

ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

**RULE 108 -- ALTERNATIVE EMISSION CONTROL PLANS**

*(Adopted: 3/2/90; Amended: 4/6/90)*

(a) Purpose

An owner or operator may demonstrate compliance with an emission limitation of a specific District Rule by means of an Alternative Emission Control Plan (AECP).

(b) Applicability

(1) The provisions of this rule shall apply to an owner or operator of an existing stationary source emitting, or capable of emitting, a volatile organic compound (VOC), electing to comply by means of an AECP and subject to one of the following District Rules:

1104 - Wood Flat Stock Coating Operations,

1106 - Marine Coating Operations,

1107 - Coating of Metal Parts and Products,

1115 - Motor Vehicle Assembly Line Coating Operations,

1124 - Aerospace Assembly and Component Coating Operations,

1125 - Metal Container, Closure, and Coil Coating Operations,

1128 - Paper, Fabric, and Film Coating Operations,

1130 - Graphic Arts,

1136 - Wood Products Coatings,

1145 - Plastic, Rubber, and Glass Coatings,

1151 - Motor Vehicle and Mobile Equipment Non-assembly Line Coating Operations,

1164 - Semiconductor Manufacturing,

1168 - Control of Volatile Organic Compound Emissions from Adhesive Application.

(2) The provisions of an AECP shall be submitted by the District to the Air Resources Board (ARB) for submittal to the Environmental Protection Agency (EPA) as a source-specific revision to the State Implementation Plan (SIP). 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.

(3) The provisions of this rule shall apply to all stationary sources of VOC emissions currently complying with a District rule by means of an AECP or Equivalency Plan. A stationary source may continue to achieve compliance through an existing Plan for a period not to exceed 180 days from date of Plan submission in accordance with the schedule set forth in paragraph (e).

(4) Each permit unit to be included in an AECP shall have been in operation pursuant to District permit or pursuant to Rule 219 prior to the submittal of the AECP application.

(c) Definitions

- (1) ALTERNATIVE EMISSION CONTROL PLAN (AECPP) is a plan which allows a source to demonstrate an alternative method of rule compliance.
- (2) BASELINE EMISSIONS are the product of three factors expressed as lbs VOC/day (see (d)(7)). The factors are emissions rate, capacity utilization, and hours of operation.
- (3) EMISSION REDUCTIONS:
  - (A) ENFORCEABLE means the operating conditions which qualify the AECPP for approval are included in a Permit to Operate enforced by the District and the AECPP is submitted as a source-specific SIP revision.
  - (B) PERMANENT means the AECPP contains permit conditions which ensure the emission reductions from the baseline are achieved for each and every operating day and the AECPP is submitted as a source-specific SIP revision.
  - (C) QUANTIFIABLE means emissions must be able to be measured before and after the reduction using the same test method and averaging time.
  - (D) SURPLUS means the emission reductions are not required by current SIP regulations, are not a measure in Tier I of the Air Quality Management Plan, or relied upon for SIP planning purposes, and are not used by the source to meet any other regulatory requirements. Surplus emission reductions shall be determined by using an appropriate baseline as described under (d)(7).
- (4) EQUIVALENCY PLAN is the same as an AECPP.
- (5) MODIFICATION means any physical change, change in method of operation of, or addition to, an existing stationary source, requiring an application for permit to construct. Routine maintenance and/or repair shall not be considered a physical change. A change in the method of operation of equipment, unless previously limited by an enforceable permit condition, shall not include:
  - (A) an increase in the production rate, unless such increase will cause the maximum design capacity of the equipment to be exceeded; or
  - (B) an increase in the hours of operation; or
  - (C) a change in ownership of a source.
- (6) PERMIT UNIT means any article, machine, equipment, or other contrivance, or combination thereof, which may cause or control the issuance of air contaminants, and which:
  - (A) requires a written permit pursuant to Rules 201 and/or 203; or
  - (B) is in operation pursuant to the provisions of Rule 219.
- (7) PLAN refers to an Alternative Emission Control Plan.
- (8) REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) is the lowest emission limit established through District regulations for a particular source.
- (9) STATE IMPLEMENTATION PLAN is the State (District) prepared plan, approved by the EPA, detailing how National Ambient Air Quality Standards will be achieved and maintained.

- (10) STATIONARY SOURCE is any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and which are owned or operated by the same person (or by persons under common control). Such above-described groupings, if non-contiguous, but connected only by land carrying a pipeline, shall not be considered one stationary source.
- (11) TRANSFER EFFICIENCY (TE) is the ratio of the weight or volume of coating solids deposited on an object to the total weight or volume of coating solids used in a coating application step expressed as a percentage.
- (12) VOLATILE ORGANIC COMPOUND (VOC) is any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1,1,1 trichloroethane, methylene chloride, trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorodifluoromethane (CFC-12), trichlorofluoromethane (CFC-11), chlorodifluoromethane (HCFC-22), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), and chlorodifluoroethane (HCFC-142b).

(d) Requirements

- (1) An owner or operator may demonstrate compliance with a specific District rule by means of an AECPP, provided that the owner or operator:
  - (A) submits an application for a Plan which is enforceable on a 24-hour daily emissions basis; and
  - (B) submits applications and receives new Permits to Operate for permit units included in the Plan; and
  - (C) prior to Plan implementation, receives written approval of the Plan from the Executive Officer with operating conditions included in a Permit to Operate enforced by the District. Permit conditions may specify parameters for conducting source tests of control equipment in order to determine compliance.
- (2) Existing permits shall be surrendered and new permits incorporating the provisions of the AECPP shall be obtained. Notwithstanding provisions of Rule 219, if a Plan encompasses operation of permit units not previously subject to permit, such permit units shall lose their exemption and require permits.
- (3) The owner or operator of a stationary source of VOC emissions shall be subject to the applicable rule's specific requirements pending District approval of a submitted Plan unless the source is operating under the provision of subparagraph (b)(3).
- (4) The AECPP shall provide, as a minimum, all data, records, and other information necessary to determine eligibility for alternative emission control including but not limited to:
  - (A) applicable District rule; and
  - (B) a list of equipment subject to alternative emission control; and
  - (C) calculations showing baseline emissions for each piece of equipment included in the Plan; and

- (D) calculations showing how the required 20 percent emission reduction will be obtained; and
  - (E) an explanation of how the proposed 20 percent emission reduction will be enforceable, permanent, quantifiable, and surplus; and
  - (F) amounts of VOC-containing materials to be used and their VOC concentrations for each operation.
- (5) The owner or operator operating under an approved Plan shall maintain daily operating records, information on operations, source tests, laboratory analyses, monitoring data, and other information in a manner and form consistent with determining compliance with the Plan on a 24-hour basis. Such records and reports shall be retained for a period of not less than two (2) years and shall be submitted to the District upon request.
- (6) The Plan shall result in at least a twenty (20) percent reduction in VOC baseline emissions, thus producing a net air quality benefit and establishing an AECPP emissions limit.
- (7) Baseline emissions are the product of:
- Emission rate (ER) (lbs VOC/gal of solids)
  - Capacity utilization (CU) (gals of solids/hour)
  - Hours of operations (H) (hrs/day)
- $$\text{Baseline emissions} = \text{ER} \times \text{CU} \times \text{H} = (\text{lbs VOC/day})$$
- Baseline emission calculations shall include data for permit units included in the Plan. Calculations shall use the lowest of either (1) the actual emission rate, (2) SIP allowable emission limit, or (3) RACT limits (as defined by the District regulations as of the date of application for credit). Also, calculations shall use the lowest of either actual or SIP allowable values for the capacity utilization and hours of operation factors. The hours of operation may be expressed as an hourly usage over a representative time, as approved by the Executive Officer not to exceed 24 hours. Sources lacking specific hours of operation records may substitute daily records (2 years) of VOC emissions from coatings and solvents usage expressed as lbs VOC/day. Actual values for the capacity utilization and hours of operation shall be based on the average from data for two years directly preceding the source's application for a Plan, unless another two-year period can be shown to the satisfaction of the Executive Officer and EPA to more accurately represent the source's normal allowable operations. No credit will be given for down-time.
- (8) Emission reductions shall consist of VOC emissions only and shall be enforceable, permanent, quantifiable, and surplus.
  - (9) For Plans encompassing VOC emissions from coating operations, the emission reductions shall be demonstrated on a solids basis, i.e. averaging shall be performed using pounds of VOC emitted per gallon of solids. The VOC content of the coating is as applied including any thinner added before or during application. Water and exempt solvents shall be excluded in this calculation.
  - (10) Emission reductions shall consist of emissions resulting from activities governed by only one source-specific District rule for which the Plan is submitted.
  - (11) Equipment subject to the Plan shall be located within the same stationary source.

- (12) If the emission reduction required by the AECPP is accomplished through equipment shutdown or production curtailment, the permanency of the reduction shall be ensured by permit conditions limiting the total VOC emissions from the entire facility. Thus, all future increases in VOC emissions from the facility shall require complete emission reduction offsets, regardless of the provisions of Regulation XIII.
- (13) Plans using add-on controls to achieve emission reductions shall specify test methods for both the emission collection system and the control system. Add-on controls shall not be considered part of an AECPP unless incorporated in an emissions averaging approach to compliance.

(e) **Compliance Schedule**

- (1) For sources operating under District approved AECPPs at the time of this rule's adoption, the following schedule shall apply:
  - (A) sources seeking compliance with Rules 1124 - Aerospace Assembly and Component Coating Operations; 1125 - Metal Container, Closure, and Coil Coating Operations; 1128 - Paper, Fabric, and Film Coating Operations; 1130 - Graphic Arts; 1136 - Wood Products Coatings; 1145 - Plastic, Rubber, and Glass Coatings; 1151 - Motor Vehicle and Mobile Equipment Non-assembly Line Coating Operations; 1164 - Semiconductor Manufacturing; and 1168 - Control of Volatile Organic Compound Emissions from Adhesive Application shall submit Plans consistent with this rule's requirements within 120 days of rule adoption. The District will move to approve or deny such Plans within 180 days of submittal; or
  - (B) sources seeking compliance with Rules 1104 - Wood Flat Stock Coating Operations, 1106 - Marine Coating Operations, Rules 1107 - Coating of Metal Parts and Products, and 1115 - Motor Vehicle Assembly Line Coating Operations shall submit Plans consistent with this rule's requirements within 180 days of rule adoption. The District will move to approve or deny such Plans within 180 days of submittal.
- (2) New Plans and Plans updated subsequent to any initial plans submittals required by the adoption of this rule shall be submitted:
  - (A) prior to modification of equipment subject to alternative emission control; or
  - (B) within 60 days following the date the specific rule relating to the Plan is amended if the rule amendment is pertinent to the Plan; or
  - (C) not less than 90 days prior to implementation of a specific rule's future compliance date which is pertinent to the Plan, but which the Plan does not address.

(f) Restrictions

- (1) A Plan shall not result in a net 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 (NESHAP). The Plan shall not be used to meet any NESHAP requirements. The baseline emissions of a hazardous pollutant shall be determined by the lower of either actual or NESHAP's allowable emissions.
- (2) Plans shall not include credits from emission reductions made prior to application for the Plan. This includes emission reductions from equipment shutdown and production curtailment.
- (3) Plans shall not include credits from emission reductions required by subsequent amendments to the rules specified in (b)(1).
- (4) Plans shall not include credits from emission reductions calculated through solvent usage for surface preparation, cleanup and/or stripping operations.
- (5) TE shall not be included as an alternative means of control.
- (6) Emission reductions from Plans shall not be used to meet requirements of New Source Performance Standards (NSPS).

[SIP: Approved 8/30/93, 58 FR 45445, 40 CFR 52.220(c)(182)(i)(A)(3)]