

Compliance and Enforcement Division October 3, 2008 Compliance Advisory

This Advisory is provided to inform you about activities of the Air District which may affect your operation. It will help you achieve and maintain compliance with applicable air quality rules and regulations.

ATTENTION: MANUFACTURERS, VENDORS AND INSTALLERS OF WATER HEATERS AND BOILERS

SUBJECT: ENFORCEMENT POLICY FOR THE EMISSION LIMITS FOR NATURAL GAS-FIRED WATER HEATERS AND BOILERS (REGULATION 9, RULE 6)

On November 7, 2007 the Bay Area Air Quality Management District amended Regulation 9, Rule 6 (the "2007 Amendments"). The amendments expand the scope of the rule to regulate NO_x emissions from large water heaters and small boilers from 75,000 Btu/hr up to 2 million Btu/hr heat input; regulate NO_x emissions from mobile home water heaters and commercial pool and spa heaters that were exempt from the standards in the rule; establish more stringent NO_x limits for all affected equipment; and modify the requirements for certifying water heaters and boilers subject to the rule.

This rule prohibits the sale, installation, or offer for sale of any of the following types of boilers unless these natural gas-fired boilers meet these highlighted emissions limitations (REG 9-6-303):

Size or Type	If Manufactured After	NO _x Limit (ng/joule)*
Small Boiler	January 1, 2008	40
(75,001-400,000 BTU/hr)	January 1, 2013	14
Large Boiler	January 1, 2008	20 ¹
(400,001-2,000,000 BTU/hr)	January 1, 2013	14 ²

^{*}Expressed in nanograms of nitrogen oxides (calculated as NO2) per joule of heat output.

Subsequent to the adoption of the 2007 Amendments, Air District Staff learned that there are no natural draft steam boilers available in the 75,001 – 400,000 Btu/hr heat input range capable of meeting the NO_x requirements in the amendments. The only steam boilers rated less than 400,000 Btu/hr that are able to meet the emission standards in the 2007 Amendments are forced draft models. Due to a variety of unique circumstances found here in the San Francisco Bay Area, low NO_x forced draft steam boilers are not an appropriate replacement for existing small steam boilers used to supply steam to radiator heated apartment buildings in San Francisco and the surrounding areas. Modifications for converting building flue systems to accommodate forced draft boilers are cost prohibitive.

In adopting the 2007 Amendments, it was not the intent of the Air District to force the application of low NO_x technology to natural draft steam boilers in the 75,001 – 400,000 Btu/hr heat input range. The Air District intends to amend Regulation 9, Rule 6 to exempt such steam boilers from the new NO_x requirements in the 2007 Amendments. Accordingly, it is the enforcement policy of the Air District to allow any natural gas-fired, natural draft steam boiler that has a rated heat input capacity of less than 400,000 Btu/hr and that is used for steam radiator heating to be replaced with a similar boiler to be used for the same purpose.

NOTE: The District reserves the right to change or modify this policy at any time, without prior notification.

More information can be obtained from the following sources:

- For questions about this Advisory, contact Michael Krone, Air Quality Specialist, at mkrone@baaqmd.gov or (415) 749-4779.
- For questions about proposed revisions to Regulation 9, Rule 6, contact Guy Gimlen Air Quality Engineer, at ggimlen@baaqmd.gov or (415) 749-4734.
- For a copy of the above-listed rule, see www.baaqmd.gov/dst/regulations/index.htm
- For compliance assistance, call (415) 749-4999, the Compliance Counselor Hotline.

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¹An alternative standard for this limit is 30 ppm NO_x at 3% O2, dry.

²An alternative standard for this limit is 20 ppm NO_x at 3% O2, dry.