

ENVIRONMENTAL Fact Sheet



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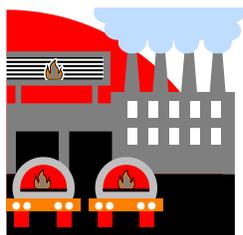
Overview of Federal Regulations Controlling Air Emissions from Industrial, Commercial and Institutional Boilers

What is the federal boiler rule?

On March 21, 2011, EPA issued final emission standards to reduce the emissions of hazardous air pollutants (HAPs) from existing and new industrial (e.g., manufacturing, printing, greenhouses), commercial (e.g., laundries, apartments, hotels), and institutional (e.g., schools, churches, medical centers, municipal buildings) boilers located at area source facilities. The rule is entitled *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers* [40 CFR Part 63, National Emissions Standard for Hazardous Air Pollutants (NESHAP), Subpart JJJJJ] otherwise known as the “Boiler Area Source Rule.” The Boiler Area Source Rule has undergone further changes, which took place on February 1, 2013, and September 14, 2016.



What are hazardous air pollutants (HAPs)?



Hazardous air pollutants are pollutants that have the potential to cause severe human health effects or ecosystem damage. A list of the HAPs specifically regulated under Section 112 of the Clean Air Act Amendments of 1990 (CAAA) can be found at: www.epa.gov/ttnatw01/orig189.html. Examples of HAPs, which are addressed by the Boiler Area Source Rule, include mercury, particulate matter (as a surrogate for non-mercury metals), and carbon monoxide (as a surrogate for organic air toxics). The public may be exposed to these substances through direct inhalation, absorbed through the skin, or ingested by consuming food that has been contaminated from toxins deposited on soil or into waterways.

What is the difference between a major source and an area source of HAPs?

A *major source* is a facility that emits, or has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs. An *area source* is any stationary source that is not a major source of HAPs. Most air emission sources in New Hampshire would be considered area sources and therefore would be subject to the Boiler Area Source Rule if they operate an affected boiler.

Which boilers are not affected?

- Gas-fired boiler
- Hot water heaters
- Temporary boilers
- Residential boilers
- Waste heat boilers or heat recovery steam generators
- Electric boilers
- Electric utility steam generating units
- Boilers used as control devices for other NESHAP standards
- Boilers subject to other NESHAP or CAAA Section 129 standards
- Hazardous waste boilers (unless the unit does not combust hazardous waste)
- Boilers used for research and development



What does the Boiler Area Source Rule require?

The rule sets emission limits, work practice standards, emission reduction measures, management practices and energy assessment requirements for seven subcategories:

- coal
- biomass
- oil
- seasonal boilers
- limited-use boilers
- boilers with heat input capacity ≤ 5 MMBtu/hr that burn oil
- boilers that use a continuous oxygen trim system



What are the compliance dates?

Existing Sources¹: Tune-up, Emission Limits and Energy Assessment was by March 21, 2014

New Sources²: Was due by May 20, 2011 or upon start-up

Newest Amendments to the rule

On September 14, 2016, three major changes to the rule took place:

- An alternative particulate matter (PM) standard for new oil-fired boilers that combust only ultra-low-sulfur liquid fuel. Reducing the distillate oil that is combusted to have less than or equal to 15 ppm sulfur. The rule before addressed PM standard for oil of 50ppm sulfur or less.
- PM performance testing must take place every 5 years for boilers with initial compliance tests showing that their PM emissions are equal to or less than half of the PM emission limit. This

¹ An existing boiler is one that commenced construction or reconstruction on or before June 4, 2010. An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, that meets the applicability requirements of this subpart after June 4, 2012 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source as long as the boiler was designed to accommodate the alternate fuel prior to June 4, 2012.

² A new boiler is one that commenced construction or reconstruction after June 4, 2010.

replaced the rule that no further test were needed if initial compliance tests showed that their PM emissions were equal to or less than half of the PM emission limit.

- Fuel analysis sampling for mercury (Hg) must be conducted every 12 months for coal-fired boilers; with initial compliance that demonstrated the facility had half or less than half their Hg emission limit. This replaced the rule, that no further testing was needed.

For Information and Assistance

A guidance document which has been developed by NHDES specifically for New Hampshire sources and is entitled “Summary of Federal and State Regulations Controlling Air Emissions from Industrial, Commercial, and Institutional Boilers” can be found along with other information on this regulation at www.des.nh.gov/organization/divisions/air/boiler-rule/index.htm.

In addition, copies of the federal boiler regulations and other materials can be found at EPA’s website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-area-sources-industrial-commercial-and-institutional>. EPA posted a list of common questions and answers at: https://www.epa.gov/sites/production/files/2016-10/documents/areaboiler_qa_oct2016.pdf.

For additional guidance, please contact the NHDES Air Resources Division Permitting Program at (603) 271-1370.