

(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 water heaters~~Water Heaters, ~~boilers~~Boilers, and ~~process heaters~~Process Heaters fired with, or designed to be fired with, natural gas 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 larger sized process heaters in this range. Beginning, January 1, 2000, the provisions of this rule are applicable to manufacturers, distributors, retailers, refurbishers, installers and operators of new units. Beginning July 1, 2002, 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 fired with, or designed to be fired with, natural gas that have a Rated Heat Input Capacity less than or equal to 2,000,000 British Thermal Units (Btu) per hour.

(~~b~~c) Definitions

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

~~(2)~~ 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~~Unit.
- (3) COMPLIANCE PORTAL means the dedicated webpage on the South Coast AQMD website for submitting reports, notifications, or any documents to comply with South Coast AQMD rule(s).
- ~~(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.~~
- (4) EXISTING BUILDING means a building that is not a New Building as defined in this rule. Existing Building includes any structures on the property including, but not limited to, sheds, detached garages, pools, and spas.
- ~~(65)~~ 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.
- ~~(76)~~ HEAT INPUT means the chemical heat released due to assumed complete combustion of fuel ~~into~~ a ~~unit~~Unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- ~~(87)~~ HEAT OUTPUT means the enthalpy of the working fluid output of the ~~unit~~Unit.
- (8) HIGH TEMPERATURE UNIT means any Unit that is designed and used to produce steam or to heat water above 180 degrees Fahrenheit.
- (9) INDEPENDENT TESTING LABORATORY means a testing laboratory that meets the requirements of ~~Distriet~~Rule 304 – Equipment, Materials, And Ambient Air Analyses, subdivision (k) and is approved by the ~~Distriet~~Executive Officer to conduct certification testing under the Protocol: Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers (Protocol).
- (10) INSTALL means the action of an Installer to place a Unit in a position ready for use.

- (11) INSTALLER means a person who Installs a Unit and is required to obtain a license issued by the Department of Consumer Affairs Contractors State License Board for a classification related to buildings and appliances.
- (~~10~~12) INSTANTANEOUS WATER HEATER means a ~~WATER HEATER~~tankless Water Heater with a ~~RATED HEAT INPUT CAPACITY~~Rated Heat Input Capacity less than or equal to 2,000,000 ~~BTU~~Btu per hour that heats water only on-demand when it flows through a heat exchanger, which is a device used to transfer heat between two or more mediums of different temperatures.
- (13) MOBILE HOME means a prefabricated structure on a permanently attached chassis.
- (14) NEW BUILDING means a building that is newly constructed or a building with a major alteration which changes the occupancy classification of a building, which means a change in the formal designation of the primary purpose of the building pursuant to 2022 Title 24 California Building Code Part 2 Chapter 3 for occupancy classification and use, and that does not have a Unit installed prior to the applicable Table 3 compliance dates. New Building comprises any structures on the property including, but not limited to sheds, detached garages, pools, and spas.
- (~~14~~15) OXIDES OF NITROGEN (NO_x) EMISSIONS means the sum of nitric oxides and nitrogen dioxides emitted, calculated, and expressed as nitrogen dioxide.
- (16) PARTS PER MILLION BY VOLUME (ppmv) means, for the purpose of this rule, Parts Per Million by Volume of a pollutant at a three percent oxygen correction on a dry basis at Standard Conditions.
- (~~12~~17) POOL HEATER means a ~~WATER HEATER~~Water Heater designed and used to heat a pool, hot tub, or spa.
- (~~13~~18) 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~~19) 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~~20) 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~~21) RATED HEAT INPUT CAPACITY means the gross ~~HEAT INPUT~~Heat Input of the combustion device, as supported by required documentation.
- (~~17~~22) RECREATIONAL VEHICLE means any vehicle used for recreational purposes designed to include a ~~w~~Water ~~h~~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~~23) RESELLER means anyone who sells either retail, wholesale, or on an individual basis ~~TYPE 1 UNITS or TYPE 2 UNITS~~any Unit.
- (~~20~~24) 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. Residential Structures includes any structures on the property including, but not limited to, sheds, detached garages, pools, and spas.
- (25) SMALL BUSINESS is as defined by Rule 102 – Definition of Terms (Rule 102).
- (26) STANDARD CONDITIONS are as defined by Rule 102.
- (~~21~~) ~~TANK TYPE WATER HEATER means a WATER HEATER with a 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~~27) THERM means 100,000 ~~BTU~~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~~28) TYPE 1 UNIT means any ~~WATER HEATER, BOILER or PROCESS HEATER~~Unit with a ~~RATED HEAT INPUT CAPACITY~~Rated Heat Input Capacity less than or equal to 400,000 ~~BTU~~Btu per hour, excluding ~~TANK TYPE WATER HEATERS~~Water Heaters subject to the limits of District Rule 1121 – Control of Nitrogen Oxides from Residential Type, Natural Gas-fired Water Heaters (Rule 1121).

- (~~25~~29) TYPE 2 UNIT means any ~~WATER HEATER, BOILER or PROCESS HEATER~~Unit with a ~~RATED HEAT INPUT CAPACITY~~Rated Heat Input Capacity greater than 400,000 ~~BTU~~Btu per hour up to and including 2,000,000 ~~BTU~~Btu per hour.
- (~~26~~30) UNIT means any ~~BOILER~~Boiler, ~~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~~31) 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% O₂, dry) or 0.037 pound NOx per million BTU of heat input and no more than 400 ppm of carbon monoxide (at 3% O₂, 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 NO₂) per joule (93 lb per billion BTU) of heat output or 55 ppm NOx emissions (at 3% O₂, 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) Prior to the applicable Table 3 compliance dates, 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 Table 1 emission limits.

Table 1 – Emission Limits

<u>Equipment Category</u>	<u>NOx Emission Limit*</u>	<u>Carbon Monoxide (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 NO₂) of Heat Output or the specified ppmv of NOx or CO corrected at 3 percent volume stack gas oxygen (O₂) on a dry basis.

** Type 1 Units are not subject to a CO limit in 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 NOx emission level of less than 14 nanograms of NOx (calculated as NO₂) per joule of heat output or less than or equal to 20 ppm of NOx emissions (at 3% O₂, 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 NOx emission level of less than 14 nanograms of NOx (calculated as NO₂) per joule of heat output or less than or equal to 20 ppm of NOx emissions (at 3% O₂, dry).~~
- (2) No person shall manufacture, supply, sell, offer for sale, or Install, for use in the South Coast AQMD, any Unit, unless such Unit complies with the applicable Table 2 emission limits by the applicable Table 3 compliance dates.

Table 2 – Zero-Emission Limits, Compliance Schedule, and Unit Age

<u>Equipment Category</u>	<u>NOx and CO Emission Limits (ppmv)</u>	<u>Compliance Schedule</u>	<u>Unit Age (years)</u>
<u>Type 1 Unit*</u>	<u>0</u>	<u>Phase I</u>	<u>15</u>
<u>Instantaneous Water Heater ≤ 200,000 Btu/hr</u>	<u>0</u>		<u>25</u>
<u>Instantaneous Water Heater > 200,000 Btu/hr</u>	<u>0</u>	<u>Phase II</u>	<u>25</u>
<u>Type 1 Pool Heater</u>	<u>0</u>		<u>15</u>
<u>Type 2 Unit**</u>	<u>0</u>		<u>25</u>
<u>Type 1 High Temperature Unit</u>	<u>0</u>	<u>Phase III</u>	<u>25</u>
<u>Type 2 High Temperature Unit</u>	<u>0</u>		<u>25</u>

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

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

Table 3 – Compliance Dates for Zero-Emission Limits

<u>Phase</u>	<u>Building Type</u>	<u>Compliance Date</u>
<u>Phase I</u>	<u>New Buildings</u>	<u>January 1, 2026</u>
	<u>Existing Buildings</u>	<u>January 1, 2029</u>
<u>Phase II</u>	<u>New Buildings</u>	<u>January 1, 2028</u>
	<u>Existing Buildings</u>	<u>January 1, 2031</u>
<u>Phase III</u>	<u>New Buildings</u>	<u>January 1, 2029</u>
	<u>Existing Buildings</u>	<u>January 1, 2033</u>

- (3) On and after the Table 3 compliance dates, an owner or operator of a Unit shall not operate a Unit which exceeds Table 2 emission limits once the Unit age determined pursuant to subdivision (e) is greater than or equal to the applicable Table 2 Unit age.
- (4) The owner or operator of a Unit may modify a Unit and demonstrate it meets the emission limits in subdivision (d) by:
 - (A) Modifying the Unit with a Certified Retrofit Kit; or
 - (B) Causing an Independent Testing Laboratory to conduct a source test according to the South Coast AQMD Source Test Method 100.1 - Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling.
- (5) An owner or operator of a Unit that modifies or replaces a burner in the Unit shall comply with the following applicable emission limits:
 - (A) Table 1 emission limits if the modification or replacement occurs:
 - (i) Prior to the applicable Table 3 compliance dates; or
 - (ii) Before the Unit reaches its Table 2 Unit age; or
 - (B) Table 2 emission limits if the modification or replacement occurs:
 - (i) On and after the applicable Table 3 compliance dates; and
 - (ii) When the Unit has reached its Table 2 Unit age.
- (6) Except for units at a RECLAIM or former RECLAIM facility, an owner or operator shall not operate any Type 2 Unit manufactured prior to January 1, 2000, in the South Coast AQMD which does not meet the NOx emission limit of 30 ppmv, or 0.037 pound NOx per million Btu of heat input, and the CO emission limit of 400 ppmv.

- (7) An owner or operator of a Unit that elects to comply with the exemption in:
 - (A) Paragraph (k)(2) shall not operate a Unit that exceeds the applicable Table 1 emission limits on and after 180 days of failing to demonstrate compliance with paragraph (k)(2) pursuant to paragraph (g)(2);
 - (B) Paragraph (k)(3) shall not operate a Unit that exceeds the applicable Table 2 emission limits on and after 180 days of failing to demonstrate compliance with paragraph (k)(3) pursuant to paragraph (g)(2); or
 - (C) Paragraph (k)(5) shall not operate a Unit that does not comply with paragraph (d)(3) on and after 180 days of failing to meet the definition of a Small Business.
- ~~(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 NO_x emission limits in subdivision (c) represent BARCT.~~

~~(A) If the Executive Officer determines that the NO_x 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 NO_x 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 NO_x 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 Unit age as of January 1, 2025, for any Unit where the Unit age cannot be determined pursuant to subparagraph (e)(1)(A).

~~(df)~~ Certification

- (1) The manufacturer shall obtain confirmation from an ~~i~~Independent ~~t~~Testing ~~l~~Laboratory prior to applying for certification for a natural gas Unit that each ~~u~~Unit model or retrofit kit complies with the ~~applicable requirements of subdivision (e)~~ Table 1 emission limits when fired with natural gas. -This confirmation shall be based upon emission source tests of a randomly selected ~~u~~Unit of each model, and the Protocol shall be adhered to during the confirmation testing of all ~~u~~Units subject to this rule.
- (2) When applying for ~~u~~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)~~ (ed). 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 ~~u~~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 ~~(e)~~ (ed) for each model to be certified. -The source test report shall be prepared by the confirming ~~i~~Independent ~~t~~Testing ~~l~~Laboratory and shall contain all of the elements identified in ~~Section 10 of~~ the Protocol for each ~~u~~Unit 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 ~~u~~Unit certification, the manufacturer shall submit the items identified in paragraph ~~(df)~~ (ed)(2) no more than ~~ninety (90)~~ 180 days after the date of the source test identified in subparagraph ~~(df)~~ (ed)(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 shall demonstrate compliance pursuant to subparagraph (d)(4)(B) by maintaining A copy of athe South Coast AQMD approved source test report and making 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 The applicable NOx and CO emissions limit of the uUnit in parts per million or pounds of NOx per million BTU of heat input;:

(B) The source test report must identify that the source test was conducted pursuant to a The DistrictSouth Coast AQMD approved test method protocol and Independent Testing Laboratory that conducted 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 shall clearly be indicated on the source test report; and:~~

(D) The Rated Heat Input Capacity of the Unit.

(2) The owner or operator of a Unit electing to comply with the exemptions in paragraph (k)(2) or (k)(3) shall:

(A) Demonstrate compliance with the annual Therm limit for each calendar year, 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, as calculated using Equation 1 (Eq. 1):

$$\text{Fuel Usage (Therms)} = \frac{H \times R \times 1,000,000 \text{ (Btu per MMBtu)}}{100,000 \text{ (Btu per Therm)}} \quad (\text{Eq. 1})$$

Where:

H = Number of Hours Recorded

R = Rated Heat Input Capacity of the Unit (MMBtu/hr); or

- (iii) Monthly fuel billing statement or equivalent documentation;
- (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 of Compliant Units

(1) Newly Manufactured Units

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

(2) Certified Retrofit Kits

The manufacturer shall display the model number of the retrofit kit and manufacturer and model of applicable uUnits 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.~~

~~(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 (e).~~

(i) Alternative Compliance Options

(1) Alternative Compliance Option for Utility Upgrades

If an owner or operator of a Unit required to meet the Table 2 emission limits will encounter delays beyond the reasonable control of the owner or operator to meet the applicable compliance dates in Table 3 or paragraph (d)(3) because a utility upgrade is required and the applicable utility company is unable to provide the necessary power to operate the Unit as demonstrated with documents specified in paragraph (j)(6), the owner or operator of a Unit shall:

(A) Notify the Executive Officer through the Compliance Portal:

(i) At least 90 days prior to the Unit's applicable compliance date in Table 3 or paragraph (d)(3) to request an extension of no more than 18 months from the applicable compliance date; or

(ii) If utility upgrades are needed to operate a Unit that is replacing a Unit that failed and is no longer operational, no later than 30 days after the date the Unit became non-operational to request an extension of no more than 18 months from the date of Unit failure;

(B) Obtain a letter from the Executive Officer through the Compliance Portal approving the extension:

(i) Prior to the Unit's compliance date; or

(ii) No later than 90 days after the date the notification was submitted pursuant to clause (i)(1)(A)(ii) for a Unit failure;

(C) If the utility upgrades will not be completed within the 18-month extension approved pursuant to subparagraph (i)(1)(B), the owner or operator may:

(i) Request an additional extension of no more than 18 months through the Compliance Portal at least 90 days prior to the end of the initial 18-month extension;

- (ii) Obtain a letter from the Executive Officer through the Compliance Portal prior to the end of the initial extension; and
 - (iii) Provide a progress report to the Executive Officer through the Compliance Portal every six months after the start of additional extension, which includes, but is not limited to:
 - (A) The status of the utility upgrade;
 - (B) The estimated date the utility provider will complete the utility upgrade; and
 - (C) Documentation which justifies the update to estimated date for completion;
 - (D) Provide a follow-up notification to the Executive Officer through the Compliance Portal no later than 72 hours after the Unit complying with the Table 2 emission limits has been installed;
 - (E) Maintain records pursuant to paragraph (j)(6);
 - (F) For a Unit that is non-operational during the extension approved pursuant to subparagraph (i)(1)(B) or clause (i)(1)(C)(ii), the owner or operator may elect to operate a temporary Unit during the extension, provided:
 - (i) The temporary Unit complies with Table 1 emission limits;
 - (ii) No later than 72 hours after the date the temporary Unit was installed, the owner or operator notifies the Executive Officer through the Compliance Portal; and
 - (iii) No later than 72 hours after the date the temporary Unit was disconnected, the owner or operator notifies the Executive Officer through the Compliance Portal.
- (2) Alternative Compliance Option for Multiple Units
An owner or operator of five or more Units that are required to meet the Table 2 emission limits within two consecutive calendar years pursuant to paragraph (d)(3) may elect to submit an alternative compliance plan requesting alternative compliance date(s), provided the owner or operator:
- (A) Submit the alternative compliance plan at least one year prior to the earliest compliance due date, with a filing fee payment pursuant to Rule 306 – Plan Fees;
 - (B) Specify compliance date(s) in the alternative compliance plan for the number of Units to meet the Table 2 emission limits as below:

- (i) Three or at least 30 percent of the Units by the latest applicable compliance date;
 - (ii) At least 30 percent of the Units one year after the latest applicable compliance date; and
 - (iii) The remaining Units two years after the latest applicable compliance date;
 - (C) If a Unit meets the requirements to apply for the alternative compliance option for utility upgrades pursuant to paragraph (i)(1), the owner or operator may elect to include a request in their alternative compliance plan for an extension of no more than 18 months from the earliest compliance due date of the Units in the alternative compliance plan, provided that the owner or operator shall:
 - (i) Include the documentation listed in paragraph (j)(6) with the application for an alternative compliance plan; and
 - (ii) If the utility upgrades will not be completed within the 18-month extension in the approved alternative compliance plan, the owner or operator may submit a revised alternative compliance plan at least 180 days prior to the end of the initial 18-month extension to request an additional extension of no more than 18 months before initiating the alternative compliance schedule specified in paragraph (i)(2)(B), with a filing fee payment pursuant to Rule 306 – Plan Fees; and
 - (D) Obtain written approval from the Executive Officer, as specified in paragraph (i)(3):
 - (i) Prior to the earliest compliance due date of all Units included in the alternative compliance plan; and
 - (ii) If an additional extension was requested pursuant to clause (i)(2)(C)(ii), prior to the end of the initial approved 18-month extension.
- (3) Approval of Alternative Compliance Option for Multiple Units

The Executive Officer shall review the request for alternative compliance date submitted pursuant to paragraph (i)(2) and provide written approval or disapproval based on whether the following criteria are met:

 - (A) The owner or operator demonstrated they are operating five or more Units that are required to be replaced based on Unit age pursuant to

paragraph (d)(3) to meet Table 2 emission limits within two calendar years;

(B) The request was submitted at least one year prior to the earliest applicable compliance due date; and

(C) The proposed alternative compliance date meets the criteria specified in subparagraph (i)(2)(B) or subparagraph (i)(2)(C), if applicable.

(4) Alternative Compliance Option for Emergency Replacements

If a Unit requires a short-term replacement due to sudden Unit failure after the applicable Table 3 compliance date and an electrical upgrade is required to increase the power supply capacity to operate a Unit that complies with Table 2 emission limits, excluding Units utilizing alternative compliance options specified in paragraphs (i)(1), (i)(6), and (i)(7):

(A) For Units used in buildings that are not Residential Structures, the owner or operator of the Unit may elect to Install and operate a temporary Unit that complies with Table 1 emission limits for up to six months prior to installing a Unit that complies with Table 2 emission limits provided the owner or operator of the Unit:

(i) Report the date the existing Unit failed and the date the temporary Unit was installed through the Compliance Portal no later than 72 hours after the date the temporary Unit was installed;

(ii) Report the date the temporary Unit was disconnected through the Compliance Portal no later than 72 hours after the date the temporary Unit was disconnected; and

(iii) Report the date the Unit complying with Table 2 emission limits was installed through the Compliance Portal no later than 72 hours after the date the new Unit was installed;

(B) For Units sold for use in Residential Structures, a manufacturer, distributor, retailer, or Installer may elect to offer a Unit for rent that complies with Table 1 emission limits for up to six months prior to installing a Unit that complies with Table 2 emission limits provided the manufacturer, distributor, retailer, or Installer report the date the temporary Unit was rented through the Compliance Portal no later than 72 hours after the date the temporary Unit was rented.

(5) Alternative Compliance Option for Mobile Homes

An owner or operator of an Instantaneous Water Heater manufactured prior to [Date of Rule Adoption] that is installed in a Mobile Home may elect to Install an Instantaneous Water Heater with Rated Heat Input Capacity of less than or equal to 200,000 Btu/hr that complies with the Table 1 emission limits until January 1, 2033, in lieu of the applicable compliance date in Table 3 or paragraph (d)(3), provided the labeling requirement in paragraph (j)(2) is met. On and after January 1, 2033, any Instantaneous Water Heater with Rated Heat Input Capacity of less than or equal to 200,000 Btu/hr manufactured, supplied, sold, offered for sale, or installed for use in a mobile home must meet the Table 2 emission limits upon replacement.

(6) Alternative Compliance Option for Units at a Property Under Lease

An owner or operator of a Unit in a property under lease shall be provided an extension of no more than 24 months to comply with the Table 2 emission limits, if the installation is delayed beyond the reasonable control of the owner or operator of the Unit, provided the owner or operator of the Unit:

(A) Occupies the property under a lease as a tenant before and after the applicable compliance date in Table 3 or paragraph (d)(3);

(B) Reports the date the existing Unit is required to be replaced to comply with the Table 2 emission limits to the Executive Officer through the Compliance Portal no later than 90 days prior to the applicable compliance date in Table 3 or paragraph (d)(3);

(C) If a Unit is non-operational during the extension specified in paragraph (i)(6), the owner or operator may elect to operate a temporary Unit during the extension, provided:

(i) The temporary Unit complies with Table 1 emission limits;

(ii) No later than 72 hours after the date the temporary Unit was installed, the owner or operator notifies the Executive Officer through the Compliance Portal; and

(iii) No later than 72 hours after the date the temporary Unit was disconnected, the owner or operator notifies the Executive Officer through the Compliance Portal;

(D) Report the date the new Unit was installed to comply with the Table 2 emission limits to the Executive Officer through the

Compliance Portal no later than 72 hours after the date the new Unit was installed; and

(E) Maintain records pursuant to paragraph (j)(7).

(7) Alternative Compliance Option for Construction

An owner or operator of a Unit shall be provided an extension of no more than six months to comply with the Table 2 emission limits if the installation is delayed because construction is required to expand the space designed to house the Unit, and associated equipment necessary for operating the Unit, excluding Units utilizing the alternative compliance options specified in paragraphs (i)(1), (i)(2), (i)(5), and (i)(6), provided the owner or operator of a Unit:

(A) Reports the date the existing Unit is required to be replaced to comply with the Table 2 emission limits to the Executive Officer through the Compliance Portal no later than 90 days prior to the applicable compliance date in Table 3 or paragraph (d)(3);

(B) If a Unit is non-operational during the extension specified in paragraph (i)(7), the owner or operator may elect to operate a temporary Unit during the extension, provided:

(i) The temporary Unit complies with Table 1 emission limits;

(ii) No later than 72 hours after the date the temporary Unit was installed, the owner or operator notifies the Executive Officer through the Compliance Portal; and

(iii) No later than 72 hours after the date the temporary Unit was disconnected, the owner or operator notifies the Executive Officer through the Compliance Portal;

(C) Report the date the new Unit was installed to comply with the Table 2 emission limits through the Compliance Portal no later than 72 hours after the date the new Unit was installed; and

(D) Maintain records pursuant to paragraph (j)(8).

(8) An owner or operator of a Unit electing to use any of the alternative compliance options in this subdivision that fails to comply with the applicable requirements of the alternative compliance options must comply with the applicable requirements in paragraph (d)(2) or (d)(3).

(j) Labeling, Reporting, and Recordkeeping Requirements

- (1) Pursuant to the labeling schedule in Table 4, any Unit that is supplied or offered for sale for use within the South Coast AQMD prior to the applicable Table 3 compliance dates that complies with the Table 1 emission limits, but not the Table 2 emission limits, shall prominently display the statement “If installed in South Coast AQMD: For Installation and Use in Existing Buildings Only.”

Table 4 – Labeling Schedule

<u>Unit’s Compliance Schedule</u>	<u>Labeling Requirements</u>	
	<u>Start Date</u>	<u>End Date</u>
<u>Phase I</u>	<u>January 1, 2026</u>	<u>January 1, 2029</u>
<u>Phase II</u>	<u>January 1, 2028</u>	<u>January 1, 2031</u>
<u>Phase III</u>	<u>January 1, 2029</u>	<u>January 1, 2033</u>

- (2) Effective January 1, 2029, to January 1, 2033, an Instantaneous Water Heater with Rated Heat Input Capacity of less than or equal to 200,000 Btu/hr supplied or offered for sale for use in a Mobile Home within the South Coast AQMD and complying with the alternative compliance date in paragraph (i)(5) shall prominently display the statement “If installed in South Coast AQMD: For Installation and Use in Mobile Homes Only.”

(3) Annual Reporting Requirement

Effective on and after the Table 3 compliance dates for Existing Buildings, manufacturers of natural gas-fired Unit(s) shall submit a report by March 1st of the following calendar year to the Executive Officer through the Compliance Portal. The report shall include:

- (A) Name of the product manufacturer;
- (B) List of product model(s);
- (C) Number of Units and Rated Heat Input Capacity of each model that was sold into or within the South Coast AQMD; and
- (D) The applicable equipment category in Table 2.

(4) General Recordkeeping Requirements

The owner or operator of a Unit shall maintain on-site, or provide upon the Executive Officer’s request, the following records:

- (A) A copy of the manufacturer’s and/or distributor’s written instructions;

(B) A record of the maintenance activity for a period of not less than three years;

(C) A copy of a government-issued document that grants permission to an individual or organization to initiate a construction project which determines the eligibility of New Building or Existing Building for the compliance of the rule; and

(D) A record demonstrating annual fuel usage pursuant to subparagraph (g)(2)(D) for a period of not less than three years, if the owner or operator of a Unit is electing to comply with the exemptions in paragraph (k)(2) or (k)(3).

(5) Rated Heat Input Capacity Documentation

The owner or operator of a Unit shall maintain on-site, or provide upon the Executive Officer's request, a copy of all documents identifying the Unit's Rated Heat Input Capacity including:

(A) Manufacturer's or distributor's manual or invoice; and

(B) Maintain documentation of the Rated Heat Input Capacity for a Unit modified pursuant to paragraph (d)(5), signed by the licensed person modifying the Unit, including:

(i) Description of all Unit modifications;

(ii) Dates the Unit was modified; and

(ii) Calculation of Rated Heat Input Capacity.

(6) Recordkeeping for Alternative Compliance Option for Utility Upgrades

An owner or operator of a Unit that elects to comply with paragraph (i)(1) shall maintain records on-site, or make them available to the Executive Officer upon request, until three years after the end date of the approved extension(s), that demonstrate the utility provider's progress on providing the necessary power, including but not limited to an official document signed by the responsible party of the utility company that services the facility that includes:

(A) An explanation of the utility upgrades required by the utility company;

(B) Communications with the utility provider when the utility upgrade was requested;

(C) Estimated date the utility provider will complete the utility upgrades;

(D) Any additional information to substantiate that an additional time is necessary; and

(E) Documentation which demonstrates that the delays are outside of the reasonable control of the owner or operator.

(7) Recordkeeping for Alternative Compliance Option for Units at a Property Under Lease

An owner or operator that elects to comply with paragraph (i)(6) shall maintain records on-site, or make them available to the Executive Officer upon request, until three years after reporting through the Compliance Portal pursuant to subparagraph (i)(6)(B), including but not limited to:

(A) A legally binding contract that explains the terms and duration of the lease under which the owner or operator of the Unit is a tenant renting the property from a landlord; and

(B) Documentation which demonstrates that the delays are beyond the reasonable control of the owner or operator of the Unit.

(8) Recordkeeping for Alternative Compliance Option for Construction

An owner or operator that elects to comply with paragraph (i)(7) shall maintain records on-site, or make them available to the Executive Officer upon request, until three years after reporting through the Compliance Portal pursuant to subparagraph (i)(7)(A), including but not limited to:

(A) Images that show the activity of construction and the expansion of the space for the Unit and associated equipment by the construction; and

(B) Documentation which demonstrates the construction, which could be a construction permit or contract.

(9) Small Business Registration

An owner or operator of a Unit electing to comply with the exemption in paragraph (k)(5) shall register their facility as a Small Business through the Compliance Portal at least 90 days prior to the Unit reaching the Unit age specified in Table 2. The owner or operator of the Unit shall maintain records on-site, or make them available to the Executive Officer upon request, until three years after registering through the Compliance Portal, to demonstrate:

(A) Business legal owner and contact information;

(B) Number of current employees;

(C) The total gross annual receipts; and

(D) If the business is a not-for-profit training center.

(10) The owner or operator of a Unit required to submit information through the Compliance Portal in paragraph (i)(1), (i)(4), (i)(6), (i)(7), (j)(3), or (j)(9) shall provide the required information by calling 1-800-CUT-SMOG® (800-288-7664) if:

(A) The Compliance Portal is not available;

(B) The functions within the Compliance Portal do not allow the owner or operator of a Unit to enter the necessary information; or

(C) The owner or operator of a Unit does not have access to the Compliance Portal.

~~(h)~~ (k) Exemptions

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

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

(B) Units subject to ~~the a NOx emission~~ limits in ~~District~~ Rule 1121—~~Control of Nitrogen Oxides From Residential Type, Natural Gas-fired Water Heaters;~~ and

~~(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)~~ (C) 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~~ Rule 1179.1 – Emission Reductions From Combustion Equipment at Publicly Owned Treatment Works Facilities.

(2) Until the applicable Table 3 compliance dates, ~~the Table 1 provisions of paragraphs (c)(3), (c)(4), and (c)(5) emission limits~~ shall not apply to:

~~(A) Any residential unit.~~

~~(B) Type 2 Units manufactured prior to January 1, 2000 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)(2) and (d)(3) and subparagraph (d)(5)(B) shall not apply to the following Units installed prior to [Date of Rule Adoption] that meet Table 1 emission limits:

(A) Units 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 that are demonstrated to use less than 3,000 Therms during every calendar year for; or

(B) Units 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 that demonstrate to use less than 2,000 Therms during every calendar year.

(4) The provisions of paragraphs (d)(3), (d)(4), (d)(5), (d)(6), and (d)(7), and the recordkeeping and reporting provisions in paragraphs (j)(4) through (j)(9) shall not apply to Units installed or used in Residential Structures.

(5) The provisions of paragraph (d)(3) shall not apply to a Unit installed in a Small Business, provided that the owner or operator of the Unit complies with paragraph (j)(9).

(6) Certification requirements specified in paragraphs (f)(1) through (f)(4) shall not apply to Units complying with Table 2 emission limits.

~~(i) Progress Reports~~

~~Any person that manufactures 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:~~

Proposed Amended Rule 1146.2 (Cont.) (~~Amended December 7, 2018~~**PAR TBD**)

- (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.~~