

RULE 400.6 NATURAL GAS-FIRED WATER HEATERS
(Adopted 11/26/2019)

A. Purpose

The purpose of this rule is to limit oxides of nitrogen emissions from natural gas-fired Water Heaters.

B. Applicability

B.1 This rule shall apply to manufacturers, distributors, retailers, and installers of natural gas-fired Water Heaters with heat input less than 75,000 British Thermal Units per hour, unless exempted pursuant to Section E of this rule.

B.2 Boilers, Process Heaters and Steam Generators that are subject to the provisions of this rule shall not be subject to Rule 400.

C. Definitions

The following definitions apply for all terms applicable to this Rule. If a term is not defined within this Rule, then the definitions provided in Rule 101, Definitions, shall apply.

C.1 California Public Utility Commission (PUC) Quality Natural Gas: Any gaseous fuel, gas-containing fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet and no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet. PUC quality natural gas also means high methane gas of at least 80% methane by volume.

C.2 Mobile Home: A structure built on a permanent chassis and designated 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.

C.3 Recreational Vehicles: A motor home, travel trailer, truck camper, or camping trailer, with or without motive power, designated for human habitation for recreational, emergency, or other occupancy.

C.4 Water Heater: A device that heats water at a thermostatically-controlled temperature for delivery on demand. Water is heated by the combustion of gaseous fuel and withdrawn for use external to the vessel at pressures not exceeding 160 psig.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.

D. Requirements

D.1 No person shall sell, offer for sale, supply, or install any PUC quality natural gas-fired water heater subject to this rule, except as specified in Section D.2, unless the water heater is certified pursuant to Section G to an oxides of nitrogen (NO_x) emissions level of less than or equal to:

D.1.1 10 nanograms of NO_x (calculated as NO₂) per joule of heat output (23 lb per billion Btu of heat output); or

D.1.2 15 ppmv @ 3 percent oxygen, dry (17.5 lb per billion Btu of heat input).

D.2 No person shall sell, offer for sale, supply, or install any PUC quality natural gas-fired Mobile Home water heater unless the water heater is certified pursuant to Section G to an oxides of nitrogen (NO_x) emissions level of less than or equal to:

D.2.1 40 nanograms of NO_x (calculated as NO₂) per joule of heat output (93 lb per billion Btu of heat output); or

D.2.2 55 ppmv @ 3 percent oxygen, dry (71 lb per billion Btu of heat input).

E. Exemptions

The provisions of this rule shall not apply to the following:

E.1 Water heaters using any fuel other than natural gas.

E.2 Water heaters used in Recreational Vehicles.

E.3 Water heaters with a rated heat input of 75,000 Btu/hr or greater are exempted from all provisions of this rule.

F. Compliance Schedule

Effective March 31, 2020, no person shall offer for sale, sell or install any natural gas-fired water heater, which does not comply with the requirements of Section D.

G. Certification Requirement

G.1 Equipment certified by the South Coast Air Quality Management District (SCAQMD) in accordance with the certification requirements in Section (d)

of SCAQMD Rule 1121, amended September 3, 2004, shall be considered certified for use in Imperial County.

G.2 Certification Report

Prior to the sale of any model of water heater in Imperial County, the manufacturer shall submit to the ICAPCD a Compliance Report documenting its certification pursuant to Section G of this rule. The Compliance Report shall contain the following information:

G.2.1 Compliance Statement

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

G.2.2 General Information

Name and address of the manufacturer, brand name of the water heater, Model number (as it appears on the water heater rating plate), description of each model water heater being certified, and a copy of the letter from SCAQMD certifying the water heater model.

H. Manufacturer's Labeling

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

I. Enforcement

I.1 The APCO may require a NO_x emissions test when necessary to verify compliance. Testing shall be conducted according to the SCAQMD Protocol for Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers, dated March 1995 (amended January 1998).

I.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.

J. Records Retention

A manufacturer shall keep certification reports, test reports, and certification statements for as long as the water heater, boiler or process heater model is

offered for sale, sold, or installed within the ICAPCD, or for a minimum of three calendar years, whichever is longer.