Subpart C—Allowance Calculations for Combustion Sources

§ 74.20 Data for baseline and alternative baseline.

(a) *Acceptable data.* (1) The designated representative of a combustion source shall submit either the data specified in this paragraph or alternative data under paragraph (c) of this section. The designated representative shall also submit the calculations under this section based on such data.

(2) The following data shall be submitted for the combustion source for the calendar year(s) under paragraph (a)(3) of this section:

(i) Monthly or annual quantity of each type of fuel consumed, expressed in thousands of tons for coal, thousands of barrels for oil, and million standard cubic feet (scf) for natural gas. If other fuels are used, the combustion source must specify units of measure.

(ii) Monthly or annual heat content of fuel consumed for each type of fuel consumed, expressed in British thermal units (Btu) per pound for coal, Btu per

barrel for oil, and Btu per standard cubic foot (scf) for natural gas. If other fuels are used, the combustion source must specify units of measure.

(iii) Monthly or annual sulfur content of fuel consumed for each type of fuel consumed, expressed as a percentage by weight.

(3) *Calendar Years.* (i) For combustion sources that commenced operating prior to January 1, 1985, data under this section shall be submitted for 1985, 1986, and 1987.

(ii) For combustion sources that commenced operation after January 1, 1985, the data under this section shall be submitted for the first three consecutive calendar years during which the combustion source operated after December 31, 1985.

(b) *Calculation of baseline and alternative baseline.* (1) For combustion sources that commenced operation prior to January 1, 1985, the baseline is the average annual quantity of fuel consumed during 1985, 1986, and 1987, expressed in mmBtu. The baseline shall be calculated as follows:

$$\text{baseline} = \frac{\sum_{\text{Year}=1985}^{1987} \text{annual fuel consumption}}{3}$$

where,

(i) for a combustion source submitting monthly data,

$$\text{annual fuel consumption} = \sum_{\text{months}=\text{Jan}}^{\text{Dec}} \sum_{\text{Fuel Types}} \left[\begin{array}{c} \text{quantity of fuel consumed} \\ \times \text{heat content} \times \text{unit conversion} \end{array} \right]$$

and unit conversion
= 2 for coal
= 0.001 for oil
= 1 for gas

For other fuels, the combustion source must specify unit conversion; or

(ii) for a combustion source submitting annual data,

$$\text{annual fuel consumption} = \sum_{\text{Fuel Types}} \left[\begin{array}{c} \text{quantity of fuel consumed} \\ \times \text{heat content} \times \text{unit conversion} \end{array} \right]$$

and unit conversion
  = 2 for coal
  = 0.001 for oil
  = 1 for gas

For other fuels, the combustion source must specify unit conversion.

(2) For combustion sources that commenced operation after January 1, 1985, the alternative baseline is the average annual quantity of fuel consumed in the first three consecutive calendar years during which the combustion source operated after December 31, 1985, expressed in mmBtu. The alternative baseline shall be calculated as follows:

$$\text{alternative baseline} = \frac{\displaystyle\sum_{\text{First 3 consecutive years}} \text{annual fuel consumption}}{3}$$

where,

"annual fuel consumption" is as defined under paragraph (b)(1)(i) or (ii) of this section.

(c) *Alternative data.* (1) For combustion sources for which any of the data under paragraph (b) of this section is not available due solely to a natural catastrophe, data as set forth in paragraph (a)(2) of this section for the first three consecutive calendar years for which data is available after December 31, 1985, may be submitted. The alternative baseline for these combustion sources shall be calculated using the equation for alternative baseline in paragraph (b)(2) of this section and the definition of annual fuel consumption in paragraphs (b)(1)(i) or (ii) of this section.

(2) Except as provided in paragraph (c)(1) of this section, no alternative data may be submitted. A combustion source that cannot submit all required data, in accordance with this section, shall not be eligible to submit an opt-in permit application.

(d) *Administrator's action.* The Administrator may accept in whole or in part or with changes as appropriate, request additional information, or reject data or alternative data submitted for a combustion source's baseline or alternative baseline.

§ 74.22 Actual SO₂ emissions rate.

(a) *Data requirements.* The designated representative of a combustion source shall submit the calculations under this section based on data submitted under § 74.20 for the following calendar year:

(1) For combustion sources that commenced operation prior to January 1, 1985, the calendar year for calculating the actual SO₂ emissions rate shall be 1985.

(2) For combustion sources that commenced operation after January 1, 1985, the calendar year for calculating the actual SO₂ emissions rate shall be the first year of the three consecutive calendar years of the alternative baseline under § 74.20(b)(2).

(3) For combustion sources meeting the requirements of § 74.20(c), the calendar year for calculating the actual SO₂ emissions rate shall be the first year of the three consecutive calendar years to be used as alternative data under § 74.20(c).

(b) *SO₂ emissions factor calculation.* The SO₂ emissions factor for each type of fuel consumed during the specified year, expressed in pounds per thousand tons for coal, pounds per thousand barrels for oil and pounds per million cubic feet (scf) for gas, shall be calculated as follows:

SO_2 Emissions Factor = (average percent of sulfur by weight) × (k),

where,

average percent of sulfur by weight
  = annual average, for a combustion source submitting annual data
  = monthly average, for a combustion source submitting monthly data
k = 39,000 for bituminous coal or anthracite
  = 35,000 for subbituminous coal
  = 30,000 for lignite
  = 5,964 for distillate (light) oil
  = 6,594 for residual (heavy) oil
  = 0.6 for natural gas

For other fuels, the combustion source must specify the SO₂ emissions factor.