

CONSTRUCTION CODE AMENDMENTS

2020 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Val K. Potter

Senate Sponsor: _____

LONG TITLE**General Description:**

This bill amends Nitrogen Oxide emission limits for natural gas-fired water heaters.

Highlighted Provisions:

This bill:

► under certain circumstances, permits the use of a water heater that exceeds certain emission limits.

Money Appropriated in this Bill:

None

Other Special Clauses:

This bill provides a special effective date.

Utah Code Sections Affected:

AMENDS:

15A-6-102, as last amended by Laws of Utah 2017, Chapter 236

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **15A-6-102** is amended to read:

15A-6-102. Nitrogen Oxide emission limits for natural gas-fired water heaters.

(1) As used in this section:

(a) "BTU" means British Thermal Unit.

(b) (i) "Heat input" means the heat of combustion released by fuel burned in a water



heater based on the heating value of the fuel.

(ii) "Heat input" does not include the enthalpy of a water heater's incoming combustion air.

(c) "Heat output" means the enthalpy of a water heater's working fluid output.

(d) "Natural gas-fired water heater" means a device that heats water:

(i) using natural gas combustion;

(ii) for use external to the device at a pressure that is less than or equal to 160 pounds per square inch gage; and

(iii) to a thermostatically controlled temperature less than or equal to:

(A) 210 degrees Fahrenheit; or

(B) 99 degrees Celsius.

(e) "ppm" means parts of Nitrogen Oxide per million parts of water heater air output.

(f) "Recreational vehicle" means the same as that term is defined in Section [13-14-102](#).

(2) On and after July 1, 2018, a person may not sell or install a natural gas-fired water heater with an emission rate greater than the following limits:

(a) except as provided in Subsection (6), for a water heater that has a heat input of less than or equal to 75,000 BTU per hour that is not installed in a mobile home, a limit of:

(i) 10 nanograms per Joule of heat output; or

(ii) 15 ppm, corrected to 3% oxygen;

(b) for a water heater that has a heat input of greater than 75,000 BTU per hour and less than 2,000,000 BTU per hour that is not installed in a mobile home, a limit of:

(i) 14 nanograms per Joule of heat output; or

(ii) 20 ppm, corrected to 3% oxygen;

(c) for a water heater installed in a mobile home, a limit of:

(i) 40 nanograms per Joule of heat output; or

(ii) 55 ppm, corrected to 3% oxygen;

(d) for a pool or spa water heater with a heat input that is less than or equal to 400,000 BTU per hour, a limit of:

(i) 40 nanograms per Joule of heat output; or

(ii) 55 ppm, corrected to 3% oxygen; and

(e) for a pool or spa water heater with a heat input of greater than 400,000 BTU per

hour and less than 2,000,000 BTU per hour, a limit of:

(i) 14 nanograms per Joule of heat output; or

(ii) 20 ppm, corrected to 3% oxygen.

(3) A water heater manufacturer shall use California South Coast Air Quality Management District Method 100.1 to calculate the emissions rate of a water heater subject to this section.

(4) A water heater manufacturer shall display on a water heater subject to this section, as a permanent label, the model number and the Nitrogen Oxide emission rate of the water heater.

(5) The requirements of this section do not apply to:

(a) a water heater using a fuel other than natural gas;

(b) a water heater used in a recreational vehicle;

(c) a water heater manufactured in the state for sale and shipment outside of the state;

or

(d) a water heater manufactured before July 1, 2018.

(6) A person may sell or install a natural gas-fired water heater with an emission rate greater than the limits established in Subsection (2)(a) if:

(a) the water heater is replacing a water heater of equal BTUs per hour;

(b) there is not available for purchase in the United States a water heater that:

(i) has an input of equal BTUs per hour as the water heater being replaced; and

(ii) meets the limits established in Subsection (2)(a); and

(c) the purpose of the water heater is to heat water and provide space heating.

Section 2. **Effective date.**

This bill takes effect on July 1, 2020.