIL OIL CORP (NSR USE ONLY)
800089	EXXONMOBIL OIL CORPORATION
800171	EXXONMOBIL OIL CORPORATION
25501	FABRI-COTE,DIV A & S GLASS FABRICS CO IN
135204	FACILITY SAMPLE
3496	FAIRVIEW DEVELOPMENTAL CENTER
112956	FENDER MUSICAL INSTRUMENTS CORP.
29011	FLEETWOOD HOMES OF CAL INC

8936	FLEETWOOD MOTOR HOMES OF CAL INC
12280	FLEETWOOD TRAVEL TRAILERS OF CAL INC #15
134590	FLEISCHMANN'S VINEGAR CO, INC
12630	FLINT INK NORTH AMERICA CORP
12876	FOAM FABRICATORS
11716	FONTANA PAPER MILLS INC
124725	FORTUNE FASHIONS IND
152947	FRANKLIN ACQUISITION, LLC/FIBERNETICS MO
43605	FREE FLOW PACKAGING INTERNATIONAL, INC.
145740	FREEDOM GRAPHIC SYSTEMS, INC.
19766	FREMARC DESIGNS
40915	FREUND BAKING CO
346	FRITO-LAY NORTH AMERICA, INC.
96013	FURNITURE TRADITIONS INC
2044	G B MFG INC/CALIF ACRYLIC, DBA CAL SPAS
155828	GARRETT AVIATION SVCS. LLC DBA STANDARD
45448	GAS RECOVERY SYST LLC (COYOTE CANYON)
61160	GE ENGINE SERVICES
12332	GEN AMERICAN TRANSPORTATION CORP/GATX
153033	GEORGIA-PACIFIC CORRUGATED LLC
152857	GEORGIA-PACIFIC GYPSUM LLC
139873	GIANT MERCHANDISING
800327	GLENDALE CITY, GLENDALE WATER & POWER
12660	GOLDSHIELD FIBERGLASS, INC, PLANT #58
139828	GRAPHIC PRESS LLC DBA INSYNC MKTG. SOL
10510	GREGG INDUSTRIES INC
142907	GREIF INDUSTRIAL PACKAGING & SERVS LLC
18378	GRUBER SYS INC
57094	GS ROOFING PRODUCTS CO, INC/CERTAINTEED
40196	GUARDIAN INDUSTRIES CORP.
19130	HALLMARK SW CORP
61785	HANDBILL PRINTERS DBA AMERICAN WEB
106325	HARBOR COGENERATION CO
100145	HARBOR FUMIGATION INC
123774	HERAEUS METAL PROCESSING, INC.
15164	HIGGINS BRICK CO
67757	HIGHLAND PLATING CO
11192	HI-SHEAR CORPORATION
800066	HITCO CARBON COMPOSITES INC
11245	HOAG MEM HOSP PRESBYTERIAN

800003	HONEYWELL INTERNATIONAL INC
68996	HONEYWELL TURBO TECHNOLOGIES
23401	HOOD MFG INC
14164	HOUSE OF PACKAGING, INC
117339	HYDROSEAL POLYMERS, INC
24081	I. M. GINSBURG FURNITURE CO INC
149974	IMPRESS COMMUNICATIONS INC
124619	IMPRESS USA INC
123087	INDALEX WEST INC
134018	INDUSTRIAL CONTAINER SERVICES-CA LLC
124808	INEOS POLYPROPYLENE LLC
129816	INLAND EMPIRE ENERGY CENTER, LLC
147371	INLAND EMPIRE UTILITIES AGENCY
9163	INLAND EMPIRE UTL AGEN, A MUN WATER DIS
71704	INLAND LITHO, INC
102216	INNOVATION FIBERGLASS PRODUCTS
151843	INSULFOAM LLC
37076	INSYNC MEDIA INC
151005	INTERNATIONAL MARKETING & MFG. INC.
8488	INTERNATIONAL PAPER CO
48522	INTERNATIONAL RECTIFIER HEXFET AMERICA
106810	INTERSTATE BRANDS CORP
98531	INVESTMENT ENTERPRISES INC,GREAT WESTERN
800367	IPS CORP
22364	ITT INDUSTRIES, CANNON
24647	J. B. I. INC
131370	JACUZZI WHIRLPOOL BATH
6144	JAGUAR FINISHING CO
16697	JBL, INC.
800197	JENSEN INDUSTRIES INC.
119741	JENSEN PRECAST
91259	JOHANSON DIELECTRICS INC
13397	JOHN BOYD DESIGNS
14492	JOHNSON LAMINATING & COATING INC
74529	K. F. FIBERGLASS, INC.
16338	KAISER ALUMINUM FABRICATED PRODUCTS, LLC
800429	KAISER FOUNDATION HOSPITAL
93702	KCA ELECTRONICS INC
152330	KIK AEROSOL SOCIAL LLC
21887	KIMBERLY-CLARK WORLDWIDE INC.-FULT. MILL

800056	KINDER MORGAN LIQUIDS TERMINALS, LLC
800057	KINDER MORGAN LIQUIDS TERMINALS, LLC
56888	KINRO INC
87716	KION PRINTING INC
1744	KIRKHILL RUBBER CO
130654	KOMFORT & DESIGN INDUSTRIES INC
108620	KRYSTAL KOACH INC
143025	KUSHWOOD LLC
55000	KYOWA AMERICA CORP
54424	L&L CUSTOM SHUTTERS INC,ALLWOOD SHUTTERS
142686	L. A. SPAS, INC
45262	LA COUNTY SANITATION DIST SCHOLL CANYON
49805	LA CITY, BUREAU OF SANIT(LOPEZ CANYON)
36909	LA CITY, DETMENT OF AIRPORTS
800335	LA CITY, DEPT OF AIRPORT
800170	LA CITY, DWP HARBOR GENERATING STATION
800074	LA CITY, DWP HAYNES GENERATING STATION
800075	LA CITY, DWP SCATTERGOOD GENERATING STN
800193	LA CITY, DWP VALLEY GENERATING STATION
800214	LA CITY, SANITATION BUREAU (HTP)
10245	LA CITY, TERMINAL ISLAND TREATMENT PLANT
800312	LA CO HARBOR-UCLA MEDICAL CENTER
800236	LA CO. SANITATION DIST
550	LA CO., INTERNAL SERVICE DEPT
53610	LA CO., METROPOLITAN TRANS AUTHORITY
3093	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER
6384	LA CO., RANCHO LOS AMIGOS NAT. REHAB CTR
800386	LA CO., SHERIFF DEPT
29411	LA CO., SHERIFF'S DEPT
42514	LA COUNTY SANITATION DIST (CALABASAS)
24520	LA COUNTY SANITATION DISTRICT
25070	LA COUNTY SANITATION DISTRICT
42633	LA COUNTY SANITATION DISTRICT (SPADRA)
75323	LA OPINION
18730	LA STEELCRAFT PROD.
20197	LAC/USC MEDICAL CENTER
800428	LAMPS PLUS INC/ PACIFIC COAST LIGHTING
24060	LASCO BATHWARE INC.
800313	LAXFUEL CORP
70915	LESTER LITHOGRAPH INC

144455	LIFOAM INDUSTRIES, LLC
83102	LIGHT METALS INC
151532	LINN WESTERN OPERATING INC
139799	LITHOGRAPHIX INC
800234	LOMA LINDA UNIV
44577	LONG BEACH CITY, SERRF PROJECT
115314	LONG BEACH GENERATION LLC
14213	LONG BEACH MEMORIAL MEDICAL CENTER
124904	LOS ANGELES TIMES COMMUNICATIONS LLC
124906	LOS ANGELES TIMES COMMUNICATIONS LLC
800080	LUNDAY-THAGARD COMPANY
13011	M.C. GILL CORP
14146	MAC GREGOR YACHT CORP
1379	MADISON-GRAHAM COLORGRAPHICS INC
114849	MAN-GROVE IND, INC/LITHOCRAFT CO. DBA
56547	MARCEL ELECTRONICS
2619	MARTIN LUTHER KING JR/MACC
800398	MASK-OFF COMPANY, INC
17841	MC DOWELL & CRAIG MFG. CO.
8918	MCCONNELL CABINETS INC
2825	MCP FOODS INC
91954	MENZIES AVIATION GROUP, INC.
58563	MERCURY PLASTICS INC
115563	METAL COATERS OF CALIFORNIA
94872	METAL CONTAINER CORP
102910	MICHELS & CO
104004	MICROMETALS, INC
155877	MILLERCOORS, LLC
39855	MIZKAN AMERICAS, INC
104806	MM LOPEZ ENERGY LLC
117297	MM PRIMA DESHECHA ENERGY, LLC
113873	MM WEST COVINA LLC
81752	MODTECH HOLDINGS, INC.
73367	MONARCH LITHO INC
115622	MONIERLIFETILE LLC
121737	MOUNTAINVIEW GENERATING STATION
11887	NASA JET PROPULSION LAB
15558	NELCO PRODUCTS INC
117882	NELSON NAMEPLATE COMPANY
40806	NEW BASIS

12428	NEW NGC, INC.
10656	NEWPORT LAMINATES
5887	NEXGEN PHARMA INC
129659	NM COLTON GENCO LLC.
129660	NM MID VALLEY GENCO LLC
129661	NM MILLIKEN GENCO, LLC
18294	NORTHROP GRUMMAN CORP, AIRCRAFT DIV
800408	NORTHROP GRUMMAN SPACE & MISSION SYSTEMS
800409	NORTHROP GRUMMAN SPACE & MISSION SYSTEMS
71207	NORTHWESTERN SHOWCASE & FIXTURE CO
112853	NP COGEN INC
134838	NUPLA CORPORATION
106711	NU-WAY LIVE OAK LANDFILL INC
50418	O C WASTE & RECYCLING
109505	OAKWOOD INTERIORS, INC
114312	OBERTHUR CARD SYSTEMS
52743	OC WASTE & RECYCLING
52753	OC WASTE & RECYCLING
69646	OC WASTE & RECYCLING
6163	OHLINE
89248	OLD COUNTRY MILLWORK INC
47781	OLS ENERGY-CHINO
17301	ORANGE COUNTY SANITATION DISTRICT
29110	ORANGE COUNTY SANITATION DISTRICT
35302	OWENS CORNING ROOFING AND ASPHALT, LLC
7427	OWENS-BROCKWAY GLASS CONTAINER INC
3525	P.B. FASTENERS
17953	PACIFIC CLAY PRODUCTS INC
151178	PACIFIC ENERGY RESOURCES, LTD.
146313	PACIFIC LA MARINE TERMINAL LLC
146810	PACIFIC LA MARINE TERMINAL LLC
150233	PACIFIC MFG MGMT, INC DBA GRENEKER SOLUT
121727	PACIFIC PIPELINE SYSTEM LLC
800417	PACIFIC TERMINALS LLC
800419	PACIFIC TERMINALS LLC - HUNTINGTON
800420	PACIFIC TERMINALS LLC - LONG BEACH
82608	PACIFIC WEST LITHO INC
21474	PACTIV CORP
22410	PALACE PLATING
130211	PAPER-PAK INDUSTRIES

58202	AGON LABS, NATURAL LIFE ECO VITE LABS
800183	AMOUNT PETR CORP (EIS USE)
12182	K LA BREA
103570	KINSON ENTERPRISES INC
18960	PASADENA CITY COLLEGE
800168	PASADENA CITY, DWP (EIS USE)
62851	PENN INDUSTRIES, INC.
142408	PENROSE LANDFILL GAS CONVERSION, LLC
101207	PERFORMANCE COMPOSITES INC, FIBERGLASS P
140552	PERFORMANCE COMPOSITES, INC
9978	PETER PEPPER PRODUCTS
800079	PETRO DIAMOND TERMINAL CO
17929	PINECRAFT CUSTOM SHUTTERS INC
15837	PLASTIC DRESS-UP CO
40991	PLASTICOLOR MOLDED PRODUCTS, INC
800212	POMONA VALLEY COMM HOSP (EIS USE)
7416	PRAXAIR INC
152501	PRECISION SPECIALTY METALS, INC.
102268	PREPRODUCTION PLASTICS, INC
136	PRESS FORGE CO
105903	PRIME WHEEL
59128	PRIME WOOD PRODUCTS INC
46	PROFESSIONAL REFINISHING ORGANIZATION
8220	PROVIDENCE ST JOSEPH MED CTR
132191	PUREENERGY OPERATING SERVICES, LLC
132192	PUREENERGY OPERATING SERVICES, LLC
132368	QUEBECOR WORLD GREAT WESTERN PUBLISHING
8547	QUEMETCO INC
82657	QUEST DIAGNOSTICS INC
3585	R. R. DONNELLEY & SONS CO, LA MFG DIV
78494	RAPID RACK INDUSTRIES INC
149241	REGAL CULTURED MARBLE
44655	REINHOLD INDUSTRIES INC
115315	RELIANT ENERGY ETIWANDA, INC.
119219	REPUBLIC SERV OF CALIF LLC(CHIQUITA CAN)
52517	REXAM PLC, REXAM BEVERAGE CAN COMPANY
94272	RGF ENTERPRISES INC
114801	RHODIA INC.
113518	RIDGEWOOD POWER MANAGEMENT,LLC
139010	RIPON COGENERATION LLC

15793	RIV CO, WASTE RESOURCES MGMT DIST, LAMB
6979	RIV CO., WASTE MGMT, BADLANDS LANDFILL
800182	RIVERSIDE CEMENT CO (EIS USE)
9961	RIVERSIDE CITY, WATER QUALITY CONTROL
100806	ROBINSON HELICOPTER CO INC
800113	ROHR,INC
89710	ROYAL CABINETS
23487	ROYAL PAPER BOX CO
32840	ROYAL TRUCK BODY INC
153095	SA RECYCLING LLC, ADAMS STEEL DBA
14833	SAINT JOHN'S HOSPITAL & HEALTH CENTER
13920	SAINT JOSEPH HOSPITAL
108701	SAINT-GOBAIN CONTAINERS, INC.
14437	SAN ANTONIO COMMUNITY HOSPITAL
58044	SAN BER CNTY SOLID WASTE MGMT - COLTON
7068	SAN BER CNTY SOLID WASTE MGMT
50299	SAN BER CNTY SOLID WASTE MGMT MID VALLEY
7371	SAN BER CNTY SOLID WASTE MGMT- MILLIKEN
11301	SAN BERNARDINO CITY MUN WATER DEPT (WRP)
4242	SAN DIEGO GAS & ELECTRIC
133323	SAN DIEGO SHUTTER CO INC
7450	SANDBERG FURNITURE MFG CO INC
77014	SARA LEE FRESH, INC
144385	SCHAWK, INC
15504	SCHLOSSER FORGE COMPANY
9898	SCIENTIFIC SPRAY FINISHES INC
141287	SCOTT BROS. DAIRY FARMS
122858	SEKISUI T.A. INDUSTRIES,INC
152811	SENSATION SPAS, INC
145464	SES TERMINAL LLC
800129	SFPP, L.P.
800278	SFPP, L.P. (NSR USE)
800279	SFPP, L.P. (NSR USE ONLY)
21089	SHERWOOD SHUTTER CORP
16639	SHULTZ STEEL CO
54402	SIERRA ALUMINUM COMPANY
85943	SIERRA ALUMINUM COMPANY
149814	SIERRACIN/SYLMAR CORP
121493	SIGNATURE FLEXIBLE PACKAGING, INC
147128	SILVER CREEK INDUSTRIES, INC

35482	SINCLAIR PRINTING CO
25513	SIX FLAGS THEMES PKS INC,SIX FLAGS MAGIC
105281	SKYLINE HOMES INC
109498	SNOW PLASTICS,HARRINGTON IND.PLSTCS,INC.
43201	SNOW SUMMIT INC
4477	SO CAL EDISON CO
17104	SO CAL EDISON CO
51003	SO CAL EDISON CO
51475	SO CAL EDISON CO
5973	SO CAL GAS CO
800128	SO CAL GAS CO (EIS USE)
8582	SO CAL GAS CO/PLAYA DEL REY STORAGE FACI
1334	SOC-CO PLASTIC COATING CO
114083	SOLUTIONS UNLIMITED, WILSON'S ART STUDIO
36738	SORENSEN ENGINEERING INC, FRANK SORENSON
999999	SOUTH COAST SPECIAL FACILITY ID
149620	SOUTHERN CALIFORNIA EDISON
148568	SOUTHWEST MILL & LUMBER
108711	SOUTHWEST MILL & LUMBER INC
61536	SPECIALTY FINISHES CO
6324	ST. BERNARDINE MEDICAL CENTER
103609	ST. JUDE MEDICAL CRMD
126498	STEELSCAPE, INC
52742	STOROPACK INC
123970	SUNDANCE SPAS INC
115586	SUNDANCE SPAS, INC
49111	SUNSHINE CANYON LANDFILL
139938	SUNSHINE GAS PRODUCERS LLC
2083	SUPERIOR INDUSTRIES INTERNATIONAL INC
76969	SYNAGRO COMPOSTING CO. OF CALIFORNIA INC
115892	T/O PRINTING
3968	TABC, INC
18931	TAMCO
392	TAYLOR-DUNN MFG CO
6643	TECHNICOLOR INC
71797	TED LEVINE DRUM CO
152033	TESORO REF & MKTG CO., LONG BEACH
151984	TESORO REF & MKTG. CO., WILMINGTON
151798	TESORO REFINING AND MARKETING CO
800436	TESORO REFINING AND MARKETING CO

84273	TEVA ENTERAL MEDICINES, INC
96037	TEXTURE DESIGN FURNITURE INC
800038	THE BOEING COMPANY - C17 PROGRAM
40841	THE DOT PRINTER INC
6262	THE HON CO
11435	THE PQ CORP
24730	THE STRIP JOINT INC
83508	THE TERMO COMPANY
78376	THMX HOLDINGS, LLC THERMAL DYNAMICS CORP
74830	THORO PACKAGING INC
800330	THUMS LONG BEACH
129497	THUMS LONG BEACH CO
800325	TIDELANDS OIL PRODUCTION CO
68122	TIDELANDS OIL PRODUCTION COMPANY ETAL
800240	TIN, INC. TEMPLE-INLAND, DBA
137508	TONOGA INC, TACONIC DBA
57560	TOPPER PLASTICS INC
142417	TOYON LANDFILL GAS CONVERSION LLC
8935	TRAIL RITE INC
24450	TREND MANOR FURNITURE MFG CO INC
53729	TREND OFFSET PRINTING SERVICES, INC
9053	TRIGEN- LA ENERGY CORP
11034	TRIGEN-LA ENERGY CORP
800267	TRIUMPH PROCESSING, INC.
43436	TST, INC.
113674	U S A WASTE OF CAL(EL SOBRANTE LANDFILL)
14966	U S GOV'T, V A MEDICAL CENTER, WEST L A
800263	U.S. GOVT, DEPT OF NAVY
119939	UBS PRINTING GROUP
800026	ULTRAMAR INC (NSR USE ONLY)
800198	ULTRAMAR INC (NSR USE ONLY)
127749	ULTRAMAR, INC
9755	UNITED AIRLINES INC
800288	UNIV CAL IRVINE (NSR USE ONLY)
800265	UNIV OF SO CAL (EIS & NSR USE ONLY)
800202	UNIVERSAL CITY STUDIOS, LLC.
18452	UNIVERSITY OF CALIFORNIA, LOS ANGELES
56	UNIVERSITY SO CALIFORNIA,HEALTH SCIENCES
5679	US GOVT, VETERANS ADMINISTRATION MED CTR
13990	US GOVT, VETERANS AFFAIRS MEDICAL CENTER

12185	US GYPSUM CO
18695	US GYPSUM CO
1073	US TILE CO
79691	VACUUM METALIZING CO
800393	VALERO WILMINGTON ASPHALT PLANT
146534	VALLE DEL SOL ENERGY, LLC
111415	VAN CAN COMPANY
148553	VERNON CITY, LIGHT & POWER DETMENT
14502	VERNON CITY, LIGHT & POWER DEPT
115130	VERTIS, INC
37881	VERTIS, INC.
151899	VINTAGE PRODUCTION CALIFORNIA LLC
80321	VISTA CONSOLIDATED INC
14495	VISTA METALS CORPORATION
2846	VISTA PAINT CORP
44276	VITATECH INTL INC
144197	WALKER WOOD PRODUCTS, INC.
146536	WALNUT CREEK ENERGY K
149027	WARREN E & P, INC.
50310	WASTE MGMT DISP &RECY SERVS INC (BRADLEY
10966	WEBER METALS INC
117460	WEDO GRAPHICS INC
152046	WELLHEAD POWER MARGARITA, LLC
42775	WEST NEWPORT OIL CO
74310	WESTERN HOMES CORP
17956	WESTERN METAL DECORATING CO
97019	WESTERN SUMMIT MANUFACTURING CORP
22092	WESTERN TUBE & CONDUIT CORP
110924	WESTWAY TERMINAL COMPANY
1962	WEYERHAEUSER COMPANY
132451	WEYERHAEUSER COMPANY
51620	WHEELABRATOR NORWALK ENERGY CO INC
127299	WILDFLOWER ENERGY LP/INDIGO ENERGY FAC
62617	WILLARD MARINE INC
19184	WINTERS INDUSTRIAL CLEANING INC
90326	WOODRIDGE PRESS INC
70021	XERXES CORP (A DELAWARE CORP)
20504	ZIEMAN MFG CO

APPENDIX 2

“t-Test” METHODOLOGY

A “t-Test” method was used for determining if the most recent year’s emissions are significantly different from prior years’.

The justification for this approach comes from the field of inferential statistics: Assume that the emissions for previous n years are drawn from a common distribution that is normal with unknown mean, μ , and unknown variance, σ^2 . Let $n = 3$. Then, we can write the prior years’ emissions data as a list $\{x_1, x_2, x_3\}$. To estimate μ and σ^2 , we use the sample average, \bar{x} , and sample variance, S^2 , for prior years’ emissions. Both of these estimators have desirable statistical properties and are commonly used. The sample average is given by

$\bar{x} = \frac{\sum_{i=1}^n x_i}{n} = \frac{\sum_{i=1}^3 x_i}{3}$ and the sample variance is $S^2 = \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2 = \frac{1}{2} \sum_{i=1}^3 (x_i - \bar{x})^2$. With these

two pieces of data, we can conduct a “t-Test”, which is used for hypothesis testing in small samples. The t -distribution is a well-known probability distribution that describes the behavior of a statistically standardized version of the sample mean:

$$t = \frac{\sqrt{n} * (\bar{x} - \mu)}{S} \sim t_{n-1} .$$

Using this standardized test statistic, the hypothesis testing whether current year emissions, x^* , are significantly different from past years’ emissions can be conducted. Formally, we test the hypothesis $H_0: \mu = x^*$ against the alternative $H_1: \mu \neq x^*$. In this case, the test statistic is generated from

$$t = \frac{\sqrt{n} * (\bar{x} - x^*)}{S} \sim t_{n-1} .$$

The resulting value of this statistic can be used together with a table of the t -distribution to express a degree of confidence about the likelihood that the hypothesis is true. In the field of inferential statistics, standard levels of “confidence” are commonly used to determine whether hypotheses are likely. The most common confidence levels used are 90%, 95%, and 99%, which provides some flexibility in deciding what a “significant deviation in current year emissions” means. Of these levels, the one used most often is the 95% level, which is used as the basis for the remaining discussion. Formally, finding a “ t ” value for this test that is outside the chosen confidence bounds is a rejection of the “null” hypothesis, H_0 . The hypothesis being tested is the claim that the current year emissions, x^* , is the true unknown mean of the common distribution for the prior years’ emissions, or equivalently whether deviations from current year emissions, x^* , are significantly different from zero. Rejection means that the current year emissions, x^* , are too far away from the sample mean calculated, \bar{x} , for prior year’s emissions to be considered a good candidate for the unknown mean of the common distribution. If current year emissions were close, in a statistical sense, to the average of past year emissions, the hypothesis would not be rejected by the data.

Using the data provided for analysis, the table below illustrates the described method assuming that 2006 is the current year:

fac_id	2006	2003	2004	2005	ave	sd	t-score	crit t_{n-1} @5%	Significant?	Cyclical?
#####	296.958	198.059	187.064	261.841	215.655	40.375	3.488	4.303	NO	NO
#####	219.566	196.975	205.427	220.896	207.766	12.131	1.685	4.303	NO	NO
#####	44.312	283.945	290.816	317.075	297.279	17.485	25.059	4.303	YES	YES
#####	160.935	163.567	162.268	161.794	162.543	0.918	3.034	4.303	NO	NO
#####	122.519	139.417	128.145	129.574	132.379	6.137	2.783	4.303	NO	NO
#####	138.640	124.284	120.560	130.759	125.201	5.161	4.510	4.303	YES	YES
#####	137.515	101.962	116.646	120.997	113.202	9.974	4.222	4.303	NO	NO