

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



28 heater based on the heating value of the fuel.

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

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

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

33 (i) using natural gas combustion;

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

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

37 (A) 210 degrees Fahrenheit; or

38 (B) 99 degrees Celsius.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

72 or

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

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

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

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

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

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

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

81 **Section 2. Effective date.**

82 This bill takes effect on July 1, 2020.