

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

**Rule 74.11 Natural Gas-Fired Water Heaters**

*(Adopted 4/9/85, revised 1/12/10)*

The provisions of this rule shall apply to any person selling, offering for sale, or installing natural gas-fired water heaters, including mobile home water heaters, rated at less than 75,000 Btu per hour in Ventura County.

A. Requirements

1. Until July 1, 2010, a person shall not sell, offer for sale, or install in Ventura County any natural gas-fired residential water heater that emits nitrogen oxides in excess of 40 nanograms of NO<sub>x</sub> (calculated as NO<sub>2</sub>) per joule of heat output (93 lb per billion Btu).
2. After July 1, 2010, except as specified in Subsection A.3, no person shall sell, offer for sale, or install within Ventura County any natural gas-fired water heater unless the water heater is certified pursuant to Section B to a NO<sub>x</sub> emission level of less than or equal to:
  - a). 10 nanograms of NO<sub>x</sub> (calculated as NO<sub>2</sub>) per joule of heat output (23 lb per billion Btu of heat output); or
  - b) 15 ppmv at 3% O<sub>2</sub>, dry (17.5 lb per billion Btu of heat input).
3. After July 1, 2010, no person shall sell, offer for sale, or install within Ventura County any natural gas-fired mobile home water heater unless the water heater is certified pursuant to Section B to a NO<sub>x</sub> emission level of less than or equal to:
  - a) 40 nanograms of NO<sub>x</sub> (calculated as NO<sub>2</sub>) per joule of heat output (93 lb per billion Btu of heat output); or
  - b) 55 ppmv at 3% O<sub>2</sub>, dry (71 lb per billion Btu of heat input).

B. Certification

1. The requirements of Section D notwithstanding, applicable equipment certified by the South Coast Air Quality Management District in accordance with the certification requirements in Section (d) of SCAQMD Rule 1121, adopted September 3, 2004, shall be considered certified for use in Ventura County.

## 2. Compliance Report

Prior to the sale of any model of water heater in Ventura County, the manufacturer shall submit to the Air Pollution Control Officer a Compliance Report documenting its certification pursuant to Section B of this rule. The Compliance Report shall contain the following information:

### (a) Compliance Statement

A statement that the water heater model is in compliance with Section B of this rule. The statement shall be signed by the manufacturer and dated, and shall attest to the accuracy of all statements.

### (b) General Information

- (1) Name and address of manufacturer,
- (2) Brand name of water heater,
- (3) Model number, as it appears on the water heater rating plate, and
- (4) Description of each model water heater being certified.
- (5) A copy of the letter from the South Coast Air Quality Management District certifying the water heater model.

## C. Identification of Complying Water Heaters

The manufacturer shall display the model number, the date of manufacture, and the certification status, as determined in Section B of this rule, of an applicable unit on both the permanent nameplate and the packaging.

## D. Enforcement

1. The APCO may require a NO<sub>x</sub> and CO<sub>2</sub> emission test when necessary to verify compliance. Testing shall be conducted according to the South Coast Air Quality Management District Protocol For Nitrogen Oxides Emissions Compliance Testing For Natural Gas-Fired Water Heaters And Small Boilers, dated March 1995 (amended January 1998).
2. The APCO may periodically inspect distributors, retailers, and installers of water heaters located in the District and conduct such tests as are deemed necessary to insure compliance with the provisions of this rule.

E. Exemptions

The provisions of this rule shall not apply to:

1. Water heaters with a rated heat input of 75,000 Btu per hour or greater.
2. Water heaters used in recreational vehicles.

F. Definitions

For the purposes of this rule the following definitions shall apply:

1. "Btu": British thermal unit or units.
2. "Heat input": The heat of combustion released by fuels burned in a unit based on the higher heating value of fuel, excluding the enthalpy of incoming combustion air.
3. "Heat output": The product obtained by multiplying the recovery efficiency, as defined by Title 20, California Administrative Code, Chapter 2, Subchapter 4, Article 4, Section 1603 and 1607, by the heating value of the input fuel furnished to the water heater.
4. "Mobile Home": A structure built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities. The structure typically includes plumbing, heating, air conditioning, and electric systems and may be transportable in one or more sections. Excluded are self-propelled vehicles and recreational vehicles.
5. "Rated Heat Input Capacity": The gross heat input capacity specified on the nameplate of either the unit or the burner.
6. "Recreational vehicle": A motor home, travel trailer, truck camper, or camping trailer, with or without motive power, designed for human habitation for recreational, emergency, or other occupancy, as defined pursuant to California Health and Safety Code § 18010.
7. "Water heater": A device that heats water at a thermostatically-controlled temperature for delivery on demand. Water is heated by the combustion of either liquid and/or gaseous fuel and withdrawn for use external to the vessel at pressures not exceeding 160 psig. The device includes the apparatus by which heat is generated and all controls and equipment necessary to prevent water temperatures from exceeding 210°F (99°C).