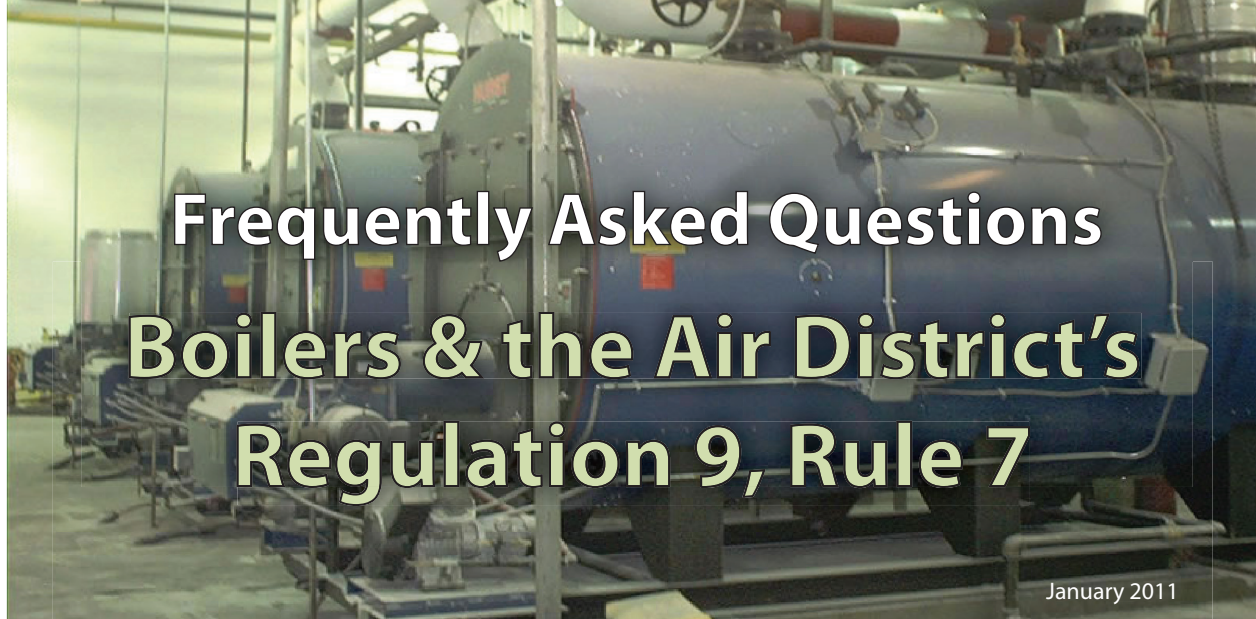




BAY AREA
AIR QUALITY
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DISTRICT



Frequently Asked Questions Boilers & the Air District's Regulation 9, Rule 7

January 2011

What is Regulation 9-7?

This Air District regulation limits the air pollution emissions of nitrogen oxides, or NO_x, and carbon monoxide, or CO, from industrial, institutional, and commercial boilers, steam generators and process heaters, all of which are collectively known as "boilers."

These types of boilers are most commonly found in schools, hospitals, courthouses, large apartment/condominium complexes and some commercial or industrial operations. There are also other Air District rules which address boilers found at refineries and public utilities.

This rule was amended on July 30, 2008, requiring, among other things, that owners and operators of smaller boilers **register** them with the Air District by **January 1, 2011**. The amendments also include requirements for boiler insulation, temperature limits, and tune-ups. Manufacturers of the smaller boilers were also required to have their new boilers approved and certified by the Air District that they meet the new emissions standards. While it is likely that there are new boilers available that meet the new emission limits, to date, none have been certified by the Air District. **Therefore, the Air District plans to propose an amendment to the rule to address the lack of certified devices and may provide additional time in which to meet the new air pollution emission limits.**

Does this rule apply to my boilers?

It may, depending on the heat rating of your boiler and other factors.

- Larger boilers with a heat rating greater than 10 MM BTU per hour (BTU/hr) are required to have an Air District **Permit to Operate** AND the rule applies. For requirements on District permits, please see **Regulation 2, Rule 1** at www.baaqmd.gov/rules.
- If the heat rating of your boiler is greater than 2MM BTU per hour (BTU/hr) and less than 10 MM BTU/hr, in most cases the rule applies. Most boilers of this size must register with the Air District. Registration and other requirements are outlined in the FAQs below.

How do I check the rated heat input of my boiler?

The rated heat input of your boiler can be found several ways.

- Locate and read the label or tag that is affixed to the boiler;
- Contact the Manufacturer or the local Manufacturer's representative by phone, provide the model number, and request the heat rating;
- Go to the Manufacturer's website;
- Contact your Maintenance or Repair Service Representative.

How do I know if my boiler is exempt from this rule?

The following boilers are exempt:

- Boilers with a rated heat input less than 1,000,000 BTU/hr fired with any fuel;
- Boilers with a rated heat input less than 2,000,000 BTU/hr if it is fired with Natural Gas or liquefied petroleum gas, or any combination of these fuels.
- Boilers, steam generators and process heaters that are used in petroleum refineries (these boilers may be subject to another Air District rule, Regulation 9-10);
- Boilers used by public electric utilities or qualifying small power production facilities (these boilers may be subject to another Air District rule, Regulation 9-11);
- Boilers that recover waste heat from the exhaust of combustion turbines or reciprocating internal combustion engines (often found at landfills);
- Kilns, ovens, and furnaces used for drying, baking, heat treating, cooking, calcining, or vitrifying.
- Boilers that use less than 10 percent of their annual maximum heat capacity (limited exemption only, other requirements apply).

If the heat rating of my boiler lies between 2MM BTU/hr and 10MM BTU/hr, and it is not exempt from the rule, what do I need to do to comply?

All boilers in this heat rating size must **register** with the Air District starting **January 1, 2011**. Each facility must pay a one-time fee for each boiler. The first boiler is registered for a fee of **\$446**, and the registration fee for each additional boiler is **\$53**. You can register online at: www.baaqmd.gov/registration.

After you register, other requirements related to the air pollution emissions limits are listed below for information only. *There are also other requirements - please see Regulation 9 - 7 at: www.baaqmd.gov/rules for a complete list.*

For boilers with a heat rating greater than 2MM BTU/hr and up to 5MM BTU/hr:

[NOTE: The Air District plans to propose an amendment to the rule to address the lack of certified devices and may provide additional time in which to meet the new air pollution emission limits.]

- By January 1, 2011, 33 percent of your boilers were required to meet specified emissions limits for Nitrogen Oxides (30 ppmv) and Carbon Monoxide (400 ppmv). For example, if you have 9 boilers, 3 would be required to meet these standards at this time.



Frequently Asked Questions

Boilers and the Air District's Regulation 9, Rule 7

- Most older boilers will not meet the new limits, so you can meet this requirement by:
 - Changing out your boiler for a new boiler that is approved by the Air District and certified that it meets the new emissions standards, or
 - For some boilers, it may be possible to change-out, or retrofit, the burner with a burner that meets the emissions limits, or
 - In some cases, it may be possible to take a boiler out-of-service completely or change it out for a water heater instead of a boiler, or
 - If possible, permanently reduce the rated heat input of the boiler to less than 2MM BTU/hr and meet the rule fuel requirements to be exempt.

Your boiler maintenance or repair service representative should also be able to measure the emissions levels to determine if your boiler is in compliance.

- By January 1, 2012, 66 percent of your boilers of this size were required to meet the emission limits for NOx and CO, and,
- By January 1, 2013, the remainder, or 100 percent, of your boilers were required to meet the emissions limits for NOx and CO.

For boilers with a heat rating between 5 MM BTU/hr and 10 MM BTU/hr:

[NOTE: The Air District plans to propose an amendment to the rule to address the lack of certified devices and may provide additional time in which to meet the new air pollution emission limits.]

- By January 1, 2012, the emissions limits for NOx – 15 ppmv and the CO – 400 ppmv (either with a certified device or retrofit burner, if available) were to be in effect. The same type of schedule was in effect, with 33% of your boilers due on 1/1/2012, 66% on 1/1/2013, and the remainder 100%, on 1/1/2014.

For all size boilers:

- If a boiler was *manufactured* less than 10 years ago, you will have more time to comply.
- The rule also includes requirements for boiler insulation, monitoring and recordkeeping, tune-up and temperature limits. Owners and Operators should familiarize themselves with the requirements of Regulation 9-7 and can access the rule by going to www.baaqmd.gov/rules.
- There are also requirements that manufacturers submit applications to the Air District with independent testing laboratory confirmation that their boiler meets the emissions limits. If approved by the Air District, only these certified boilers can be sold for use with the district boundaries. The planned rule amendments will propose additional options for manufacturers to obtain the approved boiler certification.



For more information:

- For questions about this Fact Sheet, call the Compliance Counselor Hotline at: (415) 749-4999 or Michael Wall at mwall@baaqmd.gov or (415) 749-4903.
- For questions on the rule amendment process, contact Julian Elliot at jelliot@baaqmd.gov or (415) 749-4705.
- For a copy of the rule or any Air District rule see: www.baaqmd.gov/rules.
- For questions about Air District Permits, call the Engineering Division at (415) 749-4990.