

Environmental Protection Agency

§ 76.4

data, mechanical drawings, operating manuals, or any combination thereof.

Reburning means reducing the coal and combustion air to the main burners and injecting a reburn fuel (such as gas or oil) to create a fuel-rich secondary combustion zone above the main burner zone and final combustion air to create a fuel-lean burnout zone. The formation of NO_x is inhibited in the main burner zone due to the reduced combustion intensity, and NO_x is destroyed in the fuel-rich secondary combustion zone by conversion to molecular nitrogen.

Selective catalytic reduction means a noncombustion control technology that destroys NO_x by injecting a reducing agent (e.g., ammonia) into the flue gas that, in the presence of a catalyst (e.g., vanadium, titanium, or zeolite), converts NO_x into molecular nitrogen and water.

Selective noncatalytic reduction means a noncombustion control technology that destroys NO_x by injecting a reducing agent (e.g., ammonia, urea, or cyanuric acid) into the flue gas, downstream of the combustion zone that converts NO_x to molecular nitrogen, water, and when urea or cyanuric acid are used, to carbon dioxide (CO₂).

Stoker boiler means a boiler that burns solid fuel in a bed, on a stationary or moving grate, that is located at the bottom of the furnace.

Tangentially fired boiler means a boiler that has coal and air nozzles mounted in each corner of the furnace where the vertical furnace walls meet. Both pulverized coal and air are directed from the furnace corners along a line tangential to a circle lying in a horizontal plane of the furnace.

Turbo-fired boiler means a pulverized coal, wall-fired boiler with burners arranged on walls so that the individual flames extend down toward the furnace bottom and then turn back up through the center of the furnace.

Vertically fired boiler means a dry bottom boiler with circular burners, or coal and air pipes, oriented downward and mounted on waterwalls that are horizontal or at an angle. This definition shall include dry bottom roof-fired boilers and dry bottom top-fired boilers, and shall exclude dry bottom arch-

fired boilers and dry bottom turbo-fired boilers.

Wall-fired boiler means a boiler that has pulverized coal burners arranged on the walls of the furnace. The burners have discrete, individual flames that extend perpendicularly into the furnace area.

Wet bottom means that the ash is removed from the furnace in a molten state. The term "wet bottom boiler" shall include: wet bottom wall-fired boilers, including wet bottom turbo-fired boilers; and wet bottom boilers otherwise meeting the definition of vertically fired boilers, including wet bottom arch-fired boilers, wet bottom roof-fired boilers, and wet bottom top-fired boilers. The term "wet bottom boiler" shall exclude cyclone boilers and tangentially fired boilers.

[60 FR 18761, Apr. 13, 1995, as amended at 61 FR 67162, Dec. 19, 1996]

§ 76.3 General Acid Rain Program provisions.

The following provisions of part 72 of this chapter shall apply to this part:

- (a) § 72.2 (Definitions);
- (b) § 72.3 (Measurements, abbreviations, and acronyms);
- (c) § 72.4 (Federal authority);
- (d) § 72.5 (State authority);
- (e) § 72.6 (Applicability);
- (f) § 72.7 (New unit exemption);
- (g) § 72.8 (Retired units exemption);
- (h) § 72.9 (Standard requirements);
- (i) § 72.10 (Availability of information); and
- (j) § 72.11 (Computation of time).

In addition, the procedures for appeals of decisions of the Administrator under this part are contained in part 78 of this chapter.

§ 76.4 Incorporation by reference.

(a) The materials listed in this section are incorporated by reference in the sections noted. These incorporations by reference (IBR's) were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they existed on the date of approval, and notice of any change in these materials will be published in the FEDERAL REGISTER. The materials are available for

§ 76.5

40 CFR Ch. I (7-1-00 Edition)

purchase at the corresponding address noted below and are available for inspection at the Office of the Federal Register, 800 North Capitol St., NW., 7th Floor, Suite 700, Washington, DC, at the Public Information Reference Unit, U.S. EPA, 401 M Street, SW., Washington, DC, and at the Library (MD-35), U.S. EPA, Research Triangle Park, North Carolina.

(b) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, Pennsylvania 19103; or the University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

(1) ASTM D 3176-89, Standard Practice for Ultimate Analysis of Coal and Coke, IBR approved May 23, 1995 for § 76.15.

(2) ASTM D 3172-89, Standard Practice for Proximate Analysis of Coal and Coke, IBR approved May 23, 1995 for § 76.15.

(c) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Box 2350, Fairfield, NJ 07007-2350.

(1) ASME Performance Test Code 4.2 (1991), Test Code for Coal Pulverizers, IBR approved May 23, 1995 for § 76.15.

(2) [Reserved]

(d) The following material is available for purchase from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036 or from the International Organization for Standardization (ISO), Case Postale 56, CH-1211 Geneve 20, Switzerland.

(1) ISO 9931 (December, 1991) "Coal—Sampling of Pulverized Coal Conveyed by Gases in Direct Fired Coal Systems," IBR approved May 23, 1995 for § 76.15.

(2) [Reserved]

§ 76.5 NO_x emission limitations for Group 1 boilers.

(a) Beginning January 1, 1996, or for a unit subject to section 404(d) of the Act, the date on which the unit is required to meet Acid Rain emission reduction requirements for SO₂, the owner or operator of a Phase I coal-fired utility unit with a tangentially

fired boiler or a dry bottom wall-fired boiler (other than units applying cell burner technology) shall not discharge, or allow to be discharged, emissions of NO_x to the atmosphere in excess of the following limits, except as provided in paragraphs (c) or (e) of this section or in § 76.10, 76.11, or 76.12:

(1) 0.45 lb/mmBtu of heat input on an annual average basis for tangentially fired boilers.

(2) 0.50 lb/mmBtu of heat input on an annual average basis for dry bottom wall-fired boilers (other than units applying cell burner technology).

(b) The owner or operator shall determine the annual average NO_x emission rate, in lb/mmBtu, using the methods and procedures specified in part 75 of this chapter.

(c) Unless the unit meets the early election requirement of § 76.8, the owner or operator of a coal-fired substitution unit with a tangentially fired boiler or a dry bottom wall-fired boiler (other than units applying cell burner technology) that satisfies the requirements of § 76.1(c)(2), shall comply with the NO_x emission limitations that apply to Group 1, Phase II boilers.

(d) The owner or operator of a Phase I unit with a cell burner boiler that converts to a conventional wall-fired boiler on or before January 1, 1995 or, for a unit subject to section 404(d) of the Act, the date the unit is required to meet Acid Rain emissions reduction requirements for SO₂ shall comply, by such respective date or January 1, 1996, whichever is later, with the NO_x emissions limitation applicable to dry bottom wall-fired boilers under paragraph (a) of this section, except as provided in paragraphs (c) or (e) of this section or in § 76.10, 76.11, or 76.12.

(e) The owner or operator of a Phase I unit with a Group 1 boiler that converts to a fluidized bed or other type of utility boiler not included in Group 1 boilers on or before January 1, 1995 or, for a unit subject to section 404(d) of the Act, the date the unit is required to meet Acid Rain emissions reduction requirements for SO₂ is exempt from the NO_x emissions limitations specified in paragraph (a) of this section, but shall comply with the NO_x emission limitations for Group 2 boilers under § 76.6.