



R. J. Sommerville
Air Pollution Control Officer

DATE: April 2, 1991
TO: Air Pollution Control Board
SUBJECT: Adoption of New Rule 67.1 (Alternative Emission Control Plans)

SUMMARY:

Rule 67.1 (Alternative Emission Control Plans) is a new rule to provide an alternate means for companies to comply with existing volatile organic compound (ozone precursor) control rules. Companies not meeting certain requirements in these rules can elect to use an alternative emission control plan to comply, by reducing emissions more than required by other parts of the same rule such that the net result is the same as if all operations were in compliance. Existing rules currently have alternative compliance provisions, but are inconsistent with Environmental Protection Agency requirements. Rule 67.1 meets Environmental Protection Agency requirements and will replace the alternative control provisions in individual volatile organic compound control rules. Failure to correct deficiencies may result in the withholding of certain federal grant monies from the District, and the imposition of a major source construction ban in San Diego County and/or withholding of federal highway and sewage treatment funds. Compliance with Rule 67.1 is optional for companies that may have problems meeting the volatile organic compound limits specified in other District rules. No additional emission reductions will result. Since the use of Rule 67.1 is optional, the number of facilities that may elect to utilize the rule is unknown at this time. Currently, three companies operate under an alternative emissions control plan.

Issue

Should the Board adopt new Rule 67.1 (Alternative Emission Control Plans) to correct deficiencies in District volatile organic compound control rules identified by the Environmental Protection Agency?

ON MOTION of Member Bailey, seconded by Member Golding, the Air Pollution Control Board of the San Diego County Air Pollution Control District takes action as recommended on recommendations 1 and 2, setting hearing on 5/21/91, 2:00 p.m., by following vote:
THOMAS J. PASTUSZKA
Clerk of the Air Pollution Control Board

AYES: Bailey, Golding, Williams, MacDonald
ABSENT: Bilbray

By Dora Castro
Deputy

SUBJECT: Adoption of New Rule 67.1 (Alternative Emission Control Plans)

SUMMARY: [CONTINUED]

Recommendation

AIR POLLUTION CONTROL OFFICER:

1. Set May 7, 1991 at 2:00 p.m., as the date and time for public hearing to consider the resolution adopting new Rule 67.1 of the Rules and Regulations of the San Diego County Air Pollution Control District.
2. Direct the Clerk of the Board to notice the Hearing pursuant to Section 40725 of the State Health and Safety Code.
3. Following the hearing: (a) adopt the resolution adopting new Rule 67.1 and, (b) make appropriate findings of necessity, authority, clarity and consistency, as required by Section 40727 of the State Health and Safety Code.

Advisory Statement

The Air Pollution Control Advisory Committee has yet not taken action on the proposed new Rule 67.1. This rule will be discussed at its April 10, 1991 meeting. The Committee approved moving forward with the rule without Committee approval at its March 13, 1991 meeting. The Board will be advised of the Committee's recommendation at the time of the public hearing.

Fiscal Impact

Adoption of the proposed changes will have no fiscal impact on the District.

Alternatives

Not adopt new Rule 67.1. Failure to correct the deficiencies with alternative compliance provisions in other District rules may result in the Environmental Protection Agency withholding certain federal grant monies from the District, and imposition of a major source construction ban in San Diego County and/or withholding of federal highway and sewage treatment funds. Also, companies that utilize the deficient alternative compliance provisions may be at risk for federal enforcement action.

BACKGROUND:

Rule 67.1 (Alternative Emission Control Plans) is a new rule to provide alternate means for companies to comply with Rules 67.3 (Coating of Metal Parts and Products), 67.4 (Metal Container, Metal Closure and Metal Coil Coating Operations), 67.5 (Paper, Film and

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BACKGROUND [CONTINUED]

Fabric Coating Operations), 67.9 (Aerospace Coating Operations), 67.11 (Wood Products Coating Operations), 67.16 (Graphic Arts Operations), and 67.18 (Marine Coating Operations) which regulate volatile organic compounds (ozone precursors). Companies not meeting certain requirements in these rules can elect to use an alternative emission control plan to comply. For example, if the solvent limits of a rule are 420 grams per liter for primers and 600 grams per liter for topcoats, and a company cannot find a satisfactory topcoat for a particular application, an alternative emission control plan will allow the use of a higher solvent topcoat if a primer with equivalently less solvent than 420 grams per liter is also used. Resulting emissions must be no more than if both the topcoat and primer are in compliance.

Rule 67.1 will correct deficiencies with the alternative equivalent control provisions in District rules identified as deficient by the Environmental Protection Agency. The rule provides uniform procedures for utilizing alternative equivalent control plans to meet other District volatile organic compound control rules. It specifies emission calculation procedures, and the information that must be included in an application to establish a plan. The rule requires sources using an alternative emission control plan provide at least 20 percent additional emission reductions for each and every operating day. It also prohibits the use of high transfer coating application methods as a means to achieve emission reductions for use in the plan, consistent with Environmental Protection Agency requirements.

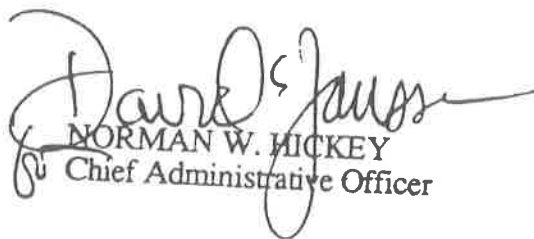
Companies must submit proposed plans to both the District and the Environmental Protection Agency for approval. A schedule for submittal is provided. The three companies currently operating under an alternative emission control plan will have 6 months to continue to use that plan. After that time, any plan must meet the requirements of Rule 67.1. Recordkeeping requirements and test methods are also included in the rule.

The use of Rule 67.1 is optional for companies that may have problems meeting volatile organic compound requirements of other District volatile organic compound control rules.

Since alternative emission control plans will be site-specific for each company electing to utilize Rule 67.1, the District cannot estimate the cost to comply with the rule.

A public workshop on the proposed changes was held on March 6, 1991. The workshop report is attached.

Concurrence:


NORMAN W. HICKEY
Chief Administrative Officer

Respectfully submitted,


R. J. SOMMERVILLE
Air Pollution Control Officer

AIR POLLUTION CONTROL BOARD
AGENDA ITEM
INFORMATION SHEET

SUBJECT: Adoption of New Rule 67.1 (Alternative Emission Control Plans)

SUPV DIST.: All

COUNTY COUNSEL APPROVAL: Form and Legality *HH* Yes N/A
 Standard Form Ordinance Resolution

AUDITOR APPROVAL: N/A Yes **4 VOTES:** Yes No

FINANCIAL MANAGEMENT REVIEW: Yes No

CONTRACT REVIEW PANEL: Approved _____ N/A

CONTRACT NUMBER(S): N/A

PREVIOUS RELEVANT BOARD ACTION: N/A

BOARD POLICIES APPLICABLE: N/A

CITIZEN COMMITTEE STATEMENT: The Air Pollution Control District Advisory Committee will review Rule 67.1 at its April 10, 1991 meeting. At its February 13, 1991 meeting, the Committee approved forwarding Rule 67.1 for Board consideration before the Committee makes a formal recommendation. The Board will be advised of the Advisory Committee's recommendation at the May 7, 1991 public hearing to consider adoption of Rule 67.1.

CONCURRENCES: N/A

ORIGINATING DEPARTMENT: Air Pollution Control District

CONTACT PERSON: Richard J. Smith 750/694-3303



R. J. SOMMERVILLE
DEPARTMENT AUTHORIZED REPRESENTATIVE

April 2, 1991
MEETING DATE

Re Rules and Regulations of the)
Air Pollution Control District)
of San Diego County)

**RESOLUTION ADDING RULE 67.1
OF REGULATION IV
OF THE RULES AND REGULATIONS OF THE
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT**

On motion of Member Bailey, seconded by Member Williams the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

NOW THEREFORE IT IS RESOLVED AND ORDERED by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

Proposed New Rule 67.1 is added to Regulation IV to read as follows:

RULE 67.1 ALTERNATIVE EMISSION CONTROL PLANS

(a) APPLICABILITY

Except as provided for in Section (g), this rule is applicable to any stationary source conducting operations subject to any of the following rules, when an owner or operator elects to comply with the corresponding subsections of these rules by means of an alternative emission control plan (AECP):

- 67.3 - Coating of Metal Parts and Products, Subsection (d)(1),
- 67.4 - Metal Container, Metal Closure and Metal Coil Coating Operations, Section (d),
- 67.5 - Paper, Film and Fabric Coating Operations, Subsection (d)(1),
- 67.9 - Aerospace Coating Operations, Subsection (d)(1),
- 67.11 - Wood Products Coating Operations, Subsection (d)(2),
- 67.16 - Graphic Arts Operations, Section (d),
- 67.18 - Marine Coating Operations, Subsections (d)(1) and (d)(2).

(b) **DEFINITIONS.**

For the purpose of this rule the following definitions shall apply:

(1) **"ALTERNATIVE EMISSION CONTROL PLAN (AECP)"** means a plan, which allows an owner or operator of a stationary source to demonstrate an alternative method of compliance with one or more volatile organic compound (VOC) content limits or VOC emission limits in the applicable District rule.

(2) **"BASELINE EMISSIONS"** means VOC emissions expressed in pounds per day, calculated according to Subsection (c)(2)(vi) of this rule. Baseline emissions are the least of either:

(i) actual average VOC emissions from the affected operations per operating day during the two years prior to submittal of the AECP, or

(ii) allowable VOC emissions from the affected operations under the applicable District rule, or

(iii) allowable VOC emissions from the affected operations under the applicable State Implementation Plan (SIP) provision.

(3) **"CALENDAR DAY"** means a day starting at twelve midnight and continuing through to the subsequent twelve midnight hour.

(4) **"EXEMPT COMPOUND"** means any of the following compounds: methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC -11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), and chlorodifluoroethane (HCFC-142b).

(5) **"FEDERALLY ENFORCEABLE"** means all limitations and conditions which are enforceable by the Administrator of the U.S. Environmental Protection Agency (EPA) including those requirements developed pursuant to 40 CFR Parts 60 and 61, those requirements within the applicable State Implementation Plan, and any permit conditions established pursuant to permits issued by EPA or permits issued in accordance with an EPA approved version of these Rules and Regulations.

(6) **"MODIFICATION"** means any physical change in the equipment subject to an AECP, including addition of any new equipment or deletion of existing equipment, or in the method of operation thereof, which would result in a change of the amount of VOC emissions from such equipment or operation and for which an Authority to Construct or modified Permit to Operate is required. Routine maintenance and/or repair shall not be considered a physical change. The following changes shall not be considered a change in the method of operation provided that such changes are not contrary to any permit conditions:

(i) an increase in production rate and/or increase in hours of operation, and

(ii) use of alternate materials containing VOC's provided that VOC emissions resulting from such use do not exceed limits allowable under the approved AECP.

(7) **"PERMIT UNIT"** means an identifiable piece of air pollutant emitting equipment including associated air pollution control equipment, or any operation that produces and/or emits air pollutants, which:

(i) requires a written permit pursuant to Rule 10, and

(ii) is in operation, exempt from the permit requirements pursuant to the provisions of Rule 11 and is proposed to be included in the AECP. Such units will require permits to operate to be issued concurrently with the approved AECP.

(8) **"STATE IMPLEMENTATION PLAN (SIP)"** means the State prepared plan, approved by the EPA, detailing how National Ambient Air Quality Standards will be achieved and maintained.

(9) **"STATIONARY SOURCE"** means a unit or an aggregation of units of non-vehicular air contaminant emitting articles, machines, equipment or other contrivances, all of which are located on one property or adjoining properties under the same ownership or entitlement to use and operate. This includes any unit or aggregation of units in the California Coastal Waters off San Diego County.

(10) **"TRANSFER EFFICIENCY"** means the ratio of the weight or volume of coating solids adhering to the surface being coated to the total weight or volume of coating solids used in an application step, expressed as a percentage.

(11) **"VOLATILE ORGANIC COMPOUND (VOC)"** means any volatile compound containing at least one atom of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates, ammonium carbonate and exempt compounds which can be emitted to the atmosphere during operations or activities subject to rules specified in Section (a).

(c) **REQUIREMENTS**

(1) An owner or operator of a stationary source may demonstrate compliance with the VOC emission limitations of any of the District rules identified in Section (a) of this rule by means of an AECP, provided that the owner or operator:

(i) Submits an application for an AECP which:

(A) provides at least a 20 percent reduction in VOC emissions from the affected operations as compared to the baseline emissions on each and every calendar day of operation. Baseline emissions shall be calculated according to Subsection (c)(2)(vi) of this rule; and

(B) allows a determination of compliance on a daily basis.

(ii) Submits applications for new or modified permits to operate for all permit units to be included in the AECP;

(iii) Receives written approval of the AECP from the Air Pollution Control Officer prior to AECP implementation. Such approval shall include federally enforceable operating conditions applied to all permits to operate for permit units included in the approved AECP; and

(iv) Complies with all specified terms, conditions and/or requirements of the AECP.

(2) The owner or operator of any source seeking to achieve compliance by use of an approved AECP shall provide all data, records, and other information necessary to determine the approvability of an alternative emission control plan including but not limited to:

- (i) The applicable District rule;
- (ii) A list of equipment subject to the alternative emission control plan located at the stationary source;
- (iii) Daily hours of operations of affected equipment per every operating calendar day for the two years directly preceding the source's application for AECP.
- (iv) Daily records of usage of each coating and thinner in accordance with Section (d) of this rule for a period of two years directly preceding the source's application for AECP;
- (v) For all add-on VOC emission control equipment - operating records, key operating parameters including but not limited to temperature, pressure and/or flow rates, source tests, laboratory analyses and monitoring data sufficient to demonstrate the claimed VOC emission reduction efficiency, for a period of two years directly preceding the source's application for AECP; and
- (vi) Calculations showing baseline emissions for each piece of equipment included in the AECP. The baseline emissions (BE) shall be calculated according to the following:

$$\text{BE (lbs VOC/day)} = \text{EF (lbs VOC/gal solids)} \times \text{CU (gal solids/hr)} \times \text{HR (hrs/day)}$$

where:

EF - emission factor (EF) in pounds of VOC emitted per gallon (or pound) of coating solids as applied,

CU - average hourly capacity utilization in gallons (or pounds) of coating solids per hour,

H - number of hours of operation per operating day.

Emission factor, capacity utilization and hours of operation used for baseline calculations shall be either actual values, values allowable by the applicable District rule or allowable VOC emissions under the applicable SIP provision, whichever is lowest. Actual values for CU and H shall be determined using average data for two years directly preceding the source's application for AECP.

Sources lacking records of operating hours may substitute the above calculations for VOC emissions with records of VOC emissions from usage of coatings, as applied, expressed as pounds VOC per day from each piece of equipment included in the AECP. VOC emissions shall be calculated on a solids basis per every operating calendar day for the two years directly preceding the source's application for AECP. Baseline emissions for each piece of equipment included in the AECP shall be the least of either actual VOC emissions, or allowable VOC emissions from the affected operations under the applicable District rule, or allowable VOC emissions from the affected operations under the applicable State Implementation Plan (SIP) provision.

Net baseline emissions included in the AECP are the sum of the baseline emissions from all equipment subject to AECP.

(vii) Calculations showing how the proposed 20 percent VOC emission reduction from the baseline emissions from affected operations will be achieved and maintained each calendar day of operation under an AECP.

(3) Any emission reductions specified in an AECP shall meet the following criteria:

(i) Include VOC emissions only and result from activities governed by only one source-specific District rule;

(ii) Be enforceable. To meet this requirement, the operating conditions which qualify the AECP for approval shall be included in a Permit to Operate enforceable by the District, Air Resources Board (ARB) and Environmental Protection Agency (EPA);

(iii) Be permanent. To meet this requirement, the VOC emission reductions shall be below baseline emissions by at least 20% on each and every day of operation under the approved AECP;

(iv) Be quantifiable. To meet this requirement, the VOC emission reductions shall be determined using methods specified in Section (e) of this rule, shall be demonstrated through daily records and shall be based on a consistent averaging time, not to exceed 24 hours; and

(v) Be surplus. To meet this requirement, the VOC emission reductions in AECP shall not be mandated by current regulations incorporated in the SIP, not already relied upon for SIP planning purposes, not banked as an emission reduction credit, and not used by the source to meet any other regulatory requirement. Surplus emission reductions shall be determined using as a reference appropriate baseline emissions calculated pursuant to Subsection (c)(2)(vi); and

(vi) Be real. To meet this requirement, the VOC emission reductions pertaining to AECP shall not likely be replaced by the VOC emission increases within the District.

(vii) Be calculated on a mass or volume of solids basis. To meet this requirement, the VOC content of materials, the amount of VOC emissions and emission reductions shall be calculated and reported as pounds of VOC per pound or gallon of coating solids as applied, excluding water and exempt compounds.

(4) Each AECP approved by the District shall be referred to ARB by the Air Pollution Control Officer for submittal to EPA as a source - specific revision to the State Implementation Plan. Sources which obtain an approved AECP from the District remain subject to federal enforcement of existing SIP limits pending federal approval of the AECP as a source - specific SIP revision pursuant to Section 110(a)(3)(A) of the Clean Air Act.

(5) The owner or operator of a stationary source applying for approval of AECP shall be subject to the applicable rule's specific requirements pending District and EPA approval of a submitted AECP unless the source is operating under the provision of Subsection (g)(2).

(6) Current permits to operate for any permit unit included in the AECP shall be modified and new permits shall be issued incorporating the provisions of the approved

AECP. If the AECP encompasses operations or equipment not previously subject to permit, such operations or equipment shall require permits.

(7) Applications for an authority to construct and permit to operate shall be submitted for any new or modified add-on control equipment to be installed under the AECP.

(8) A new, modified or updated AECP shall be submitted:

(i) Prior to modification of equipment subject to the AECP which may result in the increase of VOC emissions; or

(ii) Within 60 days following the date the source-specific rule pertaining to Section (a) and relating to the AECP is amended or an applicable lower VOC content or VOC emission limit goes into effect ; or

(iii) After equipment shutdown or production curtailment related to the equipment included in AECP, with the new baseline calculations reflecting such shutdown or curtailment.

(9) Any new equipment at an existing stationary source, or any existing equipment at such source, which was not in operation for the two years directly preceding the source's application for AECP can be added to an approved AECP provided that, until two years of daily operating records for such new or existing equipment have been established, the daily VOC emission limit of the existing approved AECP is not exceeded. After two years of daily operating records such new or existing equipment have been established, the operator of such equipment may apply to modify the AECP to include the baseline emissions established for such equipment.

(d) RECORDKEEPING

(1) The owner or operator of any permit unit that is achieving compliance with a District rule by using an approved AECP shall maintain records of all information necessary to demonstrate daily compliance, including but not limited to:

(i) a current list of coatings and thinners; and

(ii) type and/or category of coatings and thinners used; and

(iii) mix ratio of components; and

(iv) allowable and actual content of VOC, water and exempt compounds for each coating and thinner. VOC content of coatings shall be expressed in grams of VOC per liter of coating as applied, less water and less exempt compounds. VOC content of thinners shall be expressed in grams of VOC per liter of thinner.

(2) The owner or operator of any permit unit that is achieving compliance with a District rule by using an approved AECP shall maintain daily records showing:

(i) The amount of coatings and thinners used for each operation; and

(ii) The calculations of allowable and actual VOC emissions and the VOC emission reduction compared to baseline.

All records pertaining to Subsection (c)(4) shall be retained on site for at least three years and shall be submitted to the District immediately upon request .

(e) TEST METHODS

(1) Measurements of VOC content of coatings shall be conducted and reported in accordance with EPA Test Method 24 (40 CFR 60, Appendix A) as it exists on *(date of adoption)* and ASTM Test Method D 4457-85. *5-21-91*

(2) Calculations of the VOC content of coatings less water and less exempt compounds shall be performed in accordance with ASTM Standard Practice D 3960-87 for determining VOC content of paints and related coatings.

(3) Measurements of VOC emissions and collection efficiency of add-on control devices shall be conducted in accordance with EPA Methods 18 and 25 (40 CFR 60, Appendix A) and with EPA Guidelines for Developing Capture Efficiency Protocol, 55 FR 26865, June 29, 1990, as they exist on *(date of adoption)*. *5-21-91*

The same test method and averaging time shall be used to quantify emission reductions both before and after add-on control device.

(f) RESTRICTIONS:

(1) An AECF shall not result in an increase in any baseline emission of an air pollutant regulated, proposed for regulation, listed, or the subject of a notice-of-intent to list under the Clean Air Act section 112, National Emission Standards for Hazardous Air Pollutants (NESHAPs). The AECF shall not be used to meet any NESHAPs requirements. The baseline emissions of a hazardous pollutant shall be determined by the lower of either actual or NESHAPs allowable emissions.

(2) An AECF shall not include credits from emission reductions made prior to application for the AECF. This includes emission reductions from equipment shut down and production curtailment.

(3) An AECF shall not include transfer efficiency as an alternative means of control, or as a means of demonstrating emission reductions.

(4) Emission reductions required by an AECF shall not be used to meet requirements of New Source Performance Standards.

(5) Emission averaging period shall not exceed 24 hours.

(6) An AECF shall not include credits calculated through solvent usage for surface preparation, clean-up and/or stripping operations.

(7) An AECF shall not include equipment located in classified areas where all the pertinent records specified in Section (d) of this rule cannot be made available to the District because of possible national security violations.

(8) Any new stationary source, or any stationary source which was not in operation for the two years directly preceding the source's application for AECF, shall not be able to comply with District rules by means of AECF.

(g) COMPLIANCE SCHEDULE.

(1) A source operating under a District approved AECP at the time of this rule's adoption shall submit an AECP consistent with this rule's requirement to the District and EPA no later than ~~60~~ 120 days after *(date of adoption)*. *5-21-91*

(2) A stationary source currently complying with the above District rules by means of an approved AECP may continue to achieve compliance through that existing approved AECP for a period until *(180 days from date of adoption)*. Any AECP that had been previously approved shall be void upon approval of an AECP pursuant to this rule or after *(180 days from the date of adoption)*, whichever occurs first.

10-17-91

IT IS FURTHER RESOLVED AND ORDERED that the subject addition of Rule 67.1 to Regulation IV, shall take effect upon adoption.

PASSED AND ADOPTED by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this 21st day of May, 1991 by the following votes:

AYES: Members Bailey, Williams, and MacDonald
NOES: Members None
ABSENT: Members Bilbray and Golding

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO) ss.

I, THOMAS J. PASTUSZKA, Clerk of the Air Pollution Control Board of the County of San Diego, State of California, hereby certify that I have compared the foregoing copy with the original resolution passed, and adopted by said Board at a regular meeting thereof, at the time and by the vote herein stated, which original resolution is now on file in my office; that the same contains a full, true and correct transcript therefrom and of the whole thereof.

Witness my hand and the seal of said Air Pollution Control Board, this 23rd day of May, 1991.

THOMAS J. PASTUSZKA
Clerk of the Air Pollution Control Board
San Diego County Air Pollution Control District

(SEAL)

By *María A. Tiscareno*
María A. Tiscareno, Deputy

ASSISTANT TO FORMER LEGAL COUNSEL
COUNTY COUNSEL