

FACT SHEET

R307-316 NO_x Emission Controls for Natural Gas-Fired Boilers Greater Than 5.0 MMBtu

Overview

The Utah Division of Air Quality Rule R307-316, establishes maximum emission thresholds for the emissions of oxides of nitrogen (NO_x) for new or modified natural gas-fired boilers. It applies to each boiler that begins construction or modification after the compliance date of May 1, 2024, and is fueled exclusively by natural gas; has a total rated heat input greater than 5.0 Million British Thermal Units per hour (MMBtu/hr) is an industrial boiler, institutional boiler, or commercial boiler and is located in Salt Lake, Utah, Davis, Weber, or Tooele County.

Exemptions

A temporary boiler; residential boilers; CO boilers; waste heat boilers; and process heaters as defined by this rule.

Requirements

- A person that begins construction or modification of a boiler; replaces a burner in a boiler having only a single burner; or replaces 50% or more of the burners in a multi-burner boiler shall install a burner that meets a NO_x emission rate of nine parts per million by volume or less at 3% volume stack gas oxygen on a dry basis.
- An owner or operator of a boiler shall operate and maintain the boiler and boiler subsystems including burners according to the manufacturer's instructions; determine continued compliance and meet the applicable recordkeeping requirements for any control device.
- Any person may apply to the director for approval of an alternate method of control. The application shall include a demonstration that the proposed alternate produces an equal air quality benefit as required or that meets Best Available Control Technology thresholds.

Record Keeping

The owner or operator of any boiler shall retain documentation of the unit's emission rate specifications; a copy of the manufacturer's recommendations; records showing proper operation and maintenance and shall be retained for five years and made available to the director upon request.

Compliance Determination and Schedule

The NO_x emission requirement shall be determined according to the following procedures:

- U.S.EPA Reference Method 7E, Determination of Nitrogen Oxides Emissions from Stationary Sources; a continuous in-stack nitrogen oxide monitor or equivalent verification system in compliance with 40 CFR Part 60 Appendix B Specification 2; other EPA-approved testing methods acceptable to the director; or combustion analysis as part of a regular maintenance schedule.

Compliance Determination shall be conducted according to the following frequency:

- Once every three years for units with a rated heat input capacity greater than or equal to 10 MMBtu/hr, except for boilers subject to Subsection R307-316-6(1)(b); and once every five years for units with a rated heat input capacity less than 10 MMBtu/hr down to and including 5 MMBtu/hr.

Provided an emissions test is conducted within the same calendar year as the test required above an owner or operator may use the following emissions tests to comply:

- Periodic monitoring or testing of a unit as required in a Title V permit; or relative accuracy testing for continuous emissions monitoring verification pursuant to 40 CFR Part 60 Appendix B Specification 2. The compliance schedule for this rule shall begin on May 1, 2024.

Utah Division of Air Quality

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Contact
(801) 536-4000

General Air Quality information, regulations, and contact information:
<https://deq.utah.gov/division-air-quality>

This fact sheet provides general information, see:
<https://adminrules.utah.gov/public/home> for the entire rule.

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