

(Adopted January 9, 1998)(Amended January 7, 2005)(Amended May 5, 2006)  
(Amended December 7, 2018)(Amended [Date of Rule Adoption])

[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]

**PROPOSED AMENDED RULE 1146.2. EMISSIONS OF OXIDES OF NITROGEN FROM LARGE WATER HEATERS AND SMALL BOILERS AND PROCESS HEATERS**

(a) Purpose ~~and Applicability~~

The purpose of this rule is to reduce Oxides of Nitrogen (NOx) emissions from ~~natural gas fired w~~Water hHeaters, ~~b~~Boilers, and ~~p~~Process ~~h~~Heatlers as defined in this rule. ~~This rule applies to units that have a rated heat input capacity less than or equal to 2,000,000 BTU per hour. Type 1 Units as defined in this rule are typically, but not exclusively, large water heaters or smaller sized process heaters in the above range. Type 2 Units as defined in this rule are typically, but not exclusively, small boilers or largersized process heaters in this range. Beginning, , the provisions of this rule are applicable to manufacturers, distributors, retailers, refurbishers, installers and operators of new units. Beginning, , the provisions of this rule are also applicable to operators of existing Type 2 Units. , the provisions of this rule are also applicable to operators of existing Type 2 Units.~~

(b) Applicability

The provisions of this rule are applicable to manufacturers, distributors, retailers, Resellers, installers, owners, and operators of Units that have a Rated Heat Input Capacity less than or equal to 2,000,000 British Thermal Units (BTU) per hour. The provisions of this rule are not applicable to manufacturers, distributors, retailers, Resellers, installers, owners, and operators of Units subject to the limits in South Coast AQMD Rule 1121 – Control of Nitrogen Oxides from Residential Type, Natural Gas-fired Water Heaters.

(~~b~~c) Definitions

~~(1) —BEST AVAILABLE RETROFIT CONTROL TECHNOLOGY (BARCT) as defined in the California Health and Safety Code Section 40406.~~

~~(2)~~ (1) BOILER OR STEAM GENERATOR means any equipment that is fired with or is designed to be fired with natural gas, used to produce steam or to heat water, and that is not used exclusively to produce electricity for sale. Boiler or Steam Generator does not include any waste heat recovery boiler

that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

- ~~(3) — BTU means British thermal unit(s).~~
- ~~(42)~~ CERTIFIED RETROFIT KIT means any burner and ancillary controls or blowers that have been demonstrated to comply with the provisions of this rule, on a retrofit basis, on a particular model of unit.
- ~~(5) — FIRE TUBE BOILER means a BOILER that passes hot gases from a fire box through one or more tubes running through a sealed container of water. The heat of the gases is transferred through the walls of the tubes by thermal conduction, heating the water and ultimately creating steam.~~
- ~~(3)~~ EXISTING BUILDING means a building that is not a New Building as defined in this rule.
- ~~(64)~~ FORMER RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX, that has received a final determination notification, and is no longer in the RECLAIM program.
- ~~(75)~~ HEAT INPUT means the chemical heat released due to assumed complete combustion of fuel into a unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- ~~(86)~~ HEAT OUTPUT means the enthalpy of the working fluid output of the unit.
- ~~(7)~~ HIGH TEMPERATURE UNIT means any Unit as defined in this rule that is used to produce steam or to heat water above 190 degrees Fahrenheit.
- ~~(98)~~ INDEPENDENT TESTING LABORATORY means a testing laboratory that meets the requirements of ~~Distriet~~South Coast Air Quality Management District (South Coast AQMD) Rule 304 – Equipment, Materials, And Ambient Air Analyses, subdivision (k) and is approved by the ~~Distriet~~South Coast AQMD to conduct certification testing under the Protocol: Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers (Protocol).
- ~~(109)~~ INSTANTANEOUS WATER HEATER means a ~~WATER HEATER~~Water Heater with a ~~RATED HEAT INPUT CAPACITY~~Rated Heat Input Capacity less than or equal to 2,000,000 BTU per hour that heats water only when it flows through a heat exchanger, which is a device used to transfer heat between two or more mediums of different temperatures.

- (10) MULTIFAMILY STRUCTURE means any structure which is used exclusively as a dwelling for more than four families, and where equipment subject to this rule is used by the owner or occupant of such a dwelling.
- (11) NEW BUILDING means a building that has never been used or occupied for any purpose, or a building with a major alteration which changes the occupancy classification of a building.
- ~~(11)~~ OXIDES OF NITROGEN (NO<sub>x</sub>) EMISSIONS means the sum of nitric oxides and nitrogen dioxides emitted, calculated, and expressed as nitrogen dioxide.
- ~~(12)~~ POOL HEATER means a ~~WATER HEATER~~ Water Heater designed to heat a pool, hot tub, or spa.
- ~~(13)~~ PROCESS HEATER means any equipment that is fired with or is designed to be fired with natural gas and which transfers heat from combustion gases to water or process streams. A Process Heater does not include any kiln or oven used for annealing, drying, curing, baking, cooking, calcining, or vitrifying; or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.
- ~~(14)~~ PROTOCOL means the South Coast ~~Air Quality Management District~~ AQMD Protocol to ensure standardization of compliance certification test procedures, titled: Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers.
- ~~(15)~~ RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX.
- ~~(16)~~ RATED HEAT INPUT CAPACITY means the gross ~~HEAT INPUT~~ Heat Input of the combustion device, as supported by required documentation and which shall be specified on a permanent rating plate.
- ~~(17)~~ RECREATIONAL VEHICLE means any vehicle used for recreational purposes designed to include a water heater and licensed to be driven or moved on the highways of California.
- ~~(18)~~ ~~REFURBISHER means anyone who reconditions a Type 1 Unit or TYPE 2 UNIT and offers the unit for resale, for use in the District.~~
- (19) RESELLER means anyone who sells either retail, wholesale, or on an individual basis ~~TYPE 1 UNITS~~ Type 1 Units or ~~TYPE 2 UNITS~~ Type 2 Units.

- (20) RESIDENTIAL STRUCTURE means any structure which is ~~designed for~~ ~~and~~ used exclusively as a dwelling for not more than four families, and where such equipment is used by the owner or occupant of such a dwelling.
- (21) STANDARD CONDITIONS is as defined by Rule 102 – Definition of Terms.
- (~~21~~22) TANK TYPE WATER HEATER means a ~~WATER HEATER~~ Water Heater with a ~~RATED HEAT INPUT CAPACITY~~ Rated Heat Input Capacity from 75,000 BTU per hour to 2,000,000 BTU per hour and with an integral closed vessel in which water is heated and stored for use external to the vessel.
- (~~22~~23) THERM means 100,000 BTU.
- ~~(23) THERMAL FLUID HEATER means a natural gas fired PROCESS HEATER in which a process stream is heated indirectly by a heated fluid other than water.~~
- (24) TYPE 1 UNIT means any ~~WATER HEATER~~ Water Heater, ~~BOILER~~ Boiler, or ~~PROCESS HEATER~~ Process Heater with a ~~RATED HEAT INPUT CAPACITY~~ Rated Heat Input Capacity less than or equal to 400,000 BTU per hour, excluding ~~TANK TYPE WATER HEATERS~~ Tank Type Water Heaters subject to the limits of ~~District~~ South Coast AQMD Rule 1121.
- (25) TYPE 2 UNIT means any ~~WATER HEATER~~ Water Heater, ~~BOILER~~ Boiler, or ~~PROCESS HEATER~~ Process Heater with a ~~RATED HEAT INPUT CAPACITY~~ Rated Heat Input Capacity greater than 400,000 BTU per hour up to and including 2,000,000 BTU per hour.
- (26) UNIT means any ~~BOILER~~ Boiler, ~~STEAM GENERATOR~~ Steam Generator, ~~WATER HEATER~~ Water Heater, or ~~PROCESS HEATER~~ Process Heater as defined in this rule ~~paragraph (b)(2), (b)(4), (b)(5), (b)(10), (b)(12), (b)(13), (b)(21), (b)(23), (b)(24), (b)(25) or (b)(27).~~
- (27) WATER HEATER means any equipment that is fired with or designed to be fired with natural gas and that is used solely to heat water for use external to the equipment.
- (ed) Requirements
- ~~(1) On or after January 1, 2000, no person shall manufacture for use, or offer for sale for use, in the District any new Type 2 Unit, unless the NOx emissions level is less than or equal to 30 ppm of NOx emissions (at 3% O<sub>2</sub>, dry) or 0.037 pound NOx per million BTU of heat input and no more than~~

~~400 ppm of carbon monoxide (at 3% O<sub>2</sub>, dry), as certified by the District according to subdivision (d).~~

~~(2) — On or after January 1, 2001, no person shall manufacture for use, or offer for sale for use, in the District any new Type 1 Unit, unless the NOx emissions level is less than or equal to 40 nanograms of NOx (calculated as NO<sub>2</sub>) per joule (93 lb per billion BTU) of heat output or 55 ppm NOx emissions (at 3% O<sub>2</sub>, dry), as certified by the District according to subdivision (d).~~

~~(3) — Except for units at a RECLAIM or former RECLAIM facility, on or after July 1, 2002, no person shall operate in the District any unit with a rated heat input capacity greater than 1,000,000 BTU per hour but less than or equal to 2,000,000 BTU per hour manufactured prior to January 1, 1992, which does not meet the emissions limits required by paragraph (c)(1). Alternatively, a unit may be modified or demonstrated to meet the emission limits of paragraph (c)(1) pursuant to the provisions of subdivision (e).~~

(1) No person shall manufacture, supply, sell, offer for sale, or install, for use within the South Coast AQMD, any Unit unless the Unit is certified pursuant to subdivision (f) not to exceed the applicable NOx and CO emission limits specified in Table 1, prior to the compliance dates specified in Table 2.

Table 1 – NOx and CO Emission Limits

<u>Equipment Category</u>	<u>NOx Emission Limit*</u>	<u>CO Emission Limit*</u>
<u>Type 1 Units, excluding Pool Heaters</u>	<u>14 ng/J or 20 ppmv</u>	<u>N/A**</u>
<u>Type 1 Pool Heaters</u>	<u>40 ng/J or 55 ppmv</u>	<u>N/A**</u>
<u>Type 2 Units</u>	<u>14 ng/J or 20 ppmv</u>	<u>400 ppmv</u>

\* Nanograms per Joule (ng/J) of NOx (calculated as NO<sub>2</sub>) of Heat Output or the specified parts per million by volume (ppmv) of NOx or CO at 3 percent oxygen (O<sub>2</sub>) correction, on a dry basis.

\*\* Type 1 Units are not subject to a CO limit by Rule 1146.2, but may be subject to CO limits by other South Coast AQMD rules.

~~(4) — Except for units at a RECLAIM or former RECLAIM facility, on or after January 1, 2006, no person shall operate in the District any unit more than 15 years old, based on the original date of manufacture as specified in paragraph (c)(6), with a rated heat input capacity greater than 1,000,000~~

~~BTU per hour but less than or equal to 2,000,000 BTU per hour and manufactured on or after January 1, 1992, which does not meet the emissions limits required by paragraph (c)(1). Alternatively, a unit may be modified or demonstrated to meet the emission limits of paragraph (c)(1) pursuant to the provisions of subdivision (e).~~

- ~~(5) — Except for units at a RECLAIM or former RECLAIM facility, on or after January 1, 2006, no person shall operate in the District any unit more than 15 years old, based on the original date of manufacture as specified in paragraph (c)(6), with a rated heat input capacity greater than 400,000 BTU per hour but less than or equal to 1,000,000 BTU per hour manufactured prior to January 1, 2000, which does not meet the emissions limits required by paragraph (c)(1). Alternatively, a unit may be modified or demonstrated to meet the emission limits of paragraph (c)(1) pursuant to the provisions of subdivision (e).~~
- ~~(6) — The original date of manufacture shall be determined by:~~
- ~~(A) — Original manufacturer's identification or rating plate permanently fixed to the equipment. If not available, then;~~
  - ~~(B) — Invoice from manufacturer for purchase of equipment. If not available, then;~~
  - ~~(C) — Unit is deemed to be more than 15 years old.~~
- ~~(7) — On or after January 1, 2010, no person shall manufacture for use or offer for sale for use within the District any Type 2 unit unless the unit is certified pursuant to subdivision (d) to a NO<sub>x</sub> emission level of less than 14 nanograms of NO<sub>x</sub> (calculated as NO<sub>2</sub>) per joule of heat output or less than or equal to 20 ppm of NO<sub>x</sub> emissions (at 3% O<sub>2</sub>, dry).~~
- ~~(8) — On or after January 1, 2012, no person shall manufacture for use or offer for sale for use within the District any Type 1 unit (excluding pool heaters), unless the unit is certified pursuant to subdivision (d) to a NO<sub>x</sub> emission level of less than 14 nanograms of NO<sub>x</sub> (calculated as NO<sub>2</sub>) per joule of heat output or less than or equal to 20 ppm of NO<sub>x</sub> emissions (at 3% O<sub>2</sub>, dry).~~
- (2) No person shall manufacture, supply, sell, offer for sale, or install, for use in the South Coast AQMD, any Unit subject to this rule, unless such Unit does not exceed the applicable NO<sub>x</sub> and CO emission limit and compliance date set forth in Table 2.

Table 2 – NOx and CO Emission Limits, Compliance Schedule, and Unit Useful Life

<u>Equipment Category</u>	<u>NOx and CO Emission Limits (ppmv)</u>	<u>Building Type</u>	<u>Compliance Date</u>	<u>Useful Life (years)</u>
<u>Type 1 Unit*</u>	<u>0</u>	<u>New</u>	<u>January 1, 2025</u>	<u>15</u>
		<u>Existing</u>	<u>January 1, 2029</u>	
<u>Instantaneous (Tankless) Water Heater</u>	<u>0</u>	<u>New</u>	<u>January 1, 2025</u>	<u>25</u>
		<u>Existing</u>	<u>January 1, 2029</u>	
<u>Type 1 Pool Heater</u>	<u>0</u>	<u>New</u>	<u>January 1, 2027</u>	<u>15</u>
		<u>Existing</u>	<u>January 1, 2031</u>	
<u>Type 2 Unit**</u>	<u>0</u>	<u>New</u>	<u>January 1, 2027</u>	<u>25</u>
		<u>Existing</u>	<u>January 1, 2031</u>	
<u>Type 1 High Temperature Unit</u>	<u>0</u>	<u>New</u>	<u>January 1, 2029</u>	<u>25</u>
		<u>Existing</u>	<u>January 1, 2033</u>	
<u>Type 2 High Temperature Unit</u>	<u>0</u>	<u>New</u>	<u>January 1, 2029</u>	<u>25</u>
		<u>Existing</u>	<u>January 1, 2033</u>	

\* Referring to a Type 1 Unit that is not a High Temperature Unit, Type 1 Pool Heater, or Instantaneous Water Heater.

\*\* Referring to a Type 2 Unit that is not a High Temperature Unit or Instantaneous Water Heater.

(3) On and after the compliance dates in Table 2, an owner or operator of a Unit shall not operate a Unit which does not meet the applicable emission limit in Table 2 once the Unit age that is determined pursuant to subdivision (e) reaches its Useful Life in Table 2.

(4) The owner or operator of a Unit may modify a Unit and demonstrate it meets the NOx and CO emission limits in subdivision (d) by causing:

(A) A Certified Retrofit Kit to be installed; or

(B) A source test to be conducted by an Independent Testing Laboratory according to the Protocol.

(5) An owner or operator of a Unit that modifies or replaces a burner in the Unit shall comply with the following applicable emission limit:

(A) In Table 1 if the modification or replacement occurs:

(i) Prior to the applicable compliance dates in Table 2; or

(ii) Before the Unit reaches its useful life in Table 2; or

(B) In Table 2 if the modification or replacement occurs:

- (i) On and after the applicable compliance dates in Table 2; and
  - (ii) When the Unit has reached its useful life in Table 2.
- (6) An owner or operator shall not operate any Type 2 Unit manufactured prior to January 1, 2010, in the South Coast AQMD which does not meet the NOx emission limit of 30 ppmv (corrected at 3 percent O<sub>2</sub> correction, on a dry basis) or 0.037 pound NOx per million BTU of heat input and no more than 400 ppm of carbon monoxide (at 3 percent O<sub>2</sub>, dry).
- (7) An owner or operator shall not operate any Type 1 Unit manufactured prior to January 1, 2012, in the South Coast AQMD which does not meet the NOx emission limit of 55 ppmv (corrected at 3 percent O<sub>2</sub> correction, on a dry basis).
- (8) The owner or operator of a Unit shall maintain on-site a copy of the manufacturer's and/or distributor's written instructions and retain a record of the maintenance activity for a period of not less than three years.
- (9) Effective [One Year After Date of Rule Adoption], in lieu of paragraphs (d)(6) and (d)(7), an owner or operator of a RECLAIM Facility or Formal RECLAIM Facility shall not operate:
  - (A) Type 2 Units manufactured prior to January 1, 2010, which do not meet the NOx emission limit of 30 ppmv (corrected at 3 percent O<sub>2</sub> correction, on a dry basis) or 0.037 pound NOx per million BTU of heat input and no more than 400 ppm of carbon monoxide (at 3 percent O<sub>2</sub>, dry); or
  - (B) Type 1 Units manufactured prior to January 1, 2012, which do not meet the NOx emission limit of 55 ppmv (corrected at 3 percent O<sub>2</sub> correction, on a dry basis).
- ~~(9) Notwithstanding the exemptions contained in Rule 2001—Applicability and its accompanying Table 1—Rules Not Applicable to RECLAIM Facilities for Requirements Pertaining to NOx Emissions If Rule Was Adopted or Amended Prior to October 5, 2018, on or after May 5, 2006, the owner or operator of any Type 2 unit shall perform maintenance in accordance with the manufacturer's schedule and specifications as identified in a manual and other written materials supplied by the manufacturer or distributor. The owner or operator shall maintain on site a copy of the manufacturer's and/or distributor's written instructions and retain a record of the maintenance activity for a period of not less than three years.~~



- ~~(10) — Notwithstanding the exemptions contained in Rule 2001 — Applicability and its accompanying Table 1 — Rules Not Applicable to RECLAIM Facilities for Requirements Pertaining to NOx Emissions If Rule Was Adopted or Amended Prior to October 5, 2018, the owner or operator shall maintain on site a copy of all documents identifying the unit’s rated heat input capacity. The rated heat input capacity shall be identified by a manufacturer’s or distributor’s manual or invoice. If a unit is modified, the rated heat input capacity shall be calculated pursuant to paragraph (f)(3). — The documentation of rated heat input capacity for modified units shall include a description of all modifications, the dates the unit was modified and calculation of rated heat input capacity. All documentation shall be signed by the licensed person modifying the unit.~~
- ~~(11) — Notwithstanding the requirements in paragraph (c)(7), until December 31, 2010, any person may sell, offer for sale, or install any Type 2 units that are manufactured and purchased prior to January 1, 2010 and in compliance with paragraph (c)(1).~~
- ~~(12) — Notwithstanding the requirements in paragraph (c)(8), until December 31, 2012, any person may sell, offer for sale, or install any Type 1 units that are manufactured and purchased prior to January 1, 2012 and in compliance with paragraph (c)(2).~~
- ~~(13) — By January 1, 2022, the Executive Officer shall conduct a technology assessment and report to the Governing Board if the NOx emission limits in subdivision (c) represent BARCT.~~
- ~~(A) — If the Executive Officer determines that the NOx emission limits specified in paragraph (c)(1) represents BARCT, notwithstanding the exemptions contained in Rule 2001 — Applicability and its accompanying Table 1 — Rules Not Applicable to RECLAIM Facilities for Requirements Pertaining to NOx Emissions If Rule Was Adopted or Amended Prior to October 5, 2018, the owner or operator of a RECLAIM or former RECLAIM facility with any Type 2 Units shall meet the NOx emission limit specified in paragraph (c)(1) by December 31, 2023. — A Type 2 unit may be modified or demonstrated to meet the emission limit of paragraph (c)(1), pursuant to the provisions of subdivision (e). — Alternatively, a Type 2 unit may be replaced with a certified unit in compliance with the provisions of paragraph (c)(7).~~

~~(B) If the technology assessment specified in this paragraph demonstrates that more stringent BARCT requirements are applicable, the Executive Officer shall initiate rule development for the implementation schedule of the more stringent BARCT requirements within six months after the technology assessment.~~

(e) Unit Age

(1) For all Unit age determinations in this rule, an owner or operator of a Unit shall determine the Unit age as follows:

(A) Unit age shall be based on the original date of manufacture determined by:

(i) Invoice from purchase of Unit provided by manufacturer;

(ii) Original Unit manufacturer's identification or rating plate permanently affixed to the Unit; or

(iii) Any other method of determining Unit age that can be substantiated through written information as approved by the Executive Officer.

(B) The Unit shall be deemed at the end of its useful life as of January 1, 2024, for any Unit where the Unit age cannot be determined pursuant to subparagraph (e)(1)(A).

(d) Certification

(1) The manufacturer shall obtain confirmation from an ~~in~~Independent ~~Testing~~Laboratory prior to applying for certification for a natural gas Unit that; each ~~unit~~Unit model or retrofit kit complies with the applicable requirements of subdivision ~~(e)~~. -This confirmation shall be based upon emission source tests of a randomly selected ~~unit~~Unit of each model, and the Protocol shall be adhered to during the confirmation testing of all ~~units~~Units subject to this rule.

(2) When applying for ~~unit~~Unit(s) certification, the manufacturer shall submit to the Executive Officer the following:

(A) A statement that the model is in compliance with subdivision ~~(e)~~. The statement shall be signed and dated, and shall attest to the accuracy of all statements;

(B) General Information including:

(i) Name and address of manufacturer;~~;~~

(ii) Brand name;~~;~~ and

(iii) Model number, as it appears on the ~~unit~~Unit rating plate;

- (C) A description of each model being certified; and
  - (D) A source test report verifying compliance with the emission limits in subdivision (~~ed~~) for each model to be certified. ~~The source test report shall be prepared by the confirming independent Testing Laboratory and shall contain all of the elements identified in Section 10 of the Protocol for each uUnit tested. The source test shall have been conducted no more than ninety (90) days prior to the date of submittal to the Executive Officer.~~
- (3) When applying for uUnit certification, the manufacturer shall submit the items identified in paragraph (~~df~~)(2) no more than ninety (90) days after the date of the source test identified in subparagraph (~~df~~)(2)(D) ~~and at least 120 days prior to the date of the proposed sale of the units.~~
  - (4) The Executive Officer shall certify a uUnit model which complies with the provisions of subdivision (~~ed~~) and of paragraphs (~~df~~)(1), (~~df~~)(2), and (~~df~~)(3).
  - ~~(5) Certification status shall be valid for three years from the date of approval by the Executive Officer. After the third year, recertification may be required according to the requirements of paragraphs (d)(1) and (d)(2).~~
- (eg) ~~Modification (Retrofit) Provisions and Demonstrations~~ of Compliance With Emission Limits:  
~~Any unit, may be modified or demonstrated to meet the requirements of paragraph (e)(1), (e)(2), (e)(3), (e)(4), or (e)(5) provided:~~
- ~~(1) The unit is certified pursuant to subdivision (d); or~~
  - ~~(2) A certified retrofit kit has been installed; or~~
  - (31) The owner or operator of a Unit that elects to demonstrate compliance pursuant to subparagraph (d)(4)(B) shall maintain Aa copy of atthe South Coast AQMD approved source test report on-site and make it available to the Executive Officer upon request. The source test report shall, at a minimum, include: conducted by an independent third party demonstrating the specific unit complies with the emission limits at low and high fire, shall be maintained on-site; and
  - (4A) The source test report clearly specifies tThe emissions limit of the uUnit in parts per million ppmv or poundsng/J of NOx or ppmv of CO per million BTU of hHeat inputOutput;:-

~~(B) The source test report must identify that the source test was conducted pursuant to a~~ The District South Coast AQMD approved pProtocol used to conduct the source test; and

~~(5C) The source test report shall be maintained on site at the facility where the unit is being operated and made available to the Executive Officer, at all times, upon request, as long as the unit is being operated. The model and serial numbers of the specified uUnit(s) shall clearly be indicated on the source test report.~~

(2) The owner or operator of a Unit that elects to comply with the exemption in paragraph (i)(2), shall:

(A) Demonstrate compliance with the annual fuel consumption determined using one of the following methods:

(i) Fuel usage recorded by a non-resettable totalizing fuel meter, corrected to Standard Conditions;

(ii) Fuel usage calculated by multiplying the number of hours recorded by a non-resettable totalizing time meter and the Rated Heat Input Capacity of the Unit; or

(iii) Monthly fuel billing statement or any other equivalent methodology to quantify the fuel usage that is approved by the Executive Officer;

(B) Calibrate the non-resettable totalizing fuel meter or non-resettable time meter according to the manufacturer's recommendation; and

(C) Use the higher heating value of 1,050 million BTU per million standard cubic feet for converting natural gas measured in volume to therm.

~~(f)~~ Identification and Verification of Compliant Units

(1) Newly Manufactured Units

The manufacturer shall display the model number of the ~~u~~Unit complying with subdivision ~~(e)~~ on the shipping carton and permanent rating plate. The manufacturer shall also display the certification status on the shipping carton and on the ~~u~~Unit.

(2) Certified Retrofit Kits

The manufacturer shall display the model number of the retrofit kit and manufacturer and model of applicable ~~u~~Units on the shipping carton and in a plainly visible portion of the retrofit kit.

~~(3) — Modified Units~~

~~A unit with a new or modified burner shall display the new rated heat input capacity and certification status on a new permanent rating plate. The gross heat input shall be based on the maximum fuel input corrected for fuel heat content, temperature and pressure.~~

(3) Rated Heat Input Capacity Documentation

The owner or operator of a Unit shall:

(A) Maintain on-site a copy of all documents identifying the Unit's Rated Heat Input Capacity including the manufacturer's or distributor's manual or invoice; and

(B) Maintain documentation of the Rated Heat Input Capacity for a modified Unit, signed by the licensed person modifying the Unit, including a description of all Unit modifications, the dates the Unit was modified, and calculation of Rated Heat Input Capacity.

~~(g) — Enforcement~~

~~The Executive Officer may periodically inspect distributors, retailers, and installers of units located in the District, and conduct such tests as are deemed necessary to ensure compliance with subdivision (c).~~

(h) Exemptions

(1) The provisions of this rule shall not apply to:

(A) Units used in ~~Recreational~~ ~~∨~~ Vehicles; or

(B) Units subject to the limits in ~~District~~ South Coast AQMD Rule 1121 – Control of Nitrogen Oxides ~~F~~ from Residential Type, Natural Gas-fired Water Heaters.

~~(C) Units at a RECLAIM or former RECLAIM facility subject to a NOx emission limit in a different rule for an industry specific category defined in Rule 1100 – Implementation Schedule for NOx Facilities.~~

~~(D) Units at a municipal sanitation service facility subject to a NOx emission limit in a Regulation XI rule adopted or amended after December 7, 2018.~~

(2) Until the effective dates in Table 2, ~~T~~he NOx and CO provisions of paragraphs (c)(3), (c)(4), and (c)(5) emission limits in the rule shall not apply to:

~~(A) Any residential unit.~~

~~(B) — Units with a Rated Heat Input Capacity greater than 400,000 BTU per hour, but less than or equal to 2,000,000 BTU per hour, that are demonstrated to use less than 9,000 therms during every calendar year. — Compliance with the exemption limit shall be demonstrated by a calculation based on the annual fuel consumption recorded by an in-line fuel meter or the annual operating hours recorded by a timer and using one of the following methods.~~

~~(i) — Annual therm usage recorded by fuel meter and corrected to standard pressure; or~~

~~(ii) — Amount of fuel (i.e., in thousand cubic feet of gas corrected to standard pressure) converted to therms using the higher heating value of the fuel; or~~

~~(iii) — Annual therm usage calculated by multiplying the number of hours fuel is burned by the rated heat input capacity of the unit converted to therms.~~

(3) The provisions of paragraphs (d)(3), (d)(4), (d)(5), (d)(6), (d)(7), and (d)(8) shall not apply to Units installed or used for Residential or Multifamily Structures.

~~(i) — Progress Reports~~

~~Any person that manufacturers Type 1 units or Type 2 fire tube boilers, steam boilers producing steam pressure greater than 100 pounds per square inch or thermal fluid heaters subject to this rule shall submit to the District a report on progress towards compliance with the emission limits of paragraphs (e)(7) and (e)(8). Progress reports shall include detailed information on all burner and control technologies evaluated and emission tests. The progress reports shall be submitted to the District for the following categories of equipment by the specified date:~~

~~(1) — Type 2 fire tube boilers, steam boilers producing steam pressure greater than 100 pounds per square inch and thermal fluid heaters shall be submitted to the District by January 31, 2008.~~

~~(2) — Type 1 units shall be submitted to the District by January 31, 2010.~~