

**Air Pollution Control Board**

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**Air Pollution Control District**

R. J. Sommerville	Director
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## NOTICE OF WORKSHOP

### FOR DISCUSSION OF PROPOSED ADOPTION OF NEW RULE 69.5 - NATURAL GAS-FIRED WATER HEATERS AND NEW RULE 69.6 - NATURAL GAS-FIRED, FAN-TYPE CENTRAL FURNACES

The San Diego County Air Pollution Control District will hold a public meeting to consider comments concerning proposed new Rule 69.5 - Natural Gas-Fired Water Heaters, and proposed new Rule 69.6 - Natural Gas-Fired, Fan-Type Central Furnaces. Comments concerning these proposals may be submitted in writing before, or made at, the workshop which is scheduled as follows:

**DATE:** April 22, 1998 - Wednesday

**TIME:** 9:00 a.m. to 10:30 a.m.

**PLACE:** Conference Room 139  
San Diego Air Pollution Control District  
9150 Chesapeake Drive  
San Diego, CA

Proposed Rule 69.5 would apply to any new natural gas-fired water heater with a rated heat input capacity less than 75,000 Btu per hour, which is distributed, sold, offered for sale, or installed within San Diego County. The rule would limit NO<sub>x</sub> emissions to 40 nanograms per joule of heat output. Existing water heaters and those used in recreational vehicles or to heat swimming pools and hot tubs would be exempt. A grace period is proposed to deplete existing inventories before rule implementation.

Proposed Rule 69.6 would apply to any new natural gas-fired, fan-type central furnace with a rated heat input capacity less than 175,000 Btu per hour, and for combination heating and cooling units with a rated cooling capacity less than 65,000 Btu per hour, which are distributed, sold, offered for sale, or installed within San Diego County. The rule would limit NO<sub>x</sub> emissions to 40 nanograms per joule of heat output. Existing furnaces and those used in mobile homes would be exempt. A grace period is proposed to deplete existing inventories before rule implementation.

The proposed rules would require emissions testing and certification of affected water heater and furnace models. Accordingly, a certification statement submitted by the manufacturer would attest to the emission test results. South Coast Air Quality Management District approved certifications may be submitted to avoid duplicative testing and certification costs.

Several California air districts presently have rules requiring NOx control on new, residential-type natural gas water heaters and furnaces, and the control technology is well established among major manufacturers. Discussions with these manufacturers indicate most units being shipped to California are low-NOx models, consistent with rules of other air districts. Local rules will ensure the San Diego Air Basin continues to benefit from this control technology. Further, these rules are required by the California Air Resources Board to help fulfill the "all-feasible-control-measures" requirement of State law.

If you would like a copy of the proposed new rules, please call Juanita Ogata at (619) 694-8851. If you have any questions concerning this proposal, please call Robert Mross at (619) 694-3336 or Rob Reider at (619) 694-8852.



RICHARD J. SMITH  
Deputy Director

RJSm:RR:RM:ls  
3/10/98

**AIR POLLUTION CONTROL DISTRICT  
COUNTY OF SAN DIEGO**

**PROPOSED NEW RULE 69.5**

Proposed new Rule 69.5 is to read as follows:

**RULE 69.5 NATURAL GAS-FIRED WATER HEATERS**

**(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule shall apply to any person who manufactures, distributes, sells, offers for sale, or installs natural gas-fired water heaters for use in San Diego County.

**(b) EXEMPTIONS**

The provisions of this rule shall not apply to:

- (1) Water heaters with a rated heat input capacity of 75,000 Btu per hour or greater;
- (2) Water heaters used in recreational vehicles; or
- (3) Water heaters used exclusively to heat swimming pools and hot tubs.

**(c) DEFINITIONS**

For the purpose of this rule the following definition shall apply:

- (1) **"Btu"** means British thermal units.
- (2) **"Heat Output"** means the product obtained by multiplying recovery efficiency, as defined by Section 6.1.3 of the Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix E, by the rated heat input capacity of the water heater.
- (3) **"Mobile Home"** means a structure as defined in Section 18008 of the California Health and Safety Code.
- (4) **"Mobile Home Water Heater"** means a water heater manufactured exclusively for mobile home use.
- (5) **"Rated Heat Input Capacity"** means the heat input capacity of a water heater, in Btu per hour, as specified by the manufacturer on the nameplate of the water heater.
- (6) **"Recreational Vehicle"** means a motor vehicle designed and equipped for human habitation as defined in Section 362 of the California Vehicle Code.
- (7) **"Water Heater"** means a closed vessel in which water is heated by combustion of natural gas and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210°F (99°C).

**(d) STANDARDS**

Except as otherwise provided in Section (b), effective January 1, 1999, no person shall manufacture, distribute, sell, offer for sale, or install within San Diego County any:

(1) Natural gas-fired water heater that emits more than 40 nanograms of oxides of nitrogen (calculated as nitrogen dioxide) per joule (93 lbs of oxides of nitrogen per billion Btu) of heat output, or

(2) Natural gas-fired mobile home water heater that emits more than 50 nanograms of oxides of nitrogen (calculated as nitrogen dioxide) per joule (116 lbs of oxides of nitrogen per billion Btu) of heat output.

**(e) CERTIFICATION**

(1) A manufacturer of any new water heater to be offered for sale in San Diego County shall submit to the Air Pollution Control Officer a statement certifying that each model of water heater subject to the requirements of Section (d) of this rule complies with the provisions of this rule.

(i) The statement shall be signed, dated, and attest to the accuracy of all information.

(ii) The statement shall be submitted at least 30 days before the water heater model is offered for sale, sold, or installed within San Diego County.

(iii) The statement shall include:

(A) Brand name,

(B) Model number,

(C) Rated heat input capacity as specified on the nameplate, and

(D) Oxides of nitrogen emission test results of each model being certified.

(2) A manufacturer shall submit to the Air Pollution Control Officer a new certification statement for any water heater model whose design is changed in any manner which may alter oxides of nitrogen emissions.

(3) To comply with Subsections (e)(1) or (e)(2), a manufacturer may submit to the Air Pollution Control Officer a South Coast Air Quality Management District certification statement for the water heater model.

**(f) LABELING**

On the shipping carton and the nameplate of every furnace to be offered for sale in San Diego County, the manufacturer shall display the model number and South Coast Air Quality Management District certification status or San Diego Air Pollution Control District certification status of the water heater complying with Section (e) of this rule.

**(g) RECORDKEEPING**

A manufacturer shall keep oxides of nitrogen emission test records and certification records for as long as the water heater model is offered for sale or sold within San Diego County, or for three calendar years after manufacture, whichever is longer. Such records shall be provided to the District upon request.

**(h) TEST METHODS**

To determine compliance with Section (d) of this rule, measurement of oxides of nitrogen shall be conducted in accordance with:

(1) San Diego Air Pollution Control District Test Method 100 as approved by the federal Environmental Protection Agency in May 1995, or

(2) South Coast Air Quality Management District Test Method 100.1 as approved by the federal Environmental Protection Agency in March 1989.

**(i) EMISSION TEST REQUIREMENTS**

Emission tests shall be performed in accordance with the procedures and methods outlined in the South Coast Air Quality Management District Protocol: Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers as it exists on (date of adoption).

**AIR POLLUTION CONTROL DISTRICT  
COUNTY OF SAN DIEGO**

**PROPOSED NEW RULE 69.6**

Proposed new Rule 69.6 is to read as follows:

**RULE 69.6 NATURAL GAS-FIRED FAN-TYPE CENTRAL FURNACES**

**(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule shall apply to any person who manufactures, distributes, sells, offers for sale, or installs natural gas-fired, fan-type central furnaces, including combination heating and cooling units, for use in San Diego County.

**(b) EXEMPTIONS**

The provisions of this rule shall not apply to:

- (1) Fan-type central furnaces with a rated heat input capacity of 175,000 Btu per hour or greater, or
- (2) Combination heating and cooling units with a rated cooling capacity of 65,000 Btu per hour or greater, or
- (3) Fan-type central furnaces installed in mobile homes.

**(c) DEFINITIONS**

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

- (1) **"Btu"** means British thermal units.
- (2) **"Fan-Type Central Furnace"** means a self-contained space heater providing for circulation of heated air at pressures other than atmospheric through ducts more than 10 inches in length that has a rated heat input capacity of less than 175,000 Btu per hour or, for combination heating and cooling units, that has a rated cooling capacity of less than 65,000 Btu per hour.
- (3) **"Heat Output"** means the product obtained by multiplying the Annual Fuel Utilization Efficiency, as defined by Section 4.6 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N, by the rated heat input capacity of the furnace.
- (4) **"Mobile Home"** means a structure as defined in Section 18008 of the California Health and Safety Code.
- (5) **"Rated Cooling Capacity"** means the cooling capacity, in Btu per hour, as specified by the manufacturer on the nameplate of the cooling unit.
- (6) **"Rated Heat Input Capacity"** means the heat input capacity of a furnace, in Btu per hour, as specified by the manufacturer on the nameplate of the furnace.

**(d) STANDARDS**

Except as otherwise provided in Section (b), effective January 1, 1999, no person shall manufacture, distribute, sell, offer for sale, or install within San Diego County any natural gas-fired, fan-type central furnace that emits more than 40 nanograms of oxides of nitrogen (calculated as nitrogen dioxide) per joule (93 lb of oxides of nitrogen per billion Btu) of heat output.

**(e) CERTIFICATION**

(1) A manufacturer of any new furnace to be offered for sale in San Diego County shall submit to the Air Pollution Control Officer a statement certifying that each model of furnace subject to the requirements of Section (d) of this rule complies with the provisions of this rule.

(i) The statement shall be signed, dated, and attest to the accuracy of all information.

(ii) The statement shall be submitted at least 30 days before the furnace model is offered for sale, sold, or installed within San Diego County.

(iii) The statement shall include:

(A) Brand name,

(B) Model number,

(C) Rated heat input capacity as specified on the nameplate, and

(D) Oxides of nitrogen emission test results of each model being certified.

(2) A manufacturer shall submit to the Air Pollution Control Officer a new certification statement for any furnace model whose design is changed in any manner which may alter oxides of nitrogen emissions.

(3) To comply with Subsections (e)(1) or (e)(2), a manufacturer may submit to the Air Pollution Control Officer a South Coast Air Quality Management District certification statement for the furnace model.

**(f) LABELING**

On the shipping carton and the nameplate of every furnace to be offered for sale in San Diego County, the manufacturer shall display the model number and South Coast Air Quality Management District certification status or San Diego Air Pollution Control District certification status of the furnace complying with Section (e) of this rule.

**(g) RECORDKEEPING**

A manufacturer shall keep oxides of nitrogen emission test records and certification records for as long as the furnace model is offered for sale or sold within San Diego County, or for three calendar years after manufacture, whichever is longer. Such records shall be provided to the District upon request.

**(h) TEST METHODS**

To determine compliance with Section (d) of this rule, measurement of oxides of nitrogen shall be conducted in accordance with:

(1) San Diego Air Pollution Control District Test Method 100 as approved by the federal Environmental Protection Agency in May 1995, or

(2) South Coast Air Quality Management District Test Method 100.1 as approved by the federal Environmental Protection Agency in March 1989.

**(i) EMISSION TEST REQUIREMENTS**

Emission tests shall be performed in accordance with the procedures and methods outlined in the South Coast Air Quality Management District Protocol: Rule 1111 Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired, Fan-Type Central Furnaces as it exists on *(date of adoption)*.