

ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

**RULE 1304 -- EMISSIONS CALCULATIONS**

*(Adopted: 10/05/79; Amended: 03/07/80; Amended: 09/10/82; Amended: 07/12/85; Amended: 01/10/86; Amended: 08/01/86; Amended: 06/28/90; Amended: 05/03/91; Amended: 06/05/92; Amended: 09/11/92; Amended: 12/07/95; Amended: 06/14/96; Amended: 03/20/01)*

(A) General

(1) Purpose

- (a) This rule provides the procedures and formulas to calculate emissions increases and decreases for new or Modified Facilities. The results of such calculations shall be used to:
  - (i) Determine the applicability of the provisions of District Rule 1303.
  - (ii) Calculate SERs generated within the same Facility to reduce Proposed Emissions for purposes of applicability of District Rule 1303(B).
  - (iii) Determine the Potential to Emit for new or Modified Facilities and Emissions Unit(s).
  - (iv) Calculate emissions decreases used to determine ERCs pursuant to the provisions of District Rule 1309.

(B) Calculating Emissions Changes in a Facility

(1) General Emissions Calculations

- (a) The emissions change for a new or Modified Facility or Emissions Unit(s) shall be calculated, in pounds per day, by subtracting Historic Actual Emissions from Proposed Emissions.

$$\text{Emissions Change} = (\text{Proposed Emissions}) - (\text{Historic Actual Emissions})$$

(C) Calculating Simultaneous Emissions Reductions.

- (1) SERs as defined in District Rule 1301(UUU) may result from the Modification or shut down of Existing Emission Unit(s) so long as the resulting reductions are Federally Enforceable, real, enforceable, permanent, quantifiable, surplus, and are reductions in Actual Emissions of the Emissions Unit(s).
- (2) SERs resulting from the Modification or shutdown of existing Emission Unit(s) within the same Facility shall be calculated as follows:
  - (a) For the shutdown of Emissions Unit;  
$$\text{SER} = \text{Historic Actual Emissions}$$
  - (b) For Modifications or limitations on operations of Emission Unit(s);  
$$\text{SER} = (\text{Historic Actual Emissions}) - (\text{Proposed Emissions})$$
  - (c) For shutdown, Modifications or limitations on mobile, area or indirect sources of emissions;
    - (i) Any calculation formula and protocol as approved by the District, CARB and USEPA.
- (3) SERs calculated pursuant to subsection (C)(2) above shall thereafter be adjusted to reflect emissions reductions which are otherwise required by Federal, State or District law, rule, order, permit or regulation as follows:
  - (a) SERs shall be adjusted to reflect only the excess reductions beyond those already achieved by, or achievable by, the Emissions Unit using RACT.
  - (b) SERs shall be adjusted to reflect only the excess reductions beyond those required by applicable Federal, State or District law, rule, order, permit or regulation.
  - (c) SERs shall be adjusted to reflect only the excess reductions beyond those required by any applicable proposed District Rules and Regulations which have been taken to public workshop.

- (d) SERs shall be adjusted to reflect the excess reductions beyond those required by any control measures identified in the District's Air Quality Attainment Plan or contained in the State Implementation Plan of the District and which have not yet been implemented in the form of District Rules and/or Regulations.
- (4) Positive SERs as calculated above may only be used to reduce Proposed Emissions, as calculated pursuant to section (E)(1), for purposes of determining applicability of District Rule 1303(B).
- (5) Prior to use, SERs must be approved by the APCO.

(D) Calculation of Emission Reduction Credits

- (1) ERCs shall be AERs as calculated below.
- (2) Initial calculation of AERs shall be as follows:
  - (a) For the shutdown of an emissions unit;
 
$$\text{AER} = \text{Historic Actual Emissions}$$
  - (b) For Modifications or limitations on operations of an emission unit;
 
$$\text{AER} = (\text{Historic Actual Emissions}) - (\text{Proposed Emissions})$$
  - (c) For Modifications or limitations on mobile, area or indirect sources of emissions;
    - (i) Any calculation formula and protocol as approved by the District, CARB and USEPA.
- (3) AERs shall thereafter be adjusted to reflect emissions reductions which are otherwise required by Federal, State or District law, rule, order, permit or regulation, as follows:
  - (a) AERs shall be adjusted to reflect only the excess reductions beyond those already achieved by, or achievable by, the emissions unit using RACT.
  - (b) AERs shall be adjusted to reflect only the excess reductions beyond those required by applicable District Rules and Regulations.

- (c) AERs shall be adjusted to reflect only the excess reductions beyond those required by any applicable proposed District Rules and Regulations which have been taken to public workshop.
  - (d) AERs shall be adjusted to reflect the excess reductions beyond those required by any control measures identified in the District's Air Quality Attainment Plan or contained in the State Implementation Plan for the District which have not yet been implemented in the form of District Rules and/or Regulations.
- (4) Readjustment of AERs and ERCs
- (a) AERs and ERCs shall be eligible for readjustment when:
    - (i) The original amount of AERs as calculated were adjusted based upon a proposed Rule or Regulation, which was not identified in the District's AQAP or SIP and the District has subsequently determined that the Rule or Regulation will not be adopted by the District; or
    - (ii) The original amount of AERs as calculated were adjusted based upon a control measure which was identified in the District's AQAP or SIP and the control measure has subsequently been removed from either or both documents and no District Rule or Regulation has been adopted for the control measure.
  - (b) If an AER is eligible for readjustment the APCO shall calculate the readjustment as if the AER was being initially issued and thereafter reissue the ERC pursuant to the provisions found in District Rule 1309(E).
- (5) Discount of ERCs Generated from Military Bases
- (a) ERCs which are calculated from emission reductions created by a military base designated for closure or downward realignment shall be discounted five percent (5%) to improve air quality.

(E) Calculation of Terms Used in Rule 1304

(1) Proposed Emissions

- (a) For a new or Modified Facility or Emissions Unit(s), the Proposed Emissions shall be equal to the Potential to Emit for that Facility or Emissions Unit as defined by District Rule 1301(FFF) and as calculated pursuant to subsection (E)(3) below.

(2) Historic Actual Emissions (HAE)

- (a) HAE equal the Actual Emissions of an Emissions Unit or combination of Emissions Units, including Fugitive Emissions directly related to those Emissions Unit(s), calculated in pounds per year, as follows:
- (i) The verified Actual Emissions of an Emissions Unit, or combination of Emissions Units, averaged from the two year period which immediately proceeds the date of application and which is representative of Facility operations; or
  - (ii) The verified Actual Emissions of an Emissions Unit, or combination of Emissions Units, averaged for any two years of the five year period which immediately precedes the date of application which the APCO has determined is more representative of Facility operations than subsection (1) above.
  - (iii) If an Emissions Unit has been in operation for less than one year, the HAE shall be equal to zero.
  - (iv) For purposes of calculations pursuant to District Rule 1304(B), in the case of a modified Facility, HAE for an Emissions Unit may be equal to the Potential to Emit for that Emissions Unit, as indicated by Federally Enforceable Emissions Limitation, if all the emissions from that Emissions Unit have been previously offset in a documented prior permitting action pursuant to Regulation XIII or prior Rule 213.

(3) Potential To Emit

- (a) The Potential to Emit for a Facility, for the purpose of this Rule, shall be calculated as follows:
- (i) The sum of the Potentials to Emit for all existing Permit Units as defined pursuant to District Rule 1301(FFF); and

- (ii) Any emissions increases from proposed new or Modified Permit Units as calculated pursuant to subsection (B) above; and
- (iii) Any Emission Reduction Credits issued and banked pursuant to the provisions of District Rule 1309 shall be included in the calculations of a Facility's Potential to Emit.

[SIP: Submitted as amended 03/20/01 on \_\_\_\_\_; Approved 2/4/96, 61 FR 64291, 40 CFR 52.220(c)(240)(i)(A)(1); Disapproved \_\_\_\_\_, \_\_\_\_\_, 40 CFR 52.233(l)(1)(i) and 52.233(l)(1)(iii); Conditionally Approved 6/9/82, 47 FR 25013, 40 CFR 52.220(c)(87)(v)(A); Conditionally Approved 1/21/81, 46 FR 5965, 40 CFR 52.220(c)(68)(i)]