

Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 22. Control of Emissions of Nitrogen Oxides (NO_x)

§2201. Affected Facilities in the Baton Rouge Nonattainment Area and the Region of Influence

A. – C.20. ...

D. Emission Factors

1. Except as provided in LAC 33:III.2202, the following tables lists NO_x emission factors that shall apply to affected point sources located at affected facilities in the Baton Rouge Nonattainment Area or the Region of Influence.

<u>Table D-1A. Emission Factors for Sources in the Baton Rouge Nonattainment Area</u>		
<u>Category</u>	<u>Maximum Rated Capacity</u>	<u>NO_x Emission Factor^a</u>
<u>Electric Power Generating System Boilers:</u>		
<u>Coal-fired</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.50 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.21 pound/MMBtu</u>
<u>Number 6 Fuel Oil-fired</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.30 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.18 pound/MMBtu</u>
<u>All Others (gaseous or liquid)</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.20 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.10 pound/MMBtu</u>
<u>Industrial Boilers</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.20 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.10 pound/MMBtu</u>
<u>Process Heater/Furnaces:</u>		
<u>Ammonia Reformers</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.30 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.23 pound/MMBtu</u>
<u>All Others</u>	<u>>= 40 to <80 MMBtu/Hour</u>	<u>0.18 pound/MMBtu</u>
	<u>>= 80 MMBtu/Hour</u>	<u>0.08 pound/MMBtu</u>

<u>Table D-1A. Emission Factors for Sources in the Baton Rouge Nonattainment Area</u>		
<u>Category</u>	<u>Maximum Rated Capacity</u>	<u>NO_x Emission Factor^a</u>
<u>Stationary Gas Turbines:</u>		
<u>Peaking Service, Fuel Oil-fired</u>	<u>>= 5 to <10 MW</u>	<u>0.37 pound/MMBtu</u>
	<u>>= 10 MW</u>	<u>0.30 pound/MMBtu</u>
<u>Peaking Service, Gas-fired</u>	<u>>= 5 to <10 MW</u>	<u>0.27 pound/MMBtu</u>
	<u>>= 10 MW</u>	<u>0.20 pound/MMBtu</u>
<u>All Others</u>	<u>>= 5 to <10 MW</u>	<u>0.24 pound/MMBtu^b</u>
	<u>>= 10 MW</u>	<u>0.16 pound/MMBtu^c</u>
<u>Stationary Internal Combustion Engines:</u>		
<u>Lean-burn</u>	<u>>= 150 to <320 Hp</u>	<u>10 g/Hp-hour</u>
	<u>>= 320 Hp</u>	<u>4 g/Hp-hour</u>
<u>Rich-burn</u>	<u>>= 150 to <300 Hp</u>	<u>2 g/Hp-hour</u>
	<u>>= 300 Hp</u>	<u>2 g/Hp-hour</u>

^a based on the higher heating value of the fuel.

^b equivalent to 65 ppmv (15 percent O₂, dry basis) with an F factor of 8710 dscf/MMBtu.

^c equivalent to 43 ppmv (15 percent O₂, dry basis) with an F factor of 8710 dscf/MMBtu.

<u>Table D-1B. Emission Factors for Sources in the Region of Influence</u>		
<u>Category</u>	<u>Maximum Rated Capacity</u>	<u>NO_x Emission Factor^a</u>
<u>Electric Power Generating System Boilers:</u>		
<u>Coal-fired</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.21 pound/MMBtu</u>
<u>Number 6 Fuel Oil-fired</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.18 pound/MMBtu</u>
<u>All Others (gaseous or liquid)</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.10 pound/MMBtu</u>
<u>Industrial Boilers</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.10 pound/MMBtu</u>
<u>Process Heater/Furnaces:</u>		
<u>Ammonia Reformers</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.23 pound/MMBtu</u>
<u>All Others</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.08 pound/MMBtu</u>
<u>Stationary Gas Turbines:</u>		

Table D-1B. Emission Factors for Sources in the Region of Influence		
Category	Maximum Rated Capacity	NO _x Emission Factor ^a
Peaking Service, Fuel Oil-fired	>= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>= 10 MW	0.20 pound/MMBtu
All Others	>= 10 MW	0.16 pound/MMBtu ^b
Stationary Internal Combustion Engines:		
Lean-burn (Region of Influence)	>= 1500 Hp	4 g/Hp-hour
Lean-burn (Baton Rouge Nonattainment Area)	>= 320 Hp	4g/Hp-hour
Rich-burn	>= 300 Hp	2 g/Hp-hour

^a all factors are based on the higher heating value of the fuel.

^b equivalent to 423 ppmv (15 percent O₂, dry basis) with an F factor of 8710 dscf/MMBtu.

D.2 - I.5. ...

J. Effective Dates

1. Except as provided in LAC 33:III.2202, ~~T~~the owner or operator of an affected facility shall modify and/or install and bring into normal operation NO_x control equipment and/or NO_x monitoring systems in accordance with this Chapter as expeditiously as possible, but by no later than May 1, 2005.

2. Except as provided in LAC 33:III.2202, ~~T~~the owner or operator shall complete all initial compliance testing, specified by Subsection G of this Section, for equipment modified with NO_x reduction controls or a NO_x monitoring system to meet the provisions of this Chapter within 60 days of achieving normal production rate or after the end of the shake down period, but in no event later than 180 days after initial start-up. Required testing to demonstrate the performance of existing, unmodified equipment shall be completed in a timely manner, but by no later than November 1, 2005.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:290 (February 2002), repromulgated LR 28:451 (March 2002), amended LR 28:1578 (July 2002), LR 30:748 (April 2004), LR 30:** (June 2004).

§2202. Contingency Plan

A. This Section shall become effective only in the event that the United States Environmental Protection Agency (EPA) determines and notifies the department in accordance with Section 181(b)(2) of the Clean Air Act as amended [42 USC 7511(b)(2)] that the Baton Rouge Nonattainment Area has failed to attain the 1-hour ozone National Ambient Air Quality

Standard (NAAQS) by its appropriate attainment deadline (November 15, 2005, for areas classified as "severe") or, following application for extension by the state, any extension of the deadline approved by the EPA in accordance with Section 181(a)(5) of the Clean Air Act as amended [42 USC 7511(a)(5)].

B. Emission Factors. The emission factors for the sources listed below in Table B-1 shall supersede the factors for the like sources in Table D-1A of LAC 33:III.2201.D.1. All requirements of LAC 33:III.2201 shall remain applicable to such sources, except as superseded by this Section.

<u>Table B-1. Contingency Plan Emission Factors</u>		
<u>Category</u>	<u>Maximum Rated Capacity</u>	<u>NO_x Emission Factor^a</u>
<u>Industrial Boilers</u>	<u>>= 80 MMBtu/Hour</u>	<u>0.08 pound/MMBtu</u>
<u>Stationary Gas Turbines (except peaking)</u>	<u>>= 10 MW</u>	<u>0.092 pound/MMBtu</u>

^a based on the higher heating value of the fuel.

C. Effective Dates

1. An owner or operator of a source subject to an emission factor provided in Table B-1 of Subsection B of this Section shall comply with such emission factor as expeditiously as possible, but not later than two years after determination and notification by the EPA in accordance with Subsection A of this Section.

2. Required testing to demonstrate the performance of existing, unmodified equipment shall be completed in a timely manner, but by no later than 30 months after determination and notification by the EPA in accordance with Subsection A of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 30:** (June 2004).