



WORKSHOP NOTICE

June 5, 2007

TO: INTERESTED PARTIES
FROM: EXECUTIVE OFFICER / APCO
SUBJECT: **PUBLIC WORKSHOP - DRAFT AMENDMENTS TO REGULATION 9, RULE 6: NITROGEN OXIDES FROM NATURAL GAS-FIRED WATER HEATERS**

The staff of the Bay Area Air Quality Management District ("Air District") will conduct a public workshop to review and discuss possible amendments to Regulation 9, Rule 6: *Nitrogen Oxides from Natural Gas-Fired Water Heaters* from **9:00 – 11:00 AM on Friday, June 29, 2007** in the 7th Floor Board of Directors meeting room at the District office located at 939 Ellis Street, San Francisco.

BACKGROUND:

The Air District is considering amendments to Regulation 9, Rule 6 to further reduce emissions of nitrogen oxides in the Bay Area.

The Bay Area is not yet in attainment of state ozone standards, so the region must implement all feasible measures to reduce the pollutants that form ozone, nitrogen oxides (NO_x) and reactive organic gases. Control Measure-13 of the Air District's 2005 Ozone Strategy included consideration of amendments to Regulation 9, Rule 6: *Nitrogen Oxides from Natural Gas-Fired Water Heaters*. Control Measure SS-13 suggested review of the Regulation 9-6 NO_x emissions requirements for residential water heaters, and expansion of NO_x emission limits to include larger commercial water heaters and small boilers.

In addition, NO_x emissions react in the atmosphere to form secondary particulate matter (PM). The Bay Area is not in attainment of either California's PM₁₀ (particulate matter of 10 microns or less) or PM_{2.5} (particulate matter of 2.5 microns or less) standards.

Regulation 9, Rule 6 is a "point of sale" type regulation, currently limiting sale and installation of new water heaters to only those certified to meet 40 nanograms of NO_x per joule (ng/joule) of heat output. The regulation applies to typical tank residential water heaters of 75,000 Btu/hr heat input or less.

WORKSHOP DISCUSSION:

This workshop will review the feasibility of amending Regulation 9, Rule 6 to incorporate more stringent NO_x limits, and expand NO_x emissions limits to large water heaters and small boilers up to 2,000,000 Btu/hr heat input.

The potential amendments would:

- Reduce NOx emissions standards for new residential water heaters from 40 ng/joule to 10 ng/joule according to the following schedule:
 - < 50 gallon storage tank effective January 1, 2009
 - > 50 gallon storage tank effective January 1, 2010
 - Power assist storage tank effective January 1, 2011
 - Instantaneous (in line) effective January 1, 2013
- Establish NOx emission limits for new large water heaters from 75,001 to 400,000 Btu/hr heat input at 40 ng/joule effective 1/1/2008. Establish NOx limits at 14 ng/joule for new large water heaters effective 1/1/2013.
- Establish NOx emission limits for new small boilers from 400,001 to 2,000,000 Btu/hr heat input at 20 ng/joule effective 1/1/2008. Establish NOx limits at 14 ng/joule for new small boilers effective 1/1/2013.
- Establish NOx emission limits for new commercial, public and institutional pool and spa water heaters at 40 ng/joule effective 1/1/2008. Establish NOx limits at 14 ng/joule for new pool or spa water heaters effective 1/1/2013. Residential pool and spa water heaters would continue to be exempt.
- Establish NOx emission limits for new mobile home water heaters at 40 ng/joule effective 1/1/2008.

In addition, the Air District's 2005 Ozone Strategy Control Measure SS-12 focuses on equipment subject to Regulation 9, Rule 7: *Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters*. Proposed amendments to Regulation 9, Rule 7 are being considered. The proposed amendments would incorporate more stringent NOx limits and expand applicability of the standards to boilers with heat rating as low as 2,000,000 Btu/hr. A workshop on proposed amendments to Regulation 9, Rule 7 is being held from 1:00 – 3:00 pm on Friday, June 29, 2007 in the 7th Floor Board of Directors meeting room. Interested parties are invited to either or both workshops.

For copies of the draft amendments to Regulation 9, Rule 6 that the District is considering, and a copy of the workshop report, see the District's website at <http://www.baaqmd.gov/pln/ruledev/workshops.htm>. For questions or comments on the potential amendments, please contact Guy A. Gimlen, Air Quality Engineer, at (415) 749-4734 or via e-mail at ggimlen@baaqmd.gov. **Written comments, submitted by U.S. mail or electronic mail, are requested by the end of Friday, July 13, 2007.**

PUBLIC TRANSPORTATION

**MUNI -- #47 AND 49 NORTH AND SOUTH ON VAN NESS AVENUE
#38 EAST AND WEST ON GEARY BOULEVARD/O'FARRELL STREET
BART -- CIVIC CENTER STATION 8TH AND MARKET STREETS**

Attendees are encouraged to ride public transit, rideshare, bicycle, walk or use other non-motorized modes to and from the District.