

**Texas Chapter 117 - Control of Air Pollution From Nitrogen Compounds**

**SUBCHAPTER E: MULTI-REGION COMBUSTION CONTROL**

**DIVISION 3: WATER HEATERS, SMALL BOILERS, AND PROCESS HEATERS**

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**SUBCHAPTER E: MULTI-REGION COMBUSTION CONTROL**  
**DIVISION 3: WATER HEATERS, SMALL BOILERS, AND PROCESS HEATERS**  
**§§117.3200, 117.3201, 117.3203, 117.3205, 117.3210, 117.3215**

**STATUTORY AUTHORITY**

The new sections are adopted under Texas Water Code, §5.102, concerning General Powers, §5.103, concerning Rules, and §5.105, concerning General Policy, that authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code. In addition, the sections are adopted under Texas Health and Safety Code, §382.002, concerning Policy and Purpose, which states the policy and purpose of the State of Texas and the Texas Clean Air Act; §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air; §382.014, concerning Emission Inventory, which authorizes the commission to require submission information relating to emissions of air contaminants; §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; §382.017, concerning Rules, which provides the commission the authority to adopt rules consistent with the policy and purposes of the Texas Clean Air Act; §382.021, concerning Sampling Methods and Procedures, which authorizes the commission to prescribe the sampling methods and procedures; and §382.051(d), concerning Permitting Authority of Commission Rules, which authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under Chapter 382. The new sections are adopted under federal mandates contained in 42 United States Code, §§7401 *et. seq.*, that require states to adopt pollution control measures in order to reach specific air quality standards in particular areas of the state. In addition, the new sections are adopted to implement the legislative mandate under House Bill (HB) 965, 79th Legislature, 2005, which adds Texas Health and Safety Code, §382.0275, concerning Commission Action Relating to Residential Water Heaters, which requires certain actions of the commission regarding residential water heaters.

The adopted sections implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.0275.

**§117.3200. Applicability.**

This division (relating to Water Heaters, Small Boilers, and Process Heaters) applies to manufacturers, distributors, retailers, and installers of natural gas-fired water heaters, boilers, and process heaters with a maximum rated capacity of 2.0 million British thermal units per hour or less.

**§117.3201. Definitions.**

Unless specifically defined in Texas Health and Safety Code, Chapter 382 (also known as the Texas Clean Air Act) or in the rules of the commission, the terms used by the commission have the meanings commonly used in the field of air pollution control. In addition to the terms that are defined by Texas Health and Safety Code, Chapter 382, the following terms, when used in this division (relating to Water Heaters, Small Boilers, and Process Heaters), have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §§3.2, 101.1, and 117.10 of this title (relating to Definitions).

(1) **Heat output**--The product  $H_0$  obtained when a Type 0, 1, or 2 unit is tested according to Section 9.3 of the South Coast Air Quality Management District Protocol: Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers (January 1998).

(2) **Type 0 unit**--Any water heater, boiler, or process heater with a maximum rated capacity of no more than 75,000 British thermal units per hour.

(3) **Type 1 unit**--Any water heater, boiler, or process heater with a maximum rated capacity greater than 75,000, but no more than 400,000 British thermal units per hour.

(4) **Type 2 unit**--Any water heater, boiler, or process heater with a maximum rated capacity greater than 400,000 British thermal units per hour, but no more than 2.0 million British thermal units per hour.

(5) **Water heater**--A closed vessel in which water is heated by combustion of gaseous fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 pounds per square inch gauge, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit.

**§117.3203. Exemptions.**

This division (relating to Water Heaters, Small Boilers, and Process Heaters) does not apply to:

(1) units using a fuel other than natural gas;

(2) units used in recreational vehicles;

(3) Type 0 units, or Type 1 or 2 units at single-family residences, used exclusively to heat swimming pools and hot tubs;

(4) units manufactured in Texas for shipment and use outside of Texas; and

(5) units that do not comply with the nitrogen oxides specifications in §117.3205 of this title (relating to Emission Specifications) that are sold, supplied, or offered for sale in Texas, provided that the manufacturer or distributor can demonstrate that the units are intended for shipment and use outside of Texas, and that the manufacturer or distributor has taken reasonable, prudent precautions to assure that the units are not distributed for sale in Texas. This paragraph does not apply to units that are sold, supplied, or offered for sale by any person to retail outlets in Texas.

**§117.3205. Emission Specifications.**

(a) Natural gas-fired boilers and process heaters sold, distributed, installed, or offered for sale within the State of Texas must meet the following specifications for nitrogen oxides (NOx).

(1) Type 0 units manufactured on or after July 1, 2002, but no later than December 31, 2004, must not exceed:

(A) 40 nanograms per joule (ng/J) of heat output; or

(B) 55 parts per million by volume (ppmv) at 3.0% oxygen (O<sub>2</sub>), dry.

(2) Type 0 units manufactured on or after January 1, 2005, must not exceed:

(A) 10 ng/J of heat output; or

(B) 15 ppmv at 3.0% O<sub>2</sub>, dry.

(3) Type 1 units manufactured on or after July 1, 2002, must not exceed:

(A) 40 ng/J of heat output; or

(B) 55 ppmv at 3.0% O<sub>2</sub>, dry.

(4) Type 2 units manufactured on or after July 1, 2002, must not exceed:

(A) 30 ppmv at 3.0% O<sub>2</sub>, dry; or

(B) 0.037 pounds per million British thermal units (lb/MMBtu) of heat input.

(b) Natural gas-fired water heaters sold, distributed, installed, or offered for sale within the State of Texas must meet the following specifications for NO<sub>x</sub>.

(1) Type 0 units manufactured on or after July 1, 2002, must not exceed:

(A) 40 ng/J of heat output; or

(B) 55 ppmv at 3.0% O<sub>2</sub>, dry.

(2) Type 1 units manufactured on or after July 1, 2002, must not exceed:

(A) 40 ng/J of heat output; or

(B) 55 ppmv at 3.0% O<sub>2</sub>, dry.

(3) Type 2 units manufactured on or after July 1, 2002, must not exceed:

(A) 30 ppmv at 3.0% O<sub>2</sub>, dry; or

(B) 0.037 lb/MMBtu of heat input.

**§117.3210. Certification Requirements.**

(a) The manufacturer shall demonstrate that each model of Type 0, 1, and 2 unit subject to the requirements of §117.3205 of this title (relating to Emission Specifications) has been tested in accordance with Test Method 7 (40 Code of Federal Regulations Part 60, Appendix A), including 7A-E, and the South Coast Air Quality Management District (SCAQMD) Protocol: Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers (January 1998).

(b) The manufacturer may submit to the executive director an approved Bay Area Air Quality Management District or SCAQMD certification in lieu of conducting duplicative certification tests.

**§117.3215. Notification and Labeling Requirements.**

(a) Each manufacturer shall submit to the executive director a statement certifying that Type 0, 1, and 2 units subject to the requirements of §117.3205 of this title (relating to Emission Specifications) are in compliance with §117.3205 of this title. The statement must be signed and dated and attest to the accuracy of all information. The statement must include the manufacturer's brand name, model number, and the input rating as it appears on the rating plate. The manufacturer shall inform their wholesaler and/or retailer of the certification requirement of this subsection.

(b) The manufacturer shall display the model number and date of manufacture of each Type 0, 1, and 2 unit complying with §117.3205 of this title on the shipping carton and rating plate of each Type 0, 1, and 2 unit.