# RULE 405 SULFUR COMPOUNDS EMISSION STANDARDS, LIMITATIONS AND PROHIBITIONS

(Adopted prior to 11/04/77; Revised 9/14/99; 5/18/2004)

## A. Applicability

This Rule applies to the discharge of sulfur compounds into the Atmosphere.

## B. Requirements

### B.1 Sulfur Compounds

B.1.a A Person shall not discharge into the Atmosphere from any single Source of emissions, sulfur compounds, calculated as sulfur dioxide (SO2) in excess of 0.2 percent by volume, measured at point of discharge, except as specified below.

## B.2 Sulfur Recovery Units

- B.2.a A Person shall not discharge into the Atmosphere from any sulfur recovery unit producing elemental sulfur, effluent process gas containing more than the limits specified below:
  - B.2.a.1 500 parts per million by volume of sulfur compounds calculated as sulfur dioxide.
  - B.2.a.2 10 ppm by volume of hydrogen sulfide.
  - B.2.a.3 200 pounds per hour of sulfur compounds calculated as sulfur dioxide.

#### B.3 Sulfuric Acid Units

- B.3.a A Person shall not discharge into the Atmosphere from any sulfuric acid unit, effluent process gas containing more than the limits specified below:
  - B.3.a.1 500 parts per million by volume of sulfur compounds calculated as sulfur dioxide.
  - B.3.a.2 200 pounds per hour of sulfur compounds calculated as sulfur dioxide.

#### B.4 Fuel Burning Equipment

B.4.a A Person shall not discharge into the Atmosphere from any

- stationary Fuel Burning Equipment, contaminants containing more than the limits specified below:
- B.4.a.1 500 parts per million by volume of sulfur compounds calculated as sulfur dioxide.
- B.4.a.2 200 pounds per hour of sulfur compounds calculated as sulfur dioxide
- B.4.b Nothing in Section B.4.a shall be construed as preventing the use, maintenance, alteration, or Modification, to existing Fuel Burning Equipment, which will reduce its mass rate of Air Contaminant emissions.

#### B.5 Sulfur Content of Fuels

- B.5.a A Person shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.
- B.5.b A Person shall not burn any liquid or solid fuel, or mixture thereof, having a sulfur content in excess of 0.5 percent by weight.
- B.5.c (Reserved)
- B.5.d The provisions of Section B.5.a, and B.5.b shall not apply under the circumstances specified below:
  - B.5.d.1 The burning of sulfur, hydrogen sulfide, acid sludge, or other sulfur compounds in the manufacturing of sulfur or sulfur compounds.
  - B.5.d.2 The use of solid fuels in any metallurgical process.
  - B.5.d.3 The use of fuels where the gaseous products of combustion are used as raw materials for other processes.
  - B.5.d.4 The incineration of waste gases, provided that the gross heating value of such gases is less than 300 British Thermal Units per cubic foot at Standard Conditions and provided that the fuel used to incinerate such waste gases does not contain sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel calculated as hydrogen sulfide at standard conditions.
  - B.5.d.5 When the supply of compliant fuel is not available to the user

due to accident, strike, act of war, sabotage, act of God, or by reason of any federal or State of California rule or regulation prohibiting the purchase or use thereof.

- B.5.e The use of non-complying fuel shall be allowed where process conditions or Control Equipment will reduce emissions to a level equal to or less than emissions associated with the use of complying fuel.
- B.5.f Prior to the use of any non-complying fuel as provided for in Sections B.5.d and B.5.e, the APCO shall be notified in writing.

#### C. Test Methods

- C.1 Concentrations of sulfur dioxide and sulfuric acid mist shall be determined using EPA Method 8, or any other applicable EPA approved test method.
- C.2 Concentrations of hydrogen sulfide and other sulfides shall be determined using EPA Method 15, 16A, 16B, or any other applicable EPA approved test method.
- C.3 The sulfur content of liquid fuels shall be determined using ASTM D129-95, D1552-95, or D4057-95 or any other applicable EPA approved test method.
- C.4 The sulfur content of gaseous fuels shall be determined using ASTM D5504-94 or any other applicable EPA approved test method.
- C.5 The sulfur content of coal shall be determined using ASTM D3177-89 or D4239-97 or any other applicable EPA approved test method.
- C.6 The heating value of low BTU gas shall be determined using ASTM D1946-90 (analysis) and D3588-98 (calculation), or any other applicable EPA approved test method.

#### D. Monitoring and Recordkeeping

- D.1 Any person subject to the provisions of this rule shall:
  - D.1.a maintain records of the monthly fuel consumption and hours of operation per unit per month or
  - D.1.b source test each unit annually or
  - D.1.c maintain a continuous monitor per unit.
  - D.1.d All records pertaining to subsections D.1.a, D.1.b, and D.1.c shall be

maintained for source users for two years except for major sources, subject to Title V, which shall maintain the information for five years.

- D.2 To demonstrate compliance with this rule, a stationary source may use the sulfur content specification provided by the distributor, marketer, or retailer. Otherwise, a stationary source shall test each batch of fuel purchased, according to the test methods specified in section C. The sulfur content specifications of fuels and other information acquired from distributors, marketers, retailers or from testing shall be maintained by source users for two years except for major sources, subject to Title V, which shall maintain the information for five years.
- D.3 Sulfur content specifications of fuels and other information specified in this rule as well as continuous gas monitoring and chart recorder information will be made available to District staff upon request.