

RULE 67.1 ALTERNATIVE EMISSION CONTROL PLANS
(Effective 5/21/91)

(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 AECF;

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

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

(2) The owner or operator of any source seeking to achieve compliance by use of an approved AECF 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 AECF.

(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 AECF;

(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 AECF; and

(vi) Calculations showing baseline emissions for each piece of equipment included in the AECF. The baseline emissions (BE) shall be calculated according to the following:

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

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 AECF.

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 AECF. 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 AECF. Baseline emissions for each piece of equipment included in the AECF 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 AECF are the sum of the baseline emissions from all equipment subject to AECF.

(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 AECF.

(3) Any emission reductions specified in an AECF 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 AECF 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 AECF;

(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 AECF 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 AECF 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 AECPP 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 AECPP from the District remain subject to federal enforcement of existing SIP limits pending federal approval of the AECPP 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 AECPP shall be subject to the applicable rule's specific requirements pending District and EPA approval of a submitted AECPP unless the source is operating under the provision of Subsection (g)(2).

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

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

(i) Prior to modification of equipment subject to the AECPP 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 AECPP 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 AECPP, 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 AECPP can be added to an approved AECPP 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 AECPP 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 AECPP 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 AECPP 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 May 21, 1991, and ASTM Test Method D 4457-85.

(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 May 21, 1991.

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 AECP 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 AECP 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 AECP shall not include credits from emission reductions made prior to application for the AECP. This includes emission reductions from equipment shut down and production curtailment.

(3) An AECP 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 AECP shall not be used to meet requirements of New Source Performance Standards.

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

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

(7) An AECP 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 AECP, shall not be able to comply with District rules by means of AECP.

(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 120 days after May 21, 1991.

(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 October 17, 1991. Any AECP that had been previously approved shall be void upon approval of an AECP pursuant to this rule or after October 17, 1991, whichever occurs first.