Ventura County Air Pollution Control District FINAL STAFF REPORT – November 4, 2010

RULE REVISIONS TO PERMIT GREENHOUSE GASES Rules 2, 23, 33, 33.1, 35, and 76

EXECUTIVE SUMMARY

Currently, Ventura County APCD (District) rules regulate "criteria" air pollutants and hazardous air pollutants. Criteria pollutants include oxides of nitrogen, reactive organic compounds, particulate matter, oxides of sulfur, and carbon monoxide. The United States Environmental Protection Agency (EPA) has recently taken steps to add greenhouse gases (GHGs) to the list of regulated pollutants. Because the thresholds of significance for GHGs are substantially higher than those for criteria and hazardous pollutants, EPA is proposing to "tailor" their regulations to include GHGs. The District has determined that certain revisions to District Rules and Regulations are required to implement EPA's tailoring requirements.

In the Preamble to the revisions to the federal code of regulations (40 CFR Parts 51, 52, 70, and 71), EPA summarizes their revisions as follows:

EPA is tailoring the applicability criteria that determine which stationary sources and modification projects become subject to permitting requirements for greenhouse gas (GHG) emissions under the Prevention of Significant Deterioration (PSD) and title V programs of the Clean Air Act (CAA or Act). This rulemaking is necessary because without it PSD and title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year (tpy) levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This

rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from PSD and title V permitting for GHG emissions until at least April 30, 2016.

In this rule action, the following rules are proposed for revision as required by the EPA tailoring rule:

- 1. Rule 2, Definitions
- 2. Rule 23, Exemptions from Permit
- 3. Rule 33, Part 70 Permits, General
- 4. Rule 33.1, Part 70 Permits, Definitions
- 5. Rule 35, Elective Emission Limits
- 6. Rule 76, Federally Enforceable Limits on Potential to Emit.

The proposed revisions include a number of changes. First, GHG applicability thresholds, and the July 1, 2011, implementation date, are being added to several rules. Also, GHGs are being added as regulated pollutants. Second, definitions are being added for "greenhouse gases" and "CO2 equivalent." Other definitions are being amended to include greenhouse gases.

It is important to note that only the largest air pollution sources in Ventura County will be required to comply with GHG permitting requirements at this time. Most permit holders in the district will <u>not</u> be affected by these new requirements.

Revisions unrelated to GHGs are also proposed. Definitions of "Portable" and "Stationary" are being added to Rule 2, in addition to other new definitions, and several Rule 23 exemptions are being revised for clarity and/or flexibility.

PROPOSED RULE REVISIONS – GREENHOUSE GASES

The proposed revisions for this rule action related to greenhouse gas emissions are discussed in detail below. Following this discussion, revisions unrelated to greenhouse gases are discussed in a separate section.

Rule 2 - Definitions

Revisions to Rule 2 include both new definitions and revisions to existing definitions. The first revision is to the definition of "Air Contaminant," which will now include a reference to greenhouse gases.

<u>Air Contaminant</u>. "Air Contaminant" or "Air Pollutant" means any discharge, release, or other propagation into the atmosphere and includes but is not limited to, smoke, charred paper, dust, soot, grime, carbon, <u>greenhouse gases</u>, fumes, gases, odors, particulate matter, acids or any combination thereof. (Revised 6/23/81, <u>xx/xx/10</u>).

A new definition of "Greenhouse Gases" is being added. The definition is substantially the same as the definition provided by EPA in their Tailoring revisions.

<u>Greenhouse Gases (GHGs).</u> "Greenhouse Gases" shall mean the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons (by category), perfluorocarbons (by category), and sulfur hexafluoride. (Added xx/xx/10)

In addition, staff proposes to add the following abbreviations in Section B:

CO2e- carbon dioxide equivalentGHGs- greenhouse gases

Also added as Table 1 is a list of Global Warming Potentials (GWP) (see Appendix A). GWP is referenced in the definition of "CO2 Equivalent (CO2e)" in Rules 33.1 and 76.

Rule 23 - Exemptions from Permit

Subsection J.16 addresses the permitting requirements of agricultural operations where actual emissions are equal to or greater than 50 percent of federal major source thresholds. Staff proposes to add greenhouse gases to the list of thresholds, along with the July 1, 2011, implementation date:

<u>Pollutant</u>	Threshold (Tons Per Year)		
Any single HAP	10		
Combination of HAPs	25		
CO, PM10, or SOx	100		
Greenhouse Gases (CO2	<u>le)</u>		
(effective July 1, 2011) 100,000		
Greenhouse Gases (CO2	<u>(e)</u>		
(until July 1, 2011)	No Applicable Threshold		

Attainment / Nonattainment	Threshold (TPY)
Classification (Ozone)	(ROC, NOx)
Attainment, Marginal, or Modera	ate 100
Serious	50
Severe	25
Extreme	10

Note that the July 1, 2010, implementation date is the second of two dates involved in the initial two-step phase-in of GHG requirements. The first date is January 2, 2011, which applies only to Prevention of Significant Deterioration (PSD) sources. After July 1, 2011, the phase-in of GHG emissions for Part 70 (Title V) sources will begin. This will include "new sources as well as existing sources not already subject to title V that emit, or have the potential to emit, at least 100,000 tpy CO2e."

Rule 33 - Part 70 Permits - General

Revisions to Rule 33 appear in Section B, Applicability. This section specifies the requirement to obtain a Part 70 permit. GHGs are added as follows:

The requirement to obtain a Part 70 permit pursuant to this rule shall apply to:

1. Any stationary source with a potential to emit of 100 tons per year or more of any regulated air pollutant. Effective July 1, 2011, this provision shall apply to greenhouse gas emissions only if the source has a potential to emit of 100,000 tons per year or more CO2 equivalent emissions. (Reference: 40 CFR 70.2 "Major Source" (2), "Subject to Regulation" (1); 70.3(a)(1))

Note that, since GHGs are now regulated pollutants (see Rule 33.1), they are included under both the 100 ton per year mass threshold in the first sentence and the GHG equivalent provisions in the second sentence. As noted above, on July 1, 2011, all Part 70 and non-Part 70 sources with GHG emissions over the 100,000 ton per year threshold will begin the Part 70 permit process.

Rule 33.1 - Part 70 Permits - Definitions

A new definition of "CO2 Equivalent (CO2e)" is proposed. This definition is substantially the same as definition provided in the EPA Tailoring revisions. Global Warming Potentials appear in Rule 2.

5. "CO2 Equivalent (CO2e)": The amount of greenhouse gases emitted relative to the global warming potential of each pollutant. CO2e shall be computed by multiplying the mass amount of emissions (tons per year) for each greenhouse gas by the gas's associated global warming potential and summing the resultant values.

<u>Global warming potentials appear in Table 1</u> of Rule 2, Definitions.

This definition is also being added to Rule 76.

Three definitions in Rule 33.1 are proposed for revision. The definition of "Federally-Enforceable Requirement" is currently limited to a specific number of listed situations. The proposed additional language will open the definition to other requirements "promulgated by the administrator of the EPA."

- 12. "Federally-Enforceable Requirement": Any air pollution requirement set forth in, or authorized by, the federal Clean Air Act or EPA regulations. In addition, conditions of a Part 70 permit are federally-enforceable requirements, unless such conditions are designated as not being federally-enforceable pursuant to Rule 33.3.C. Federally enforceable requirements include requirements that are included in regulations promulgated by the administrator of the EPA at the time of issuance of a Part 70 permit but have future effective dates. Federally-enforceable requirements include all of the following:
 - a. Title I requirements of the federal Clean Air Act, including, <u>but not limited to</u>, all of the following:

The definition of "Insignificant Activity" is being amended to exclude greenhouse gases from the specific emission limits in Subsection 13.c:

- **<u>13</u>**. "Insignificant Activity": Any emissions unit that meets all the following requirements:
 - c. It emits no more than 0.5 tons per year of any EPA hazardous air pollutant and no more than 2 tons per year of any regulated air pollutant, except greenhouse gases.

For the definition of "Regulated Air Pollutant," greenhouse gases are proposed for addition. The definition will be amended on the federal implementation date and will apply only to sources that exceed the 100,000 ton per year CO₂e threshold.

- <u>20</u>. "Regulated Air Pollutant": Any pollutant which is emitted into or otherwise enters the ambient air, and which is listed among the following:
 - <u>f.</u> Greenhouse gases if the source has a potential to emit of 100,000 tons per year or more CO2 equivalent emissions (effective July 1, 2011).

Rule 35 allows a source to take voluntary limits on its potential to emit to remain exempt from Rule 33, Part 70 Permits. A permit issued pursuant to Rule 35 is commonly known as "federally enforceable state operating permit," or FESOP permit.

The proposed revision to Rule 35 is the addition of "greenhouse gas" to the list of information required for an elective emission limit request.

B. Request For Elective Emission Limits

A voluntary request for federally-enforceable elective emission limits shall take the form of a permit application and shall be subject to fees according to Rule 42, Sections A and E. The application shall include:

- 1. The identification and description of all existing emission units at the stationary source for which federally-enforceable elective emission limits are being requested. Existing emission units may include units permitted pursuant to Rule 10 (Permits Required), units exempt from permit pursuant to Rule 23 (Exemptions from Permit), and other sources of both hazardous air pollutant emissions and other regulated air pollutant emissions;
- 2. The identification of all criteria, and hazardous, and greenhouse gas air pollutants for each existing emission unit identified in Subsection B.1 for which federally-enforceable elective emission limits are being requested;

Rule 35 – Elective Emission Limits

Rule 76 - Federally Enforceable Limits on Potential to Emit

Rule 76 is known at a "prohibitory" rule that exempts many smaller sources from Rule 33, Part 70 Permits. To do this, Rule 76 uses "actual emissions" as a surrogate for "potential to emit." In general, a source whose actual emissions are less that 50 percent of a Part 70 permit threshold will remain exempt from Rule 33 even if the source's "potential to emit" is in excess of a Part 70 permit threshold. The vast majority to permits issued by the District are exempt from Part 70 permit requirements as a result of Rule 76.

Rule 76 enables permit holders to electively limit their emissions in a federally enforceable manner. In this way, sources that have the potential to emit air contaminants equal to or greater than the threshold for a major source of regulated air pollutants or a major source of hazardous air pollutants (HAPs) may avoid the permitting requirements for that level of emissions. Because various sections of the rule address different percentages of the "major source" thresholds, varying thresholds for greenhouse gas emissions are being added to the rule.

In Section A, Applicability, de minimis emission levels are twenty percent of the "major source" thresholds, which, for GHGs, is 100,000 tons per year. Therefore, greenhouse gases are added to Subsection A.2 as follows:

- 2. Stationary Source with De Minimis Emissions: The recordkeeping and reporting provisions in <u>Sections C</u>, D and E below shall not apply to a stationary source with de minimis emissions or operations as specified in either <u>Subsection A.2.</u> a or <u>A.2.</u> b below:
 - a. In every 12-month period, the stationary source emits less than or equal to the following quantities of emissions:
 - 1) 5 tons per year of a regulated air pollutant (excluding HAPs<u>and</u> greenhouse gases),
 - 5) 20,000 tons of greenhouse gases (as <u>CO2e) per year, effective July 1,</u> <u>2011.</u>

The limits established in Section B, Emission Limitations, define the maximum quantity of emissions allowed for a federally enforceable emission limit. These levels are fifty percent of the "major source" thresholds. Therefore, greenhouse gases are added to Subsection B.1 as follows:

- 1. Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in <u>Subsection E.1 below, no stationary source</u> subject to this rule shall emit in every 12-month period more than the following quantities of emissions:
 - a. 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs), as follows:
 - 1) 50 tons per year of any regulated air pollutant, <u>except greenhouse</u> <u>gases</u>, for which a potential to emit of 50,000 tpy CO2 equivalent emissions shall apply.

Section D, Reporting Requirements, does not apply to sources with emission levels that do not exceed 25 percent of the "major source" thresholds. Therefore, greenhouse gases are added to Subsection D.2 as follows:

- 2. For the purpose of determining compliance with this rule, this requirement shall not apply to stationary sources which emit in every 12-month period less than or equal to the following quantities:
 - a. For any regulated air pollutant (excluding HAPs and greenhouse gases), 25 percent of the major source thresholds, as follows:
 - 1) 25 tons per year of any regulated air pollutant,
 - 2) 6.25 tons per year NOx or ROC,

e. 24,999 tons of greenhouse gases (as CO2e) per year.

In Section G, Definitions, a CO2 Equivalent (CO2e) definition is proposed. The same definition appears in Rule 33.1. Also, two definitions in Section G, Definitions, are proposed for revision. Greenhouse gases will be added to "Major Source of Regulated Air Pollutants" and "Regulated Air Pollutant," as follows:

7. "Major Source of Regulated Air Pollutants" (excluding HAPs): A stationary source that emits or has the potential to emit a regulated air pollutant (excluding HAPs) in quantities equal to or exceeding the lesser of any of the following thresholds:

a. 100 tons per year (tpy) of any regulated air. Effective July 1, 2011, this provision shall apply to greenhouse gas emissions only if the source has a potential to emit of 100,000 tons per year or more CO2 equivalent emissions.

[...]

Fugitive emissions of these pollutants shall be considered in calculating total emissions for stationary sources in accordance with 40 CFR Part 70.2 "Definitions- Major source(2)<u>"</u>.

- 12. "Regulated Air Pollutant": The following air pollutants are regulated:
 - a. Oxides of nitrogen and volatile organic compounds;
 - <u>f.</u> Greenhouse gases if the source has a potential to emit of 100,000 tons per year or more CO2 equivalent emissions (effective July 1, 2011).

Note that no local greenhouse gas regulatory activity will occur before July 1, 2011.

PROPOSED RULE REVISIONS – OTHER CHANGES

Proposed revisions unrelated to greenhouse gas emissions are discussed in detail below.

Rule 2 – Definitions

To clarify certain permitting situations, staff is proposing to add definitions of "Portable" and "Stationary." These definitions are similar to those that currently appear in VCAPCD Rule 250 – Registration Of Agricultural Engines – but are updated for general use.

<u>Portable.</u> "Portable" means a device that is not stationary. (Added xx/xx/10)

<u>Stationary.</u> "Stationary" means a device that meets any one of the following criteria:

The device is attached to a foundation, or if 1. not so attached, resides at the same location or at the same stationary source for more than 12 consecutive months. A backup, standby or replacement device that replaces a device at a location or stationary source and is intended to perform the same or similar function as the device being replaced shall be included in calculating the consecutive time period. The cumulative time of all devices, including the time between the removal of the original device and installation of the replacement device, shall count toward the consecutive time determination; or

- 2. The device is not attached to a foundation and is located at a seasonal location for less than 12 consecutive months. To be stationary, the device must be located at the seasonal source for at least three months each year for at least two years.
- 3. The device is moved from one location to another in an attempt to circumvent the 12 month residence time requirement in paragraph 1 above. The period during which the device is maintained at a storage facility shall be excluded from the consecutive time determination.
- 4. The device is moved around a stationary source and performs routine or regular operations integral to the function of the stationary source. (added xx/xx/10)

Subsections 2 and 4 in the "Stationary" definition differ from the Rule 250 definition. For Subsection 2, slightly different criteria for stationary seasonal equipment is proposed for clarity.

The definition of "Equipment" is being modified for clarity. The intent of the definition will not change.

<u>Equipment</u>. Any operation, article, machine, equipment, or contrivance which may emit or reduce the emissions of any air contaminant or affected <u>regulated</u> pollutant. (Added 11/19/85, revised xx/xx/10))

The existing definition of "Motor Vehicle" includes a reference to California Motor Vehicle Code. Staff

proposes to delete the existing definition and add the following, which is based on the Vehicle Code definition:

Motor Vehicle. "Motor Vehicle" is a vehicle that is self-propelled, including recreational vehicles, and does not include a self-propelled wheelchair, motorized tricycle, or motorized quadricycle, if operated by a person who, by reason of physical disability, is otherwise unable to move about as a pedestrian. Also excluded are truck campers. (Revised xx/xx/10)

Rule 2 include a definition of particulate matter as PM10. Staff proposes to add a definition of PM2.5.

Particulate Matter (PM2.5), "Particulate matter (PM2.5)" means particulate matter with an aerodynamic diameter equal to or less than 2.5 micrometers. (Added xx/xx/10)

Rule 23 - Exemptions from Permit

A number of revisions are proposed for Rule 23. The first is in Section A - Burning, Incineration and Smoke. Staff proposed to remove the exemption from permit for safety flares in Subsection A.4, as follows:

4. After July 1, 2011, safety Safety flares rated at less than one million BTU per hour used exclusively used for emergency standby for the disposal of process gases in the event of unavoidable process upsets. (Adopted 6/14/77, <u>Revised xx/xx/10</u>)

This revision is proposed to improve the enforceability of the exemption. Staff suspects that some safety flares are used for other purposes (process upsets, maintenance periods, etc.). In addition to criteria pollutants, flares have a potential to emit significant amounts of greenhouse gases (primarily methane). On July 1, 2011, all safety flares greater than or equal to one million Btu per hour will require a permit to operate.

A revision is proposed for Section D - Vehicles, Engines. Staff has found that the use of emergency portable engines for electrical generation is increasingly difficult to enforce. The revision will specify that portable engine generators connected for future electrical service will no longer be considered portable and will require a Permit to Operate.

- 7. Emergency internal combustion engines, as follows:
 - c. Portable engines used for emergency purposes. <u>An engine powering a generator connected to a facility's electrical</u> <u>grid in preparation for a future</u> <u>emergency shall not be considered a</u> <u>portable emergency engine.</u>

In Section F - Organic Compound Emissions, staff is proposing to amend the permit exemption for polyester resin operations under 20 gallons a month. In Ventura County, boat yards are one of several significant users of polyester resin. The repair of a large boat may require more than 20 gallons of materials. Large repairs like this happen infrequently. To allow boatyards to make an occasional large repair, staff proposes to change the exemption to 240 gallons over a 12 month rolling total. The change will increase flexibility but not annual ROC emissions. The revised exemption will be consistent with other emissions-based paint and solvent exemptions based on a 12 month rolling total.

14. Polyester resin operations using less than 20 240 gallons of polyester resin materials eachmonth over a rolling period of 12 consecutive calendar months, including unsaturated polyester resins, cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other material containing ROC and used in the polyester resin operation. Inert filler and cleaning material is specifically excluded from this determination.

In Subsection J.16, the paragraph on large confined animal facilities is being amended to specify that only major sources and major modifications are affected. In addition, a definition of "large confined animal facility" is being added to eliminate reference to the California Code of Regulations.

> This provision shall not exempt any large confined animal facility or any <u>major</u> source <u>or any major modification to a major source</u> required to be issued a permit pursuant to Title I (42 U.S.C. Sec. 7401 et seq.) or Title V (42 U.S.C. Sec. 7661 et seq.) For the purpose of this subsection, agricultural operations are operations conducted in the raising of fowl or animals or the production of products of the soil, including crops, orchard fruits, trees, vines, rose bushes, ornamental plants, floricultural crops, and other horticultural

crops. An agricultural source includes all emissions units that are not exempt pursuant to other provisions of this rule which are used in agricultural operations located on contiguous property under common ownership or control.

For the purpose of this subsection a "large confined animal facility" is defined at Cal. Code Regs, tit. 17, § 86500 as follows:

(i) 1,000 milk-producing dairy cows;
(ii) 3,500 beef cattle;
(iii) 7,500 calves, heifers or other cattle;
(iv) 650,000 chickens other than laying hens;
(v) 650,000 ducks;
(vi) 650,000 ducks;
(vii) 100,000 turkeys;
(viii) 3,000 swine;
(ix) 2,500 horses;
(x) 15,000 sheep, lambs, or goats; or
(xi) 30,000 rabbits or other animals.

[Source: CCR Title 17, Division 1, Chapter 1, Subchapter 2.7, §86500(a)]

Rule 33 - Part 70 Permits - General

Staff proposes to delete from Rule 33, Subsection B.2, wording that is no longer relevant. This wording applies to EPA approval dates that have passed.

2. The following language shall remain in effectuntil the effective date of EPA's approval of the revision to this subsection: Any stationary source with a potential to emit 25 tons per year or more of eitherreactive organic compounds or nitrogenoxides.

The following revised language shall take effect on the effective date of EPA's approval of this language:

Any stationary source with a potential...

Rule 33.1 – Part 70 Permits – Definitions

Staff proposes to add to the definition of "Title I Modification" a reference to 40 CFR Part 63, another National Emissions Standards for Hazardous Air Pollutants regulation.

<u>26.</u> "Title I Modification": A modification to a Part 70 permit that meets any of the following criteria:

- e. Any modification to a source that would be defined as a modification under 40 CFR Part 61 <u>or Part 63</u>, National Emissions Standards for Hazardous Air Pollutants. (Reference: 40 CFR 61.15, <u>40 CFR 63.2</u>)
- Rule 76 Federally Enforceable Limits on Potential to Emit

Staff proposes to clarify the application of an exemption from Rule 33 in Subsection A.4, as follows:

- 4. Exemption, Stationary Source Subject to Rule 33: This rule shall not apply to the following stationary sources:
 - a. Any stationary source whose actual emissions...
 - 1) The owner or operator has notified the District at least 30 days prior to any exceedance that s/he will submit an application for a Part 70 permit, or otherwise obtain federally-enforceable permit limits to avoid the need for such application, and

In Subsection A.6, unnecessary language is proposed for deletion:

6. Within three years of the effective date of Rule 33, t The District shall maintain and make available to the public upon request, for each stationary source subject to this rule, information identifying the provisions of this rule applicable to the source.

In Subsection B.2, and again in definition of "Actual Emissions" in Subsection G.2, a specific hierarchy of calculation methods is being established. U.S. EPA will be the primary source of applicable methods, followed by California ARB methods and methods approved by the District:

...actual emissions shall use U.S. EPA, California Air Resources Board (CARB) or District approved methods, including emission factors and assumptions methods, including emission factors and assumptions, specified or approved by U.S. EPA; where such methods are not available, the APCO may allow methods approved by the

California Air Resources Board (CARB) or other District-approved methods.

As illustrated on page 4 above, staff proposes to amend a number of sections in Rule 76 for clarity. These changes involve expanded numerical

EMISSION REDUCTION / COST EFFECTIVENESS

Health & Safety Code § 40703 states that the district must consider, and make public, "the cost-effectiveness of a control measure." The proposed revisions are not included in any control measure, so a costeffectiveness calculation is not necessary.

Nevertheless, the proposed revisions are administrative in nature and no significant additional costs to stakeholders are expected. Some sources already

report GHG emissions to the state (CARB). District costs to implement a permitting program for GHGs will occur.

In addition, because BACT requirements and feasible control measures are not involved, an incremental cost-effectiveness analysis under Health & Safety Code Section 40920.6 is not required.

SOCIOECONOMIC IMPACT

Health & Safety Code § 40728.5 requires the Air Pollution Control Board consider the socioeconomic impact of any new rule or amendment to an existing rule if air quality or emission limits are significantly effected. The proposed revisions are administrative in nature and do not include emission limits. The proposed revisions will significantly affect neither air quality nor emission limitations in Ventura County. Therefore, an evaluation of the requirements of Health & Safety Code § 40728.5 is not necessary.

ENVIRONMENTAL IMPACTS OF METHODS OF COMPLIANCE / CEQA

Methods of Compliance

California Public Resources Code § 21159 requires the District to perform an environmental analysis of the reasonably foreseeable methods of compliance if the proposed rule requires "the installation of pollution control equipment, or [specifies] a performance standard or treatment requirement..." The proposed revisions are administrative in nature and do not involve a requirement to install air pollution control equipment. Therefore, an analysis is not necessary.

CEQA Requirements

Staff has determined that the proposed revisions are exempt from the requirements of the CEQA under Section 15061(b)(3) of the CEQA Guidelines because it can be seen with certainty that there is no possibility that these changes may have a significant effect on the environment.

ANALYSIS OF EXISTING FEDERAL AND DISTRICT REGULATIONS

California Health & Safety Code § 40727.2(a) requires districts to provide a written analysis of existing regulations prior to adopting, amending or repealing a regulation. Section 40727.2(a) states:

In complying with Section 40727, the district shall prepare a written analysis as required by this section. In the analysis, the district shall identify all existing federal air pollution control requirements, including, but not limited to, emission control standards constituting best available control technology for new or modified equipment, that apply to the same equipment or source type as the rule or regulation proposed for adoption or modification by the district. The analysis shall also identify any of that district's existing or proposed rules and regulations that apply to the

references (Subsection <u>A.2.</u>a or <u>A.2.</u>b) and additional distinctions between sections and subsections (<u>Sub</u>section E.1). The intent of the rule with respect to these revisions will not change. Please see the draft rule for all proposed revisions.

same equipment or source type, and all air pollution control requirements and guidelines that apply to the same equipment or source type and of which the district has been informed pursuant to subdivision (b). The proposed revisions include no emission control standards; therefore, the requirements of Health & Safety Code § 40727.2(a) are satisfied pursuant to Health & Safety Code § 40727.2(g).

PUBLIC MEETINGS AND COMMENTS

Public Workshop September 21, 2010

Staff conducted a public workshop on September 21, 2010. There were 11 attendees. A majority of the discussion revolved around the proposed permit fee in Rule 42 [now postponed]. Prior to the workshop, EPA transmitted a number of suggested changes to the proposed rules. None of these suggestions are significant and staff is considering them. ARB had no comments on the proposed revisions.

Advisory Committee November 2, 2010

After a primer on permitting and a staff presentation, the Advisory Committee debated the need for the

proposed revisions. Staff stated that if the federal laws implementing greenhouse gases were either repealed or delayed, implementation of the proposed changes to District rules will be stayed. The rule could eventually be repealed.

Several members believed that the proposed revisions for permitting will lead eventually to emission limits on greenhouse gases. It was noted that the proposed revisions are required by EPA for greenhouse gas permitting and will continue the process that allows most sources to avoid the Part 70 (Title V) program. A motion to delay consideration of the proposed revisions for 4 months failed. The Committee recommended approval of the proposed revisions by a vote of X to X.

APPENDIX A Rule 2 - Table 1 Global Warming Potentials (GWP) (100-year Time Horizon)

NAME	GWP	NAME	GWP	
CO2	1	HFE-43-10pccc (H-Galden 1040x)	1,870	
CH4	21	HFE-125	14,900	
N2O	310	HFE-134	6,320	
HFC-23	11,700	HFE-143a	756	
HFC-32	650	HFE-227ea	1,540	
HFC-41	150	HFE-236ca12 (HG-10)	2,800	
HFC-125	2,800	HFE-236ea2 (Desflurane)	989	
HFC-134	1,000	HFE-236fa	487	
HFC-134a	1,300	HFE-245cb2	708	
HFC-143	300	HFE-245fa1	286	
HFC-143a	3,800	HFE-245fa2	659	
HFC-152	53	HFE-254cb2	359	
HFC-152a	140	HFE-263fb2	11	
HFC-161	12	HFE-329mcc2	919	
HFC-227ea	2,900	HFE-338mcf2	552	
HFC-236cb	1,340	HFE-338pcc13 (HG-01)	1,500	
HFC-236ea	1,370	HFE-338mmz1	380	
HFC-236fa	6,300	HFE-347mcc3	575	
HFC-245ca	560	HFE-347mcf2	374	
HFC-245fa	1,030	HFE-347pcf2	580	
HFC-365mfc	794	HFE-347mmy1	343	
HFC-4310mee	1,300	HFE-356mec3	101	
Nitrogen trifluoride	17,200	HFE-356pcc3	110	
Sulfur hexafluoride	23,900	HFE-356pcf2	265	
Trifluoromethyl sulphur pentafluoride	17,700	HFE-356pcf3	502	
PFC-14 (Perfluoromethane)	6,500	HFE-356mm1	27	
PFC-116 (Perfluoroethane)	9,200	HFE-365mcf3	11	
PFC-218 (Perfluoropropane)	7,000	HFE-374pc2	557	
PFC-3-1-10 (Perfluorobutane)	7,000	HFE-449sl (HFE-7100) Chemical Blend	297	
PFC-4-1-12 (Perfluoropentane)	7,500	HFE-569sf2 (HFE-7200) Chemical Blend	59	
PFC-5-1-14 (Perfluorohexane)	7,400	Sevoflurane	345	
Perfluorocyclopropane	17,340	(Octafluorotetramethylene) 73		
		hydroxymethyl group		
Perfluorocyclobutane	8,700	Bis(trifluoromethyl)-methanol	195	
PFC-9-1-18	7,500	2,2,3,3,3-pentafluoropropanol 42		
HCFE-235da2 (Isoflurane)	350	PFPMIE 10,300		

Source: Table A-1 to Subpart A of part 98, Global Warming Potentials (Federal Register, Volume 74, No. 209, October 30, 2009)

APPENDIX B Greenhouse Gas Emission Calculations for the Fuel Combustion Thresholds In Rule 76

Rule 76,	Subsection A.2.b.6) through A.2.b.9)	Emission Factor	Conversion	CO ₂ Emissions		
A.2.b.6	1,400 gallons of gasoline	8.8 kg CO2/gallon	1000	12.3 Metric tonnes CO2		
A.2.b.7	16,600 gallons of diesel fuel	10.14 kg CO2/gallon	1000	168.3 Metric tonnes CO2		
A.2.b.8	500,000 gallons of distillate oil	10.14 kg CO2/gallon	1000	5070.0 Metric tonnes CO2		
A.2.b.9	71,400,000 cubic feet of natural gas	0.05 kg CO2/scf	1000	3570.0 Metric tonnes CO2		
Rule 76, Subsection E.1.f.1)						
	66,000 gallons of diesel fuel	10.14 kg CO2/gallon	1000	669.2 Metric tonnes CO2		
	133,000 gallons of diesel fuel	10.14 kg CO2/gallon	1000	1348.6 Metric tonnes CO2		
	265,000 gallons of diesel fuel	10.14 kg CO2/gallon	1000	2687.1 Metric tonnes CO2		

Emission Factors from the *Regulation For The Mandatory Reporting Of Greenhouse Gas Emissions*, California Code of Regulations, title 17, Subchapter 10, Article 2, sections 95100 to 95133; Appendix A, Table 4, for Motor Gasoline, Distillate Fuel Oil, and Natural Gas (Unspecified)