

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: NEW 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 amendments expand the scope of the rule to regulate NO_x emissions from 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 water heaters unless the water heaters meet these highlighted emissions limitations:

Residential Water Heaters: NO_x emissions for residential natural gas-fired water heaters (less than or equal to 75,000 BTU/hr) must meet the following schedule:

Size	If Manufactured After	Limit (ng/joule)*
Less than or equal to 50 gallon storage tank	January 1, 2009 ¹	10
Greater than 50 gallon storage tank	January 1, 2010 ¹	10
Any tank with power assist	January 1, 2011 ²	10

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

¹Does not apply to direct-vent, power-vent, power direct-vent storage tank water heaters or water heaters used for mobile homes. ²Does not apply to water heaters used for mobile homes.

Additional Types of Water Heaters and Boilers: NO_x emissions for the following types of natural gas-fired heaters and boilers must meet the following schedule:

Size or Type	If Manufactured After	Limit (ng/joule)*
Small Boiler or Water Heater	January 1, 2008	40
(75,001-400,000 BTU/hr)	January 1, 2013	14
Large Boiler or Water Heater	January 1, 2008	20 ¹
(400,001-2,000,000 BTU/hr)	January 1, 2013	14 ²
Mobile Home Water Heater	January 1, 2008	40
Pool/Spa Heater	January 1, 2008	40 ³
(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.

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

³An alternative standard for this limit is 55 ppm NO_x at 3% O2, dry.

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

NOTE: Regulation 9, Rule 6 does <u>not</u> require retrofit or replacement of any water heater during its service lifetime *if* the water heater meets the applicable emission limitation in the Rule, *or* was manufactured, sold, and installed prior to the effective date provided above for the specific water heater type.

> Certification and Identification Requirements for Manufacturers:

- If a manufacturer intends to sell regulated equipment within this Air District, the manufacturer must apply to the Air District every three (3) years for written approval and certification no less than 90 days before the new emission standards take effect. If the equipment is already certified by the South Coast Air Quality Management District (SCAQMD) that it complies with the above-listed emission standards, a manufacturer may submit to the Air District an approved SCAQMD certification.
- If a manufacturer does not have an approved SCAQMD certification, Section 9-6-402.1 requires that the manufacturer must obtain confirmation from an independent testing laboratory that the regulated equipment complies with Regulation 9, Rule 6, and submit those results with the certification application.
- The manufacturer must display the model number and Air District or SCAQMD certification status on the shipping carton and rating plate for each unit.

Send certification applications to the Air District Engineering Division at:

BAAQMD Engineering Division Attn: Regulation 9, Rule 6 Certifications 939 Ellis Street, San Francisco, CA 94109

- Exemptions: Regulation 9, Rule 6 exempts from the NO_x emission standards any natural gas-fired boilers and water heater:
 - With a rated heat input capacity greater than 2,000,000 BTU per hour;
 - Used in a recreational vehicle; or
 - Used exclusively to heat swimming pools, hot tubs, or spas and the rated heat input is <u>less</u> than 400,000 BTU per hour.

*Note that the rule no longer exempts mobile home water heaters.

More information can be obtained from the following sources:

- For questions about this Advisory, contact Michael Krone, Air Quality Specialist, at <u>mkrone@baaqmd.gov</u> or (415) 749-4779.
- 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.

Kelly J. Wee Director of Compliance and Enforcement Bay Area Air Quality Management District