

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 100. AIR POLLUTION CONTROL**

SUBCHAPTER 33. CONTROL OF EMISSION OF NITROGEN OXIDES

252:100-33-1. Purpose

The purpose of this ~~Subchapter~~ subchapter is to control the emission of nitrogen oxides (NO_x) from stationary sources to prevent the Oklahoma air quality standards from being exceeded and insure that the present level of air quality in Oklahoma is not degraded.

252:100-33-1.1. Definitions

The following terms, when used in this ~~Subchapter~~ subchapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Direct-fired" means that the hot gases produced by the flame or heat source come into direct contact with the material being processed or heated.

"Indirect-fired" means that the hot gases produced by the flame or heat source do not come into direct contact with the material, excluding air, being processed or heated.

"New fuel-burning equipment" means any fuel-burning equipment that was not in being on February 14, 1972, or any existing fuel-burning equipment that was altered, replaced, or rebuilt after February 14, 1972, resulting in ~~an increase~~ increased in nitrogen oxide emissions of nitrogen oxides with the following exceptions.

(A) New fuel-burning equipment for gas turbines means any gas turbine that was not in being on July 1, 1977, or any existing gas turbine that was altered, replaced, or rebuilt after July 1, 1977, resulting in ~~an increase~~ increased in nitrogen oxide emissions of nitrogen oxides; and

(B) New fuel-burning equipment for direct-fired processes means any direct-fired fuel-burning equipment or processes that were not in being on July 1, 1977, or any existing direct-fired fuel-burning equipment or processes that were altered, replaced, or rebuilt after July 1, 1977, resulting in ~~an increase~~ increased in nitrogen oxide emissions of nitrogen oxides.

"Technological limitation" means operating constraints deliberately and necessarily designed into air pollution control equipment or process equipment to prevent damage to the equipment and/or to prevent hazards to operating or maintenance personnel.

"Three-hour average" means the arithmetic average of sampling results or continuous emission monitoring data from three contiguous one-hour periods.

252:100-33-1.2. Applicability

(a) This ~~Subchapter~~ subchapter applies to new fuel-burning equipment that meets both of the following criteria.

(1) The fuel-burning equipment has a rated heat input of 50 million ~~(MM)~~ Btu/hr (MMBtu/hr) or greater.

(2) The equipment burns solid fossil, gas, or liquid fuel, or a combination thereof.

(b) ~~Glass-melting furnaces~~ Direct-fired fuel-burning equipment that are is subject to BACT requirements contained in a currently applicable Air Quality Division permit ~~are is~~ exempt from the requirements of ~~this Subchapter~~ OAC 252:100-33-2. The NO_x emissions from this equipment shall

not cause or contribute to an exceedance of any NO_x NAAQS or NO_x PSD increment.

252:100-33-2. Emission limits

(a) Fuel-burning equipment subject to this subchapter shall meet the following emission limitations except as provided in OAC 252:100-33-1.2(b) and 2(b).

~~(a)(1)~~ **Gas-fired fuel-burning equipment.** ~~Nitrogen-oxide emissions~~ Emissions of nitrogen oxides (calculated as nitrogen dioxide) from any new gas-fired fuel-burning equipment shall not exceed 0.20 lb/MMBtu (86 nanograms per Joule (ng/J)) heat input, three-hour average.

~~(b)(2)~~ **Liquid-fired fuel-burning equipment.** ~~Nitrogen-oxide emissions~~ Emissions of nitrogen oxides (calculated as nitrogen dioxide) from any new liquid-fired fuel-burning equipment shall not exceed 0.30 lb/MMBtu (129 ng/J) heat input, three-hour average.

~~(c)(3)~~ **Solid fossil fuel-burning equipment.** ~~Nitrogen-oxide emissions~~ Emissions of nitrogen oxides (calculated as nitrogen dioxide) from any new solid fossil fuel-burning equipment shall not exceed 0.70 lb/MMBtu (300 ng/J) heat input, three-hour average.

(4) **Combination of fuels burned.** When different types of fuels are burned simultaneously in any combination, the NO_x standard (calculated as nitrogen dioxide in lb/MMBtu heat input, three-hour average) for the fuel-burning equipment shall be determined by proration unless a secondary fuel is used in de minimis quantities (less than 5% of total Btu input annually). Compliance shall be determined using the following formula where X is the percent of total heat input derived from gas fuel, Y is the percent of total heat input derived from liquid fuel, and Z is the percent of total heat input derived from solid fossil fuel: $NO_2 \text{ limit} = [X(0.2) + Y(0.3) + Z(0.7)] / (X + Y + Z)$.

(b) If fuel-burning equipment, due to technological limitations, cannot meet the requirements of OAC 252:100-33-2(a) during startup and/or shutdown, the equipment shall comply with BACT for startup or shutdown as contained in a currently applicable Air Quality Division permit. The NO_x emissions during startup or shutdown of this equipment shall not cause or contribute to an exceedance of any NO_x NAAQS or NO_x PSD increment.

252:100-33-3. Performance testing [REVOKED]