Chapter 8 - Asbestos, Sulfur and Nitrogen Oxides

800 [NOT IN SIP]

801 SULFUR CONTENT OF FUEL OILS

801.l The purchase, sale, offer for sale, storage, transport, or the use of, fuel oil which contains more than one percent (1%) sulfur by weight in the District is prohibited, if the fuel oil is to be burned in the District.

802 SULFUR CONTENT OF COAL

802.1 The purchase, sale, offer for sale, storage, transport, or use of coal which contains more than one percent (1%) sulfur by weight in the District shall be prohibited, ill the coal is to be burned in the District. However, when the Mayor certifies in writing that the combustion-gas-desulfurization system used at a stationary source results in sulfur oxide emission no greater than the emissions normally resulting from the burning of coal with one percent (1%) sulfur content, coal of a higher sulfur content may be burned at the stationary source.

802.2 Application for a certification shall be made in writing to the Mayor by the owner or operator of the stationary source and, upon presentation to a seller of the certification, a copy of which shall be retained by the seller, the sale, purchase, and transportation of the coal shall be permitted.

803 SULFUR PROCESS EMISSIONS

803.1 The discharge into the atmosphere of sulfur oxides calculated as sulfur dioxide, in excess of five one hundredths percent (0.05%) by volume is prohibited.

803.2 Where the process or the design of equipment is such as to permit more than one interpretation of this section, the interpretation that results in the minimum value of allowable emissions shall apply.

803.3 Adding diluted air to the exhaust gas stream for the purpose of complying with the provisions of §§803.1 through 803.2 is prohibited.

804 NITROGEN OXIDE EMISSIONS

804.1 No person shall discharge, or cause the discharge into the atmosphere of nitrogen oxides from fossil fuel-fired steam generating units of more than one hundred million (100,000,000) British Thermal Units (B.T.U.) per hour heat input in excess of the emission limits set forth in Appendix No. 1.

805 REASONABLY AVAILABLE CONTROL TECHNOLOGY FOR MAJOR STATIONARY SOURCES OF OXIDES OF NITROGEN

805.1 The requirements of § 805 shall apply to any person specified pursuant to the following provisions of this section:

(a) Any person owning, leasing, operating or controlling any major stationary source, having the potential to emit twenty-five (25) tons per year or more of oxides of nitrogen, including the following major stationary sources:

(1) Fossil-fuel-fired steam-generating units having an energy input capacity of twenty million (20,000,000) BTU per hour or more;

(2) Stationary combustion turbines having an energy input capacity of one hundred million (100,000,000) BTU per hour or more;

(3) Asphalt concrete plants having the potential to emit twenty-five (25) tons per year or more of NO_x; and

(4) Any major stationary source or part of a major stationary source, other than those specified in this subsection, having the potential to emit twenty-five (25) tons per year or more of NO_x;

(b) Any person owning, leasing, operating or controlling a major stationary source ever subject to § 805 shall continue to comply with all requirements of § 805, even if emissions from the subject major stationary source no longer exceed the twenty-five (25) ton per year applicability requirement of § 805; and

(c) The requirements of § 805 shall not apply to the following:

(1) Any person subject to § 805 who is able to demonstrate to the Mayor that, since January 1, 1990, the major stationary source has not emitted, before the application of air pollution control equipment, twenty-five (25) tons per year or more of NO_x in any year: provided that the person obtains a permit from the Mayor limiting the potential to emit to less than twenty-five (25) tons per year and provided the permit is transmitted to and approved by EPA as a revision to the District's State Implementation Plan; and

(2) Emergency standby engines operated less than five hundred (500) hours during any consecutive twelve (12) month period.

805.2 Any person subject to §805 shall comply with the following provisions:

(a) Any person subject to §805 shall maintain continuous compliance with all requirements of §805. Compliance with the applicable emission limitations shall be determined by test methods approved by the Mayor and the EPA or by continuous emission monitors satisfying the requirements of 40 CFR 60 Appendix B;

(b) Any person regulated under §805 may apply to the Mayor by July 1, 1994 for an alternative emission limitation which reflects the application of specific Reasonably Available Control Technology (hereafter referred to as "RACT." Any alternative emission limitation provided for by this section shall also be approved by EPA. An applicant for an alternative RACT shall do the following:

(1) Demonstrate to the Mayor that it is not technologically or economically feasible for that person to comply with the applicable emission limitation. The demonstration shall include a study of the capabilities of the following NO_X control options:

(A) Low-NO_5 burners;

(B) Overfire air;

(C) Flue gas recirculation; and

(D) Burners out of service;

(2) Determine an emission limitation reflecting the application of RACT; and

(c) Testing performed to verify compliance shall be based on a period during which the emission unit or air pollution control equipment is used an operated under conditions acceptable to the Mayor and the EPA and consistent with the operational parameters and limits set forth in any permit or certificate in effect.

805.3 Any person subject to §805 shall comply with the following provisions of this subsection regarding emission control plans for implementation of RACT.

(a) Any person who owns, leases, operates or controls a major stationary source subject to §805 shall submit an emission control plan to the Mayor for review and approval by the Mayor prior to implementation of RACT. The plan shall be submitted to the Mayor by the time specified in §805, or within one hundred eighty (180) days of the date the major stationary source or part of the major stationary source first meets the applicability requirements of §805;

(b) Any person subject only to §805.8, Procedures for Adjusting Combustion Processes pursuant to the requirements of §805, shall only submit a notification to the Mayor that they will comply with §805.8;

(c) The emission control plan shall detail how RACT will be implemented at the major stationary source which is subject to §805. Each plan submitted under §805.3 shall, at a minimum, include the following:

(1) A list and description of all the emission units at the major stationary source which have the potential to emit NO_X including the following:

(A) A site plan identifying the location of each NO_X emitting unit and the installation date for same;

(B) The size in millions of BTU per hour of each emission unit;

(C) For fuel utilization major stationary sources, the type of fuel or fuels combusted in each emission unit; and

(D) The maximum NO_X emission rate of each emission unit in pounds per million BTU for each fuel burned;

(2) A demonstration that the provisions of §805 can be met by each emission unit included in the control plan, including the emission levels before and after implementation of RACT of all emission units emitting NO_X for which the emission control plan is being submitted;

(3) If applicable, the designs, specifications and standard operating and maintenance procedures for any air pollution control equipment used to reduce NO_x emissions that is used to implement RACT;

(4) The testing, monitoring, recordkeeping and reporting procedures used to demonstrate compliance with the applicable provisions of this section;

(5) A schedule for the implementation of RACT at the major stationary source by the deadline contained in the applicable provision of this section, including provisions for demonstrating to the for periodic increments of progress;

(6) Any other information required by the Mayor; and

(7) The signature of a responsible official certifying the application;

(d) An emission control plan submitted by any person who owns, leases, operates or controls a major stationary source or part of major stationary source subject to §805.8, or any

person applying for an alternative RACT under §805.2(b) shall meet the following requirements, in addition to those of §805.3(c):

(1) The plan shall contain a demonstration and description of the RACT emission limits for this major stationary source or part of a major stationary source; and

(2) Any information necessary to support the demonstration made in §805.3(d)(l), such as technological and economic considerations, industry surveys, customer considerations, etc.;

(e) The Mayor shall approve emission control plans pursuant to the requirements of this paragraph:

(1) For persons not subject to §805.2(b) or 805.8, the Mayor shall issue a final approval or disapproval of the plan; and

(2) For persons subject to §805.8 or applying for an alternative RACT under §805.2(b) where the information submitted in the emission control plan is sufficient to support both the determination of RACT/alternative RACT and the proposed schedule, the Mayor shall publish a notice of public hearing. After the public hearing and the close of the public comment period, the Mayor shall issue a final approval or disapproval of the emission control plan; and

(f) Except as provided for in §805.3(b), no emission reduction or any other action taken at any major stationary source or part of a major stationary source will constitute implementation of RACT at that major stationary source unless that emission reduction or other action is part of an emission control plan approved by the Mayor.

805.4 Any person owning, leasing, operating or controlling any stationary combustion turbine subject to §805 shall comply with the requirements of this subsection.

(a) After May 31, 1995, no person owning, leasing, operating or controlling any stationary combustion turbine which has an energy input capacity of one hundred million (100,000,000) BTU per hour or greater shall emit NO, in excess of the applicable allowable NO_X emission rate set forth in this subsection, except as provided for in §805.4(b):

(1) For simple cycle stationary combustion turbines: Seventy five (75) ppmvd, corrected to fifteen percent (15%) O_2 for oil - fired turbines; and

(2) In reducing the NO_X emission rate to that specified in §805.4(a), the CO concentration in the exhaust gas shall not exceed fifty (50) ppmvd at fifteen percent (15%) O, at any operating condition, for a one (1) hour average;

(b) A stationary combustion turbine with an energy input capacity of one hundred million (100,000,000) BTU per hour or greater which is operated for less than five hundred

(500) hours per year is exempt from the emission limitations specified in §805.4(a). The owner or operator of a stationary combustion turbine shall do the following:

(1) Maintain, in a permanently bound log book, or other format acceptable to the Mayor, a list of the dates on which the stationary combustion turbine was operated and the number of hours it was operated on that day; and

(2) Before February 1st of each year after 1994, calculate the number of hours the stationary combustion turbine operated over the previous calendar year. If the number of hours exceeds five hundred (500), then the stationary combustion turbine is no longer exempted from the provisions of §§805.4(a) and 805.4(b);

(c) Any person who owns, leases, operates or controls a stationary combustion turbine subject to §805.4 shall submit an emissions control plan, and have the plan approved by the Mayor under §805.3. The plan shall be submitted by July 1, 1994;

(d) After May 31, 1995, any person required to comply with §805.4 shall maintain continuous compliance at all times. Compliance shall be demonstrated by testing or by installing a continuous emission monitoring system:

(1) After May 31, 1995, the emission monitoring system shall do the following:

(A) Continuously monitor the NO_X emission rate from the major stationary source;

(B) Continuously record the NO_X emission rate from the major stationary source;

(C) Be installed and operated in a manner approved by the Mayor and acceptable to the EPA; and

(D) Demonstrate that the NO_X emission rate does not exceed the applicable maximum allowable NO_X emission rate specified in §805;

(2) Testing shall meet the following requirements:

(A) Be conducted using methods approved by the Mayor and acceptable to EPA; and

(B) Demonstrate that the NO_X emission rate does not exceed the applicable maximum allowable NO_X emission rate specified in §805.4.

805.5 Any person owning, leasing, operating or controlling any fossil-fuel-fired steam-generating unit subject to § 805 shall comply with the requirements of this subsection:

(a) Any person owning, leasing, operating or controlling any fossil-fuel-fired steam-generating unit with an energy input capacity of twenty million (20,000,000) BTU per hour or greater shall, prior to May 1st of each year starting in 1995, adjust the combustion process in accordance with the procedure for doing so set forth at §805.8; and

(b) After May 31, 1995, no person owning, leasing, operating or controlling any fossil-fuel-fired steam-generating unit with an energy input capacity of fifty million (50,000,000) BTU per hour or greater and less than one hundred million (100,000,000) BTU per hour shall emit NO_x at a rate greater than the applicable maximum allowable NO_x emission rate cited in this paragraph. For tangential or face-fired fossil-fuel-fired steam-generating units powered exclusively by oil: thirty hundredths pound (0.30 lb) per million BTU, based on a calendar day average;

(c) After May 31, 1995, no person owning, leasing, operating or controlling a fossil-fuel-fired steam-generating unit with an energy input capacity of one hundred million (100,000,000) BTU per hour or greater shall emit NO_x at an emission rate greater than the following maximum allowable NO_x emission rate:

(1) For dry bottom coal fired fossil-fuel-fired steam-generating units:

(A) Forty-three hundredths pound (0.43 lb) per million BTU, based on a calendar day average, for tangential or face-fired fossil-fuel-fired steam-generating units; and

(B) Forty-three hundredths pound (0.43 lb) per million BTU, based on a calendar day average, for stoker-fired fossil-fuel-fired steam-generating units;

(2) For tangential or face-fired fossil-fuel-fired steam-generating units:

(A) Twenty-five hundredths pound (0.25 lb) per million BTU, based on a calendar day average, for fossil-fuel-fired steam-generating units powered by fuel oil or a combination of fuel oil and natural gas; and

(B) Twenty hundredths pound (0.20 lb) per million BTU, based on a calendar day average, for fossil-fuel-fired steam-generating units powered exclusively by natural gas;

(d) Any person who owns, leases, operates or controls a fossil-fuel-fired steam-generating unit subject to §805.6(b) or (c) shall submit an emissions control plan, and have the plan approved by the Mayor under §805.3. The plan shall be submitted by July 1, 1994;

(e) After May 31, 1995, any person required to comply with §805.5 shall maintain continuous compliance at all times. For fossil-fuel-fired steam- generating units subject to §805.5(a), compliance will be determined by recordkeeping as detailed in §805.8. For fossil-fuel-fired steam generating units subject to §805.5(b), compliance shall be demonstrated by

testing or by installing a continuous emissions monitoring system. For fossil-fuel-fired steam-generating units subject to §805.5(c) compliance shall be demonstrated by installing a continuous emission monitoring system:

(1) The emission monitoring system shall:

(A) Continuously monitor the NO, emission rate from the major stationary source;

(B) Continuously record the NO, emission rate from the major stationary source;

(C) Be installed and operated in a manner approved by the Mayor and acceptable to the EPA; and

(D) Demonstrate that the NO_X emission rate does not exceed the applicable maximum allowable NO_X emission rate specified in §805.

(2) Testing shall meet the following requirements:

(A) Be conducted using methods approved by the Mayor and acceptable to EPA; and

(B) Demonstrate that the NO_X emission rate does not exceed the applicable maximum allowable NO_X emission rate specified in §805.5.

805.6 Any person owning, leasing, operating or controlling any asphalt concrete plant subject to § 805 shall comply with the following requirements:

(a) After May 31, 1995, no person owning, leasing, operating or controlling an asphalt concrete plant which has the potential to emit fifty (50) tons per year of NO_x or greater shall emit NO_x at a rate greater than one hundred fifty (150) ppmvd at seven percent (7%) O_2 and carbon monoxide to a level of five hundred (500) ppmvd at seven percent (7%) O_2;

(b) After January 1, 2005, no person owning, leasing, operating or controlling an asphalt concrete plant which has the potential to emit twenty-five (25) tons per year of NO_x or greater shall emit NO_x at a rate greater than one hundred fifty (150) ppmvd at seven percent (7%) O_2 and carbon monoxide to a level of five hundred (500) ppmvd at seven percent (7%) O_2;

(c) Any person who owns, leases, operates or controls an asphalt plant subject to § 805.6 shall submit an emissions control plan, and have the plan approved by the Mayor under § 805.3. The plan shall be submitted by July 1, 1994;

(d) Any person required to comply with § 805.6 shall maintain continuous compliance

at all times. Compliance shall be demonstrated by recordkeeping and testing or by recordkeeping and installing a continuous emissions monitoring system as follows:

(1) The emissions monitoring system shall:

(A) Continuously monitor the NO_x emission rate from the major stationary source;

(B) Continuously record the NO_x emission rate from the major stationary source;

(C) Be installed and operated in a manner approved by the Mayor and acceptable to EPA; and

(D) Demonstrate that the NO_x emission rate does not exceed the applicable maximum allowable NO_x emission rate specified in § 805; and

(2) Testing shall meet the following requirements:

(A) Be conducted using methods approved by the Mayor and acceptable to EPA;

(B) Be conducted before May 1st of each year after 1995; and

(C) Demonstrate that the NO_x emission rate does not exceed the applicable maximum allowable NO_x emission rate specified in this subsection.

805.7 Any person owning, leasing, operating or controlling any major stationary source or part of a major stationary source subject to § 805, other than those particular types of emitting units addressed by § 805.4 through § 805.6, shall comply with the following requirements:

(a) By May 31, 1995, no person who owns, leases, operates or controls a major stationary source with the potential to emit NO_x greater than or equal to fifty (50) tons per year shall cause, suffer, allow or permit emissions therefrom in excess of an emission rate achievable through the implementation of RACT as demonstrated in an emission control plan under § 805.3(e);

(b) After January 1, 2005, no person who owns, leases, operates or controls a major stationary source with the potential to emit NO_x greater than or equal to twenty-five (25) tons per year shall cause, suffer, allow or permit emissions therefrom in excess of an emission rate achievable through the implementation of RACT as demonstrated in an emission control plan under § 805.3(e);

(c) Any person subject to § 805.7(a) shall have the RACT emission limit approved by

the Mayor in an emissions control plan approved under § 805.3; and shall submit the plan one hundred eighty (180) days prior to the applicable implementation deadline. The plan shall also be transmitted to and approved by EPA as a revision to the District's State Implementation Plan;

(d) By installing and testing continuous emissions monitoring system;

(1) The emission monitoring system shall:

(A) Continuously monitor the NO_x emission rate from the major stationary source;

(B) Continuously record the NO_x emission rate from the major stationary source;

(C) Be installed and operated in a manner approved by the Mayor and acceptable to EPA; and

(D) Demonstrate that the NO_x emission rate does not exceed the RACT emission limitations contained in the emissions control plan that EPA has approved as a SIP revision; and

(2) Testing shall meet the following requirements:

(A) Be conducted using methods approved by the Mayor and acceptable to EPA;

(B) Be conducted before May 1st of each year after 1995; and

(C) Demonstrate that the NO_x emission rate does not exceed the RACT emission limitations contained in the emissions control plan that EPA has approved as a SIP revision;

(e) Any person required to implement RACT shall prepare and maintain daily records sufficient to demonstrate compliance consistent with the applicable averaging time. Records kept to demonstrate compliance shall be kept on-site for three (3) years and shall be made available to representatives of the Mayor and EPA in accordance with the requirements of an approved emissions control plan or upon request; and

(f) Any person required to implement RACT shall, upon request of the Mayor, perform or have performed tests to demonstrate compliance with § 805.7. Testing shall be conducted in accordance with methods approved by the Mayor and EPA.

805.8 Any person required to adjust the combustion process of any major stationary source subject to the provisions of this section shall do so according to the following provisions:

(a) Adjustments shall be performed annually and shall include, at a minimum, the following:

(1) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;

(2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x and, to the extent practicable, minimize emissions of CO; and

(3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

(b) The adjustments shall be made such that the maximum emission rate for any contaminant does not exceed the maximum allowable emission rate as set forth in this section.

(c) Any person required to adjust the combustion process of any major stationary source subject to this section shall maintain, in a permanently bound log book, or another format approved in writing by the Mayor, the following information:

(1) The date on which the combustion process was last adjusted;

(2) The name, title, and affiliation of the person who made the adjustments;

(3) The NO_x emission rate, in ppmvd, after the adjustments were made;

(4) The CO emission rate, in ppmvd, after the adjustments were made;

(5) The CO_2 concentration, in percent (%) by volume dry basis, after the adjustments were made;

(6) The O_2 concentration, in percent (%) by volume dry basis, after the adjustments were made; and

(7) Any other information that the Mayor may require.

899 DEFINITIONS AND ABBREVIATIONS

899.1 The meanings ascribed to the definitions appearing in § 199.1 of chapter 1 of this title shall apply to the terms in this chapter.

899.2 The meanings ascribed to the abbreviations appearing in §199.2 of chapter I of this title shall apply to the abbreviations in this chapter.