

Title 7 DNREC
1100 Air Quality Management Section

1142 Specific Emission Control Requirements (Formerly Reg. No. 42)

12/12/2001

1.0 Control of NO_x Emissions from Industrial Boilers

1.1 Purpose

New Castle County and Kent County are part of the Philadelphia-Wilmington-Trenton 1-hour ozone non-attainment area. All areas of Delaware impact this non-attainment area. On December 19, 1999, the EPA identified an emission reduction “shortfall” associated with this non-attainment area. Promulgation of ~~Section 4~~ 1.0 of this regulation is one measure that the Department is taking to mitigate this shortfall.

In determining the applicability of ~~this Section 1.0 of this regulation~~, the Department attempted to minimize the impact on facilities that recently installed NO_x controls under ~~Regulation No. 12~~ **7 DE Admin Code 1112** (NO_x RACT) and ~~Regulation No. 37/39~~ **7 DE Admin Code 1137/1139** (NO_x Budget Trading Program). The Department did this by regulating only large sources that, as of the effective date of ~~this Section 1.0 of this regulation~~, emitted NO_x at a rate greater than the rate identified in Table ~~† 3-1 of Regulation No. 12~~ **7 DE Admin Code 1112**, were not equipped with NO_x emission control technology, and were not subject to the requirements of ~~Regulation No. 39~~ **7 DE Admin Code 1139**. In effect, ~~this Section 1.0 of this regulation~~ regulates sources that remain high NO_x emitters after the application of RACT and post RACT requirements, and that have not committed substantial capital funds to reduce NO_x emissions.

1.2 Applicability

1.2.1 ~~This section applies~~ The provisions of 1.0 of this regulation apply to any person that owns or operates any combustion unit with a maximum heat input capacity of equal to or greater than 100 million btu per hour, except that ~~this section 1.0 of this regulation~~ shall not apply to any unit that, as of the effective date of ~~this Section 1.0 of this regulation~~:

1.2.1.1 Emits NO_x at a rate equal to or less than the rate identified in Table ~~† 3-1 of Regulation No. 12~~ **7 DE Admin Code 1112**, ~~of the State of Delaware “Regulations Governing the Control of Air Pollution.”~~

1.2.1.2 Is equipped with low NO_x burner, flue gas recirculation, selective catalytic reduction, or selective non-catalytic reduction technology.

1.2.1.3 Is subject to the requirements of ~~Regulation No. 39 7 DE Admin Code 1139, of the State of Delaware "Regulations Governing the Control of Air Pollution."~~

1.2.2 The requirements of ~~this section~~ 1.0 of this regulation are in addition to all other state and federal requirements.

1.2.3 Affected persons shall comply with the requirements of ~~paragraph~~ 1.3 of this ~~Section~~ regulation as soon as practicable, but no later than May 1, 2004.

1.3 Standards.

1.3.1 The NO_x emission rate from any unit subject to ~~this Section~~ 1.0 of this regulation shall be equal to or less than the following:

1.3.1.1 Between May 1st through September 30th of each year, inclusive: 0.10 lb/mmBTU, 24-hour calendar day average.

1.3.1.2 During all times that gaseous fuel is being fired: 0.10 lb/mmBTU, 24-hour calendar day average.

1.3.1.3 During all times not covered by ~~Section~~ 1.3.1.1 and 1.3.1.2 of this regulation: 0.25 lb/mmBTU, 24-hour calendar day average.

1.3.2 As an alternative to compliance with the requirements of ~~paragraph~~ 1.3.1 of this ~~Section~~ regulation, compliance may be achieved through the procurement and retirement of NO_x allowances authorized for use under ~~Regulation No. 39 7 DE Admin Code 1139, of the State of Delaware "Regulations Governing the Control of Air Pollution,"~~ as follows:

1.3.2.1 The actual 24-hour calendar day average NO_x emission rate in pounds per million btu shall be determined for each day of unit operation, using CEMs operated in accordance with ~~paragraph~~ 1.4 of this ~~section~~ regulation.

1.3.2.2 The actual heat input to each unit in million btu shall be determined for each day of unit operation, using methods proposed by the person subject to ~~this Section~~ 1.0 of this regulation and acceptable to the Department.

1.3.2.3 0.10 or 0.25, as applicable and consistent with ~~paragraph~~ 1.3.1 of this ~~section~~ regulation, shall be subtracted from the rate determined in ~~paragraph~~ 1.3.2.1 of this ~~section~~ regulation.

1.3.2.4 To obtain the number of pounds of NO_x emitted for a particular day, the emission rate determined in ~~paragraph~~ 1.3.2.3 of this ~~section~~ regulation.

regulation shall be multiplied by the heat input to the unit for that day determined in ~~paragraph 1.3.2.2 of this section~~ regulation. If the emission rate determined in ~~paragraph 1.3.2.3 of this section~~ regulation is equal to or less than zero, then the number of pounds of NO_x emitted for that day shall be zero.

1.3.2.5 Not later than the 20th day of each month:

1.3.2.5.1 The number of pounds of NO_x emissions calculated pursuant to ~~paragraph 1.3.2.4 of this section~~ regulation shall be summed for each calendar month, the result shall be divided by 2000, and shall be rounded to the nearest whole ton.

1.3.2.5.2 For each ton of NO_x emissions calculated pursuant to ~~paragraph 1.3.2.5.1 of this regulation~~, records shall be maintained demonstrating that one NO_x allowance owned by the person subject to ~~this Section 1.0 of this regulation~~ is identified and available, by serial number, for retirement.

1.3.2.6 Not later than February 1 of each calendar year, the NO_x allowances identified pursuant to ~~paragraph 1.3.2.5.2 of this Section regulation~~ for the previous calendar year, shall be submitted to the Department for retirement. Such submission shall detail the calculations specified in 1.3.2.1 through 1.3.2.5 ~~above~~ of this regulation, and shall indicate the serial number of each allowance to be retired.

1.4 Monitoring Requirements. Compliance with the NO_x emission standards specified in ~~this section 1.0 of this regulation~~ shall be determined based on CEM data collected in accordance with the requirements of ~~Regulation 17, Section 3.1.2 of 7 DE Admin Code 1117~~ (Performance Specification 2), and in compliance with the requirements of 40 CFR, Part 60, Appendix F.

1.5 Recordkeeping and Reporting Requirements.

1.5.1 Not later than 180 days after the effective date of ~~this Section 1.0 of this regulation~~, any person subject to ~~this Section 1.0 of this regulation~~ shall develop, and submit to the Department for approval, a schedule for bringing the affected emission unit(s) or units into compliance with the requirements of ~~this Section 1.0 of this regulation~~. Such schedule shall include, at a minimum, all of the following:

1.5.1.1 The method by which compliance will be achieved

1.5.1.2 The dates by which the affected person commits to completing the following major increments of progress, as applicable:

- 1.5.1.2.1 Completion of engineering;
- 1.5.1.2.2 Submission of permit applications;
- 1.5.1.2.3 Awarding of contracts for construction and/or installation;
- 1.5.1.2.4 Initiation of construction;
- 1.5.1.2.5 Completion of construction;
- 1.5.1.2.6 Commencement of trial operation;
- 1.5.1.2.7 Initial compliance testing;
- 1.5.1.2.8 Submission of compliance testing reports;
- 1.5.1.2.9 Commencement of normal operations (in full compliance).

1.5.2 Any person subject to ~~this Section 1.0 of this regulation~~ shall submit to the Department an initial compliance certification not later than May 1, 2004. The initial compliance certification shall, at a minimum, include the following information:

- 1.5.2.1 The name and the location of the facility.
- 1.5.2.2 The address and telephone number of the person responsible for the facility.
- 1.5.2.3 Identification of the subject source(s) or sources.
- 1.5.2.4 The applicable standard.
- 1.5.2.5 The method of compliance.
- 1.5.2.6 Certification that each subject source is in compliance with the applicable standard
- 1.5.2.7 All records necessary for determining compliance with the standards of ~~this Section 1.0 of this regulation~~ shall be maintained at the facility for a period of five years.

1.5.3 Any person subject to ~~this Section 1.0 of this regulation~~ shall, for each occurrence of excess emissions, within 30 calendar days of becoming aware of such occurrence, supply the Department with the following information:

1.5.3.1 The name and location of the facility.

1.5.3.2 The subject source(s) or sources that caused the excess emissions.

1.5.3.3 The time and date of first observation of the excess emissions.

1.5.3.4 The cause and expected duration of the excess emissions.

1.5.3.5 The estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions.

1.5.3.6 The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

1.5.4 Any person subject to ~~this section~~ 1.0 of this regulation shall maintain all information necessary to demonstrate compliance with the requirements of ~~this section~~ 1.0 of this regulation for a minimum period of five years. Such information shall be immediately made available to the Department upon verbal and written request.

2.0 [Reserved]