



FACT SHEET - Rule 2.37

NATURAL GAS-FIRED WATER HEATERS AND SMALL BOILERS REGULATION

New Rule Limits Begin January 1, 2010

Background Information

On April 8, 2009, the Yolo-Solano Air Quality Management District (District) adopted amendments to Rule 2.37, Natural Gas-Fired Water Heaters and Small Boilers. The purpose of the rule is to reduce emissions of nitrogen oxides (NOx) and Particulate Matter (PM) from water heaters and boilers.

Exposure to PM has been linked to asthma attacks, pneumonia, bronchitis, and decreased lung function. Additionally, since NOx is one of the main components of ozone, NOx reductions will help move the District towards meeting ozone attainment goals for the region.

How Are You Affected?

Rule 2.37 is enforced at the point of sale, which means that manufacturers, distributors, retailers, and installers of natural gas-fired water heaters and small boilers are prohibited from selling, distributing, or installing units that are not compliant with the rule. There is no requirement to retrofit or change-out existing units.

What Equipment Units are Subject to Rule 2.37?

New emission limits apply to the following units. See chart below for specific limits for each unit.

- **Small water heater** = Rated heat input capacity < 75,000 Btu/hour
- **Large water heater** = Rated heat input capacity of 75,000 – 400,000 Btu/hr
- **Small boiler** = Rated heat input capacity of > 400,000 - <1,000,000 Btu/hr
- **Mobile home water heater** = All
- **Pool/spa heater** = Rated heat input capacity of > 400,000 - <1,000,000 Btu/hr

CATEGORY	NOx Emission Limit <i>Effective 5/31/1995</i>	NOx Emission Limit <i>Effective 1/1/2010</i>	NOx Emission Limit <i>Effective 1/1/2014</i>
Small Water Heater	40 ng/J	10 ng/J or 15 ppm NOx @3% O ₂ dry	10 ng/J or 15 ppm NOx @3% O ₂ dry
Large Water Heater	No present standard	40 ng/J or 55 ppm NOx @3% O ₂ dry	14 ng/J or 20 ppm NOx @3% O ₂ dry
Small Boiler	No present standard	20 ng/J or 30 ppm NOx @3% O ₂ dry	14 ng/J or 20 ppm NOx @3% O ₂ dry
Mobile Home Water Heater	No present standard	40 ng/J or 55 ppm NOx @3% O ₂ dry	40 ng/J or 55 ppm NOx @3% O ₂ dry
Pool/Spa Heater	No present standard	40 ng/J or 55 ppm NOx @3% O ₂ dry	14 ng/J or 20 ppm NOx @3% O ₂ dry

ng/J = nanograms per Joule Btu/hr = British thermal units per hour ppm = parts per million