

(Adopted November 7, 2014)(Amended [Date of Adoption])

**PROPOSED AMENDED RULE 1153.1 EMISSIONS OF OXIDES OF NITROGEN
FROM COMMERCIAL FOOD OVENS**

[Rule Index to be included after adoption]

(a) Purpose ~~and Applicability~~

The purpose of this rule is to reduce ~~nitrogen oxide~~ Oxides of Nitrogen (NOx) and Carbon Monoxide (CO) emissions from gaseous and liquid fuel-fired ~~combustion equipment~~ Commercial Food Ovens as defined in this rule.

(b) Applicability

This rule applies to owners or operators of Commercial Food Ovens including, but not limited to, with in-use ovens Bakery Ovens, Dryers, Roasters, Smokehouses, Tortilla Ovens, Food Ovens, and dry roasters with nitrogen oxide (NOx) emissions from fuel combustion Units that require South Coast Air Quality Management District (SCAQMD) permits and are used to prepare food or products for making beverages for human consumption. ~~As of November 7, 2014, the equipment subject to this rule is no longer subject to SCAQMD Rule 1147 except for the compliance determination option set forth in Rule 1147 (d)(7).~~

(~~b~~c) Definitions

~~(1) ANNUAL HEAT INPUT means the amount of heat released by fuels burned in a burner or unit during a calendar year, based on the fuel's higher heating value.~~

(1) ALTERNATIVE COMPLIANCE SCHEDULE PLAN means a compliance plan that allows an owner or operator of a Unit(s) required to meet a zero emission NOx limit to apply for an alternative compliance schedule if electrical upgrades are required by their utility company which are beyond control of the facility.

(2) BAKERY OVEN means a Commercial Food Oven used to heat, cook, or prepare baked products. Bakery Ovens include, but are not limited to, tunnel ovens, conveyor ovens, tray ovens, and griddle ovens.

(3) COMBUSTION-BASED EMISSION LIMITS means emission limits that rely on technologies that combust gaseous or liquid fuel and include Phase I Emission Limits ~~and emission limits that rely on Hybrid Oven Technologies.~~

~~(2) BTU means British thermal unit(s).~~

- ~~(3) — COMBUSTION MODIFICATION means replacement of a burner, burners, fuel or combustion air delivery system(s), or burner control system(s).~~
- (4) COMBUSTION SYSTEM means a specific combination of burner, fuel supply, combustion air supply, and control system components as identified in a permit application to ~~the SCAQMD~~ South Coast AQMD pursuant to subdivision (e), or in an application for certification pursuant to subdivision (eh) of this rule, or in a SCAQMD South Coast AQMD permit, if as applicable.
- (5) COMMERCIAL FOOD OVEN means a cooking device with a Rated Heat Input Capacity greater than 325,000 British Thermal Unit(s) (Btu) per hour used to heat, cook, dry, or prepare food or products for making beverages for human consumption that is used as part of a business.
- (6) COOKING OVEN means a Commercial Food Oven used to cook food products including, but is not limited to, meat, fish, poultry, or vegetables. Cooking ovens do not include Bakery Ovens, Tortilla Ovens, Drying Ovens, and Smokehouses.
- (7) DECOMMISSION means to permanently shut down a Unit by removing the fuel, air, electricity, or other utility source connected to it and to inactivate the Unit's applicable South Coast AQMD permit.
- (8) DIRECT-FIRED BAKERY OVEN means a Bakery Oven where the energy or heat source is placed directly inside the baking chamber and the heat transfer is primarily carried out by radiation from the flames, electrical resistance, or hot surface.
- (9) DRYER means a Commercial Food Oven, using either a direct or indirect heat source, to dry food products using a rotating drum. Dryers include spray dryers which are Commercial Food Oven where liquids or slurry are atomized and dried into powder form by spraying the feed into a heated chamber.
- (810) DRYING OVEN means a Commercial Food Oven ~~cooking device or chamber~~ used to remove water or moisture to dry food products.
- ~~(5) — FOOD OVEN means an oven used to heat, cook, dry, or prepare food or products for making beverages for human consumption.~~
- (11) ELECTRIC HEATING ELEMENT means any component of a Commercial Food Oven used to transform electrical energy into heat.
- (12) FORMER RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market (RECLAIM) program 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.
- (613) GASEOUS FUEL means natural gas; compressed natural gas (CNG); liquefied petroleum gases (LPG), including but not limited to propane and butane; synthetic

natural gas (SNG); or other fuel that is a gas at ambient temperature and atmospheric pressure.

(14) GRIDDLE OVEN means a Commercial Food Oven that uses a moving griddle, which is a flat or grooved metal plate, that is heated between 550°F to 900°F to produce baked products such as English muffins.

~~(715)~~ HEAT INPUT means the higher heating value of the fuel to the burner or ~~UNIT~~ Unit measured as ~~BTU-Btu~~ per hour.

~~(816)~~ HEAT OUTPUT means the enthalpy of the working fluid at the output of a burner or ~~UNIT~~ Unit.

~~(16) —HYBRID OVEN means any Unit that is equipped with both a Combustion System and an Electric Heating Element.~~

(17) INDIRECT-FIRED BAKERY OVEN means a Bakery Oven that uses heat exchangers connected to the burning zone to indirectly heat the baking chamber, where the product being baked does not contact the combustion gases.

~~(818)~~ INFRARED BURNER (IR Burner) means a burner with ceramic, metal fiber, sintered metal, or perforated metal flame-holding surface; with more than 50 percent% of the ~~heat output~~ Heat Output as infrared radiation; that is operated in a manner where the zone ~~including and~~ above the flame-holding surface is red and does not produce observable blue or yellow flames in excess of ½ inch (13 mm) in length; and with a ~~RATED HEAT INPUT CAPACITY~~ Rated Heat Input Capacity per square foot of flame-~~holding~~ surface of 100,000 ~~BTU~~ Btu per hour or less.

~~(10) —IN USE UNIT means any UNIT that is demonstrated to the Executive Officer that it was in operation at the current location prior to November 7, 2014.~~

~~(119)~~ ~~NO_x EMISSIONS~~ OXIDES OF NITROGEN (NO_x) EMISSIONS means the sum of nitrogen oxide and nitrogen dioxide in flue gas, collectively expressed as nitrogen dioxide.

(20) PARTS PER MILLION BY VOLUME (ppmv) means, for the purpose of this rule, Parts Per Million by Volume of a pollutant corrected to three percent oxygen on a dry basis at Standard Conditions.

(21) PHASE I EMISSION LIMITS means the NO_x and CO emission limits specified in Table 1.

(22) PHASE II EMISSION LIMITS means the NO_x and CO emission limits specified in Table 1, when applicable.

~~(22) —PHASE III EMISSION LIMITS means the NO_x and CO emission limits specified in Table 1, when applicable.~~

- ~~(12) — PROTOCOL means a SCAQMD approved set of test procedures for determining compliance with emission limits for applicable equipment.~~
- ~~(13) — RADIANT TUBE HEATING means an indirect heating system with a tube or tubes; with burner(s) that fire(s) within the tube(s); and where heat is transferred by conduction, radiation, and convection from the burner flame and combustion gases to the tube(s) and the heat is then transferred to the process by radiation and convection from the heated tube(s) without any direct contact of process materials with burner flames and combustion gasses.~~
- ~~(14)~~23 RATED HEAT INPUT CAPACITY means the gross ~~HEAT INPUT~~ Heat Input of the combustion ~~UNIT~~ Unit specified on a permanent rating plate attached by the manufacturer to the device. If the ~~UNIT~~ Unit or ~~COMBUSTION SYSTEM~~ Combustion System has been altered or modified such that its gross ~~HEAT INPUT~~ Heat Input is higher or lower than the rated ~~HEAT INPUT~~ Heat Input capacity specified on the original manufacturer's permanent rating plate, the modified gross ~~HEAT INPUT~~ Heat Input shall be considered as the ~~RATED HEAT INPUT CAPACITY~~ Rated Heat Input Capacity.
- ~~(24)~~ RECLAIM FACILITY means a facility, or any of its successors, that was in the RECLAIM program as of January 5, 2018, as established in Regulation XX.
- ~~(15)~~25 RESPONSIBLE OFFICIAL means:
- (A) For a corporation: a president or vice-president of the corporation in charge of a principal business function or a duly authorized person who performs similar policy-making functions for the corporation; ~~or~~
 - (B) For a partnership or sole proprietorship: general partner or proprietor, respectively; or
 - (C) For a government agency: a duly authorized person.
- ~~(16)~~26 ROASTER means ~~an a Unit oven~~ a Commercial Food Oven used to dry roast food products that include, but are not limited to, nuts, coffee beans, or other plant seeds. ~~ROASTER— Roasters includes coffee roasting units—Units~~ with an integrated afterburner which consists of a single burner used as the heat source for the afterburner and Roaster. ~~that is the only heat source, which also provides heat to roast the coffee beans.~~
- ~~(27)~~ SMOKEHOUSE means a Commercial Food Oven in which meat products are cured using smoke and heat.
- ~~(28)~~ SOURCE TEST PROTOCOL means a South Coast AQMD approved set of test procedures for determining compliance with emission limits for applicable equipment.

~~(29) — SPRAY DRYER means a Unit where liquids are atomized and dried into powder form by spraying the liquid feed into a heated chamber.~~

~~(3029)~~ STANDARD CONDITIONS is as defined by Rule 102 – Definition of Terms.

~~(1730)~~ THERM means 100,000 BTU/Btu.

~~(31)~~ TORTILLA OVEN means a Commercial Food Oven used to cook, toast, or bake tortilla chips and other tortilla products.

~~(1832)~~ UNIT means any ~~oven, dryer, smoker, or ROASTER~~ Commercial Food Oven, including, but not limited to, Bakery Oven, Cooking Oven, Direct-Fired Bakery Oven, Dryer, Drying Oven, Indirect-Fired Bakery Oven, Roasters, ~~Spray Dryer, Smokehouse,~~ or Tortilla Ovens ~~requiring a SCAQMD permit and~~ used to prepare food or products for making beverages for human consumption.

(ed) Requirements

(1) ~~In accordance with the compliance schedule in Table 2, any person owning or operating an in-use unit~~ An owner or operator of a Unit subject to this rule shall not operate the ~~unit~~ Unit in a manner that exceeds: ~~carbon monoxide (CO) emissions of 800 ppm by volume, referenced to 3% oxygen (O2), and the applicable nitrogen oxide emission limit specified in Table 1.~~

(A) For a Unit that was installed and in operation before [Date of Rule Adoption]:

(i) Phase I Emission Limits specified in Table 1 according to the compliance schedule in paragraph (e)(1); and

(ii) Phase II Emission Limits specified in Table 1, if applicable, on and after January 1, 2027, and before January 1, 2030, for Units that have a Phase III Emission Limit, according to the compliance schedule in paragraph (e)(2); and

~~(iii) — Phase III Emission Limits specified in Table 1, if applicable, on and after January 1, 2030, according to the compliance schedule in paragraph (e)(3).~~

(B) For an owner or operator that submits a permit application to install or retrofit a Unit on or after [Date of Rule Adoption]:

(i) Phase I Emission Limits ~~for a Unit that is installed before January 1, 2027~~ for a permit application that was submitted before January 1, 2024, for a Unit with a Phase II Emission Limit; and

(ii) Phase II Emission Limits, if applicable, ~~for a Unit that is installed on and after January 1, 2027 and before January 1, 2030, for Units~~

~~that have a Phase III Emission Limit; and for a permit application that was submitted on and after January 1, 2024.~~

~~(iii) — Phase III Emission Limits, if applicable, for a Unit that is installed on and after January 1, 2030.~~

Table 1—NO_x Emission Limit for In-Use Units

NO_x Emission Limit	
PPM @ 3% O ₂ , dry or Pound/mmBTU heat input	
Process Temperature	
<i>≤ 500° F</i>	<i>> 500° F</i>
40 ppm or 0.042 lb/mmBTU	60 ppm or 0.073 lb/mmBTU

Table 1 – NO_x and CO Emission Limits (ppmv)¹

<u>Equipment Categories</u>		<u>Phase I</u>		<u>Phase II</u>		<u>Phase III</u>	
		<u>NO_x</u>	<u>CO</u>	<u>NO_x</u>	<u>CO</u>	<u>NO_x</u>	<u>CO</u>
<u>Direct Fired Bakery Ovens</u>	<u>≤3 MMBtu/hr</u>	<u>30</u>	<u>800</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>N/A</u>
	<u>>3 MMBtu/hr</u>	<u>30</u>	<u>800</u>	<u>30/0²N/A</u>	<u>800N/A</u>	<u>0</u>	<u>0</u>
<u>Indirect-Fired Bakery Ovens</u>		<u>30</u>	<u>800</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>N/A</u>
<u>Griddle Oven</u>		<u>30</u>	<u>800</u>	<u>N/A</u>	<u>N/A</u>		
<u>Tortilla Ovens</u>	<u>Heated solely by IR Burners</u>	<u>15</u>	<u>800</u>	<u>N/A</u>	<u>N/A</u>	<u>0</u>	<u>0</u>
	<u>All Other Tortilla Ovens</u>	<u>30</u>	<u>800</u>	<u>N/A</u>	<u>N/A</u>	<u>0</u>	<u>0</u>
<u>Cooking Ovens</u>	<u>≤3 MMBtu/hr</u>	<u>30</u>	<u>800</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>N/A</u>
	<u>>3 MMBtu/hr</u>	<u>30</u>	<u>800</u>	<u>N/A</u>	<u>N/A</u>		
<u>Drying Ovens</u>		<u>30</u>	<u>800</u>	<u>0N/A</u>	<u>0N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Smokehouses</u>		<u>30</u>	<u>800</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>N/A</u>
<u>Spray Dryers</u>		<u>30</u>	<u>800</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Roasters</u>		<u>30</u>	<u>800</u>	<u>N/A</u>	<u>N/A</u>	<u>0</u>	<u>0</u>

¹ Parts per million by volume (ppmv) corrected to three percent oxygen, dry

² ~~Hybrid Oven operating requirements specified in paragraph (d)(3)~~

Table 2—Compliance Schedule Equipment Category(ies)	Permit Application Shall be Submitted By	Unit Shall Be in Compliance On and After
Ovens used solely for making pita bread manufactured prior to 1999	October 1, 2017	July 1, 2018
Griddle ovens manufactured prior to 1999	October 1, 2017	July 1, 2018

Ovens heated solely by indirect-fired radiant tubes manufactured prior to 2002	October 1, 2021	July 1, 2022
Other unit manufactured prior to 1992	October 1, 2015	July 1, 2016
Other unit manufactured from 1992 through 1998	October 1, 2018	July 1, 2019
Ovens heated solely by indirect-fired radiant tubes manufactured after 2001 and any other unit manufactured after 1998	October 1 of the year prior to the compliance date	July 1 of the year the unit is 20 years old

(2) Emission Rate Limits

An owner or operator of a Unit that elects to comply with a NOx emission limit based on pound per million Btu (lb/MMBtu) in lieu of a ppmv limit shall not operate the Unit in a manner that exceeds the following limits, pursuant to the schedule in paragraph (e)(1):

(A) 0.036 lb/MMBtu in lieu of the 30 ppmv; or

(B) 0.018 lb/MMBtu in lieu of the 15 ppmv.

~~(3) Hybrid Oven Requirements~~

~~An owner or operator of a Hybrid Oven shall only operate the Combustion System to preheat the Hybrid Oven to normal operating temperature and shall operate the Hybrid Oven solely using the Electric Heating Element during routine operations to produce the food product.~~

(43) Interim Concentration Limits

An owner or operator of a Unit at a Former RECLAIM Facility shall not operate the Unit in a manner that exceeds a 102 ppmv interim NOx concentration limit upon the date of becoming a Former RECLAIM Facility until that Unit is required to meet the emission limits in paragraph (d)(1).

(54) One pound or less of NOx per day Emission Limit

In lieu of complying with the ~~Table 1-Phase I~~ emission limits, an owner or operator of a Unit may elect to comply with one of the following NOx emission limits and shall maintain records pursuant to subdivision (j):

(A) One pound or less of NOx per day averaged over a calendar month pursuant to paragraph (i)(1); or

(B) One pound per day of NOx pursuant to paragraph (i)(2).

(65) Decommissioned Unit(s)

In lieu of complying with the Phase I or Phase II or ~~Phase III~~ Emission Limits, an owner or operator of a Unit may elect to Decommission a Unit pursuant to the schedule in paragraph (e)(65) for a Unit subject to Phase I Emission Limits and pursuant to the schedule in subparagraph (e)(2)(A) for a Unit subject to Phase II Emission Limits, or pursuant to the schedule in subparagraph (e)(3)(A) for a Unit subject to Phase III Emission Limits by:

- (A) Inactivating the applicable South Coast AQMD permit for the Unit to be decommissioned; and
- (B) Disconnecting and blinding the fuel line(s) of the Unit to be decommissioned.

~~(2) Unit age shall be based on:~~

~~(A) The original date of manufacture of the unit as determined by:~~

- ~~(i) Original manufacturer's identification or rating plate permanently fixed to the equipment. If not available, then:~~
- ~~(ii) Invoice from manufacturer or distributor for purchase of equipment. If not available, then:~~
- ~~(iii) Information submitted to SCAQMD with prior permit applications for the specific unit sufficient to establish the manufacture date. If not available, then:~~
- ~~(iv) Unit shall be deemed by SCAQMD to be 20 years old.~~

~~(3) Owners or operators of units shall determine compliance with the emissions limit specified in Table 1 pursuant to the provisions of subdivisions (d) or (e) using a SCAQMD approved test protocol. The test protocol shall be submitted to the SCAQMD at least 150 days prior to the scheduled test and approved by the SCAQMD Source Testing Division.~~

~~(4) Identification of Units~~

~~(A) Unmodified Units~~

~~The owner or operator shall display the model number and the rated heat input capacity of the unit complying with subdivision (c) on a permanent rating plate. The owner or operator shall also display the SCAQMD certification status on the unit when applicable.~~

~~(B) Modified Units~~

~~The owner or operator of a unit with a combustion modification shall display the modified rated heat input capacity for the unit and individual burners on new permanent supplemental rating plates installed in an~~

~~accessible location on the unit and every burner. The gross heat input shall be defined by the maximum fuel input corrected for fuel heat content, temperature, and pressure. Gross heat input shall be demonstrated by a calculation based on fuel consumption recorded by an in-line fuel meter. The permanent supplemental rating plates shall include the date the unit and burners were modified and the date any replacement burners were manufactured. The documentation of rated heat input capacity for modified units shall include the name of the company and person modifying the unit, a description of all modifications, the dates the unit was modified, and calculation of rated heat input capacity. The documentation for modified units shall be signed by the highest ranking person modifying the unit.~~

~~(5) 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 and permanent rating plates attached to the unit and individual burners pursuant to paragraph (c)(4).~~

~~(67) On or after November 7, 2014, any person owning or operating An owner or operator of a unit Unit subject to the Combustion-Based Emission Limits ~~subject to this rule~~ shall perform ~~combustion system~~ Combustion System maintenance in accordance with the manufacturer's schedule and specifications as identified in the manual or other written materials supplied by the manufacturer or distributor. ~~The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the manufacturer's, distributor's, installer's, or maintenance company's written maintenance schedule and instructions and retain a record of the maintenance activity for a period of not less than three years. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the SCAQMD certification or SCAQMD approved source test reports, conducted by an independent third party, demonstrating that the specific unit complies with the emission limit. The source test report(s) must identify that the source test was conducted pursuant to a SCAQMD approved protocol. The model and serial numbers of the specified unit shall clearly be indicated on the source test report(s). The owner or operator shall maintain on the unit in an accessible location a permanent or permanent supplemental rating plate. The maintenance instructions, maintenance records, and the source test report(s) or SCAQMD certification shall be made available to the Executive Officer upon request.~~~~

~~(78) Any person owning or operating An owner or operator of a unit Unit ~~subject to this rule~~ ~~complying required to comply with an~~ pounds per million Btu emission limit~~

~~in Table 1 expressed as pounds per million BTU shall install and maintain in service a non-resettable, totalizing fuel meters for the fuel(s) supplied to each unit's Unit fuel(s) pursuant to paragraph (j)(87) prior to the compliance determination specified in paragraph (c)(3) subdivision (g).~~

~~(98) An Owners owner or operators of a unit Unit with a combustion system Combustion System that operates at only one firing rate, as required by permit condition, that complies and is required to comply with an emission limit using expressed as pounds per million BTU Btu shall install a non-resettable, totalizing time or fuel meter for the fuel(s) supplied to each fuel Unit pursuant to paragraph (j)(87).~~

~~(9) An owner or operator of a Unit that does not have a CO permit limit on [Date of Rule Adoption], shall meet the CO emission limit in Table 1 and shall apply for a CO permit limit when required to submit a permit application to meet a NOx emission limit.~~

~~(10) The Executive Officer shall conduct a technology assessment and report to the Stationary Source Committee by January 1, 2026, if the Phase II Emission Limits established in Table 1 are technically feasible and represent Best Available Retrofit Control Technology (BARCT) as defined in the California Health and Safety Code Section 40406 and assess if zero-emission limits for other Commercial Food Oven categories can be established as BARCT. If the technology assessment specified in this paragraph demonstrates Phase II Emission Limits will not be technically feasible by the applicable compliance date and/or demonstrates additional Commercial Food Oven categories are technically feasible to transition to zero-emission technologies, the Executive Officer shall initiate rule development for a revised compliance schedule.~~

~~(8) Unit fuel and electric use meters that require electric power to operate shall be provided a permanent supply of electric power that cannot be unplugged, switched off, or reset except by the main power supply circuit for the building or the unit's safety shut-off switch. Any person owning or operating a unit subject to this rule shall not shut off electric power to a unit meter unless the unit is not operating or is shut down for safety.~~

~~(9) Compliance by Certification~~

~~For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, and upon approval by the Executive Officer, an owner or operator may demonstrate compliance with the emission limit and demonstration requirement of this subdivision by certification granted to the manufacturer for any model of unit or specific combustion system sold for use in~~

~~the SCAQMD. Any unit or combustion system certified pursuant to subdivision (e) shall be deemed in compliance with the emission limit in Table 1 of paragraph (e)(1) and demonstration requirement of paragraph (e)(3) of this subdivision, unless a SCAQMD conducted or required source test shows non-compliance.~~

~~(10) — Alternate Compliance Plan For Multiple Units~~

~~Owners or operators of facilities with three or more in-use units with compliance dates in the same year or two consecutive years may request a delay and phase-in of the compliance dates in Table 2 for the affected units. The term of the alternate compliance plan shall be no more than 3 years for 3 or 4 units and no more than 5 years for 5 or more units. At least one unit shall comply with the applicable emission limit by July 1 of the first applicable compliance date specified in Table 2 for the affected units and at least one unit shall comply with the applicable emission limit by July 1 of each year thereafter. The alternate compliance plan shall identify the units included in the plan and commit to a schedule showing when the compliance testing for each unit will be completed and when each unit will demonstrate compliance with the emission limit. All owners or operators of these units shall demonstrate compliance with the applicable emission limit of this rule in accordance with the schedule in the plan and before the end of the term of the alternate compliance plan. The alternate compliance plan submitted pursuant to this paragraph shall include:~~

- ~~(A) — A cover letter submitted to the SCAQMD identifying that the application is for a Rule 1153.1 (e)(10) Alternate Compliance Plan for Multiple Units and signed by the responsible official;~~
- ~~(B) — A completed SCAQMD Form 400A with company name, SCAQMD Facility ID, identification that the application is for a compliance plan (section 7 of form), identification that the request is for a Rule 1153.1 (e)(10) Alternate Compliance Plan for Multiple Units (section 9 of the form), and signature of the responsible official;~~
- ~~(C) — Documentation of the applicable units' permit IDs, equipment descriptions, and heat ratings (BTU/hour), and the proposed alternate compliance schedule;~~
- ~~(D) — Filing fee payment (Rule 306 (e)); and~~
- ~~(E) — Initial plan evaluation fee payment (Rule 306 (i)(1)).~~

~~(11) — Compliance Plan for Burner Replacement Prior to Rule Adoption~~

~~Notwithstanding the requirements of paragraph (e)(1), units with combustion modifications completed prior to November 7, 2014 that resulted in replacement of 100% of the unit's burners during a one-time period of less than 31 consecutive~~

~~days, shall comply with the applicable emission limit specified in Table 1 of paragraph (c)(1) on either (1) July 1 of the year the modification is ten years old if the unit operates no more than 8 hours per day on all days of operation or (2) July 1 of the year the modification is 5 years old if the unit operates greater than 8 hours on any day. The hours of operation shall be documented by daily recordkeeping starting January 1, 2015 or the date the plan is submitted, whichever is earlier. To qualify for this time extension, the owner/operator must submit an alternate compliance plan to the SCAQMD no later than 90 days after November 7, 2014 with documentation of the purchase, replacement, and identification of each new burner installed. The alternate compliance plan submittal to the SCAQMD shall include:~~

- ~~(A) — A letter submitted to the SCAQMD stating the application is for a Rule 1153.1 (c)(11) Burner Replacement Prior to Rule Adoption Alternate Compliance Plan; identifying the applicable unit, unit permit ID, dates the emissions test protocol and emissions test results shall be submitted to the SCAQMD, and proposed alternate compliance schedule (5 or 10 years) with beginning and ending dates; and signed by the responsible official;~~
- ~~(B) — A completed SCAQMD form 400A with company name, identification that application is for an alternate compliance plan (section 7 of form), identification that the request is for the Rule 1153.1 (c)(11) Burner Replacement Prior to Rule Adoption Compliance Plan (section 9 of form), and signature of the responsible official;~~
- ~~(C) — Documentation of the date of replacement of the burners with invoices for burner purchase, burner installation, and tuning, and a listing of each new burner installed in the unit with each burner's manufacturer, model number, serial number, date of manufacture on burner rating plate or date stamp on burner, and each burner's rated heat input capacity;~~
- ~~(D) — Documentation of the applicable unit's permit ID, description, and heat rating (BTU/hour);~~
- ~~(E) — Filing fee payment (Rule 306 (e)); and~~
- ~~(F) — Initial plan evaluation fee payment (Rule 306 (i)(1)).~~
- ~~(12) — Owners or operators of units operating with an alternate compliance plan pursuant to paragraph (c)(11) shall install, prior to submittal of the compliance plan application, a non-resettable time meter on the applicable unit and document and maintain records of unit use every day of operation for the duration of the alternate compliance plan.~~

~~(13) — Owners or operators of units operating with an alternate compliance plan pursuant to paragraph (c)(11) that replace more than 50% of the burners identified in the alternate compliance plan more than 365 days before the ending date of the alternate compliance plan shall submit an emissions testing protocol for the applicable unit Unit to the SCAQMD South Coast AQMD within 30 days of the date when more than 50% of the burners are replaced. Owners and operators of these units shall conduct emissions testing and demonstrate compliance with the emission limits in Table 1 of paragraph (c)(1) within 270 days of the date they replace more than 50% of the burners identified in the alternate compliance plan.~~

(e) Compliance Schedule

(1) Phase I Emission Limits

An owner or operator of a Unit that is required to meet the Phase I Emission Limits and does not have an existing condition that limits the NOx and CO emissions to the applicable Phase I Emission Limits shall:

(A) For a burner that is 7 years or older, as determined pursuant to paragraph (f)(1), as of [Date of Rule Adoption]:

(i) Submit a permit application on or before July 1, 2024, for each Unit to limit the NOx and CO emissions to a level not to exceed the Phase I Emission Limits; and:

(ii) Not operate a Unit that exceeds the applicable Phase I Emission Limit later than 12 months after the date a permit is issued, or the extension date as approved in writing pursuant to Rule 205 – Expiration of Permits to Construct (Rule 205).

~~(i) — On or before July 1, 2024, for any Unit where the burner(s) is replaced or where the burner age is 227 years or older, as determined pursuant to paragraph (f)(1), as of [Date of Rule Adoption]; or~~

(B) For a burner that is less than 7 years old, as determined pursuant to paragraph (f)(1), as of [Date of Rule Adoption]:

(i) Submit a permit application On or before the July 1st that follows the calendar year when a Unit's burner reaches 227 years, as determined pursuant to paragraph (f)(1).

(Bii) Not operate a Unit that exceeds the applicable Phase I Emission Limit later than one of the following dates, whichever is sooner:

- (iA) 12 months after the date a permit is issued, or the extension date as approved in writing pursuant to Rule 205 – Expiration of Permits to Construct (Rule 205); or
- (iiB) The burner age is ~~25~~10 years as determined pursuant to paragraph (f)(1).

(2) Phase II Emission Limits

Unless an owner or operator has an approved Alternative Compliance Schedule Plan, on and after January 1, 2027, an owner or operator of a Unit required to meet the Phase II Emission Limits shall:

(A) For existing Units that will be retrofit to meet Phase II Emission Limits ~~and for Units with a Hybrid Oven emission limit pursuant to (d)(3)~~, submit a permit application for each Unit to limit the NOx and CO emissions to a level not to exceed the Phase II Emission Limits:

(i) On or before July 1, 2027, if:

(A) The Unit is ~~25~~22 years or older by January 1, 2027, as determined pursuant to paragraph (f)(2); and

(B) The burner is ~~10~~7 years or older by January 1, 2027, as determined pursuant to paragraph (f)(1); ~~and~~

(ii) On or before the July 1st after the end of the calendar year when:

(A) The Unit reaches ~~25~~22 years of age, as determined pursuant to paragraph (f)(2); and

(B) The burner reaches ~~10~~7 years of age, as determined pursuant to paragraph (f)(1); ~~and~~ or the end of the calendar year is deemed as December 31, 2032, whichever is earlier.

(B) For Units subject to a subparagraph (e)(2)(A) permit submittal requirement, not operate a Unit that exceeds the applicable Phase II Emission Limit later than one of the following dates, whichever is sooner:

(i) 12 months after the date a permit is issued, or the extension date as approved in writing pursuant to Rule 205 – Expiration of Permits to Construct (Rule 205); or

(ii) On or before January 1, 2036, the date the ~~burner~~Unit age is 25 years or older, as determined pursuant to paragraph (f)(2), and the burner age is 10 years or older, as determined pursuant to paragraph (f)(1); or

(iii) After January 1, 2036, the date the Unit age is 25 years or older, as determined pursuant to paragraph (f)(2).

(C) For Units with a zero Phase II Emission Limit

Decommission each Unit ~~with~~ that exceeds the applicable zero-Phase II Emission Limit pursuant to paragraph (d)(65):

(i) On or before July 1, 2027, if:

(A) The Unit is 25 years or older by January 1, 2027, as determined pursuant to paragraph (f)(2); and

(B) The burner is 10 years or older by January 1, 2027, as determined pursuant to paragraph (f)(1).; ~~and~~

(ii) On or before the July 1st after the end of the calendar year when:

(A) The Unit reaches 25 years of age, as determined pursuant to paragraph (f)(2); and

(B) The burner reaches 10 years of age, as determined pursuant to paragraph (f)(1) or on January 1, 2036, whichever is earlier.; ~~and~~

(D) Submit an application to comply with the volatile organic compound limits in Rule 1153 – Commercial Bakery Ovens, if applicable.

~~(3) — Phase III Emission Limits~~

~~On and after January 1, 2030, an owner or operator of a Unit required to meet the Phase III Emission Limits shall:~~

~~(A) — For existing Units that will be retrofit to meet Phase III Emission Limits, submit a permit application to modify an existing permit for each Unit to limit the NOx and CO emissions to a level not to exceed the Phase III Emission Limits:~~

~~(i) — On or before July 1, 2030, if:~~

~~(A) — The Unit is 25 years or older by January 1, 2030, as determined pursuant to paragraph (f)(2); and~~

~~(B) — The burner is 10 years or older by January 1, 2030, as determined pursuant to paragraph (f)(1); and~~

~~(ii) — On or before the July 1st after the end of the calendar year when:~~

~~(A) — The Unit reaches 25 years of age, as determined pursuant to paragraph (f)(2); and~~

~~(B) — The burner reaches 10 years of age, as determined pursuant to paragraph (f)(1); and~~

~~(B) — For Units subject to a paragraph (e)(3)(A) permit submittal requirement, not operate a Unit that exceeds the applicable Phase III Emission Limit later than one of the following dates, whichever is sooner:~~

~~(i) — 12 months after the date a permit is issued, or the extension date as approved in writing pursuant to Rule 205— Expiration of Permits to Construct (Rule 205); or~~

~~(ii) — The burner age is 25 years.~~

~~(C) — For existing Units that will be replaced to meet Phase III Emission Limits, Decommission each Unit with an emission that exceeds the Phase III Emission Limit pursuant to paragraph (d)(6):~~

~~(i) — On or before July 1, 2030, if:~~

~~A) — The Unit is 25 years or older by January 1, 2030, as determined pursuant to paragraph (f)(2); and~~

~~(B) — The burner is 10 years or older by January 1, 2030, as determined pursuant to paragraph (f)(1); and~~

~~(ii) — On or before the July 1st that follows the end of the calendar year when:~~

~~(A) — The Unit reaches 25 years of age, as determined pursuant to paragraph (f)(2); or~~

~~(B) — The burner reaches 10 years if age, as determined pursuant to paragraph (f)(1); and~~

~~(D) — Submit an application to comply with the volatile organic compound limits in Rule 1153— Commercial Bakery Ovens, if applicable.~~

~~(43) Alternative Compliance Schedule Phase II or Phase III—Emission Limits~~
~~An owner or operator of a Unit that is required to meet a Phase II or Phase III Emission Limit that is unable to provide the necessary power to operate the Unit from their utility company within the compliance schedule in paragraph (e)(2) shall submit an Alternative Compliance Schedule Plan meeting the requirements in paragraph (k)(1).~~

~~(54) An owner or operator of a Unit that elects to comply with the one pound or less of NOx per day emission limit pursuant to paragraph (d)(54) that fails to demonstrate compliance pursuant to subdivision (i) shall:~~

~~(A) Submit a permit application to meet the applicable ~~Phase I~~ emission limit within 180 days of failure to demonstrate compliance pursuant to subdivision (i) or exceeding the NOx emission limit pursuant to paragraph (d)(54); and~~

~~(B) Not operate a Unit that exceeds the applicable Phase I Emission Limit by one of the following dates, whichever is sooner:~~

- (i) 12 months after the date a permit is issued or the extension date as approved in writing pursuant to Rule 205 – Expiration of Permits to Construct (Rule 205); or
 - (ii) Two years from the date the Unit failed to demonstrate compliance.
- (65) An owner or operator that elects to Decommission a Unit pursuant to paragraph (d)(65) in lieu of complying with the Phase I Emission Limits shall Decommission the Unit no later than 30 months after the applicable permit application submittal date pursuant to paragraph (e)(1).
- (76) An owner or operator of a Unit that fails to meet the compliance by certification requirements specified in paragraph (h)(1) or fails to submit manufacturer's emission certification, contract, or purchase order for an Combustion System that is identical to the Combustion System specified in the application for the Unit's permit and installed in the Unit, shall demonstrate compliance with the applicable Phase I Emission Limit through source test pursuant to subdivision (g) according to the following schedule:
 - (A) Submit a complete source test protocol within 180 days of failing the compliance demonstration;
 - (B) Conduct the initial source test within 90 days after receiving written approval of the Source Test Protocol by the Executive Officer; and
 - (C) Conduct subsequent source tests according to the schedule in paragraph (g)(1).
- (87) An owner or operator of a Unit that fails to operate the Unit as specified in the manufacturer's emission certification in paragraph (h)(1), including specified processes, operating conditions, and temperatures, or in case of an expired certification and the manufacturer does not re-certify the Unit, shall demonstrate compliance with the applicable Phase I Emission Limits through source test pursuant to subdivision (g) according to the following schedule:
 - (A) Submit a complete source test protocol within 180 days of failing the compliance demonstration;
 - (B) Conduct the initial source test within 90 days after receiving written approval of the Source Test Protocol by the Executive Officer; and
 - (C) Conduct subsequent source tests according to the schedule in paragraph (g)(1).

(f) Equipment Age

(1) Burner Age

An owner or operator of a Unit shall determine the burner age as follow:

- (A) Burner age for a Unit equipped with burners of varying ages shall be based on the oldest burner age;
- (B) Burner age shall be based on the original date of installation determined by:
 - (i) Invoice from purchase of burner equipment provided by burner manufacturer;
 - (ii) Information submitted to South Coast AQMD in previous permit applications for replacement of the specific burner;
 - (iii) Original Unit manufacturer's identification or rating plate permanently affixed to the Unit; or
 - (iv) Any other method of determining burner age that can be substantiated through written information as approved by the Executive Officer.
- (C) The burner shall be deemed to be ~~227~~ years old as of January 1, 2024, for any Unit where the burner age cannot be determined pursuant to subparagraphs (f)(1)(A) and (f)(1)(B).

(2) Unit Age

An owner or operator of a Unit shall determine the Unit age as follow:

- (A) Unit age shall be based on the original date of installation determined by:
 - (i) Invoice from purchase of Unit provided by manufacturer;
 - (ii) Information submitted to South Coast AQMD in previous permit applications for Unit replacement;
 - (iii) Original Unit manufacturer's identification or rating plate permanently affixed to the Unit; or
 - (iv) 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 to be 25 years old as of ~~July 1, 2026~~ January 1, 2024, for any Unit where the Unit age cannot be determined pursuant to subparagraph (f)(2)(A).

(dg) ~~Compliance Determination~~ Source Test Requirements for Units Subject to Combustion-Based Emission Limits

- (1) An owner or operator of a Unit(s) subject to Combustion-Based Emission Limits or a South Coast AQMD permit concentration limit shall conduct simultaneous source tests for NOx and CO, averaged over a period of at least 15 consecutive

minutes and no more than 60 consecutive minutes, to demonstrate compliance with the applicable Combustion-Based Emission Limit every five calendar years, but no earlier than 48 calendar months after the previous source test.

~~(1) — All compliance determinations pursuant to paragraphs (c)(1), (c)(3), (c)(9), (c)(10) and this subdivision shall be calculated:~~

~~(A) — Using a SCAQMD approved test protocol averaged over a period of at least 15 and no more than 60 consecutive minutes; and~~

~~(B) — After unit start up:~~

~~Each compliance determination shall be made in the maximum heat input range at which the unit normally operates. An additional compliance determination shall be made using a heat input of less than 35% of the rated heat input capacity.~~

~~For compliance determinations after the initial approved test, the owner or operator is not required to resubmit a protocol for approval if: there is a previously approved protocol and the unit has not been altered in a manner that requires a permit alteration, and rule or permit emission limits have not changed since the previous test.~~

~~(2) — All parts per million emission limits specified in subdivision (c) shall be referenced at 3 percent volume stack gas oxygen on a dry basis.~~

(2) An owner or operator of a Unit shall conduct an initial source test:

(A) For Units installed before [Date of Adoption]:

(i) No later than 24 months after [Date of Rule Adoption] or no later than 24 months after the date the facility operating the Unit becomes a Former RECLAIM Facility, whichever is later, and establish the date of this source test as the basis for subsequent source testing frequency; or

(ii) Use the results of a South Coast AQMD-approved source test conducted between the applicable frequency required in paragraph (g)(1) and [Date of Rule Adoption] and establish the date of this source test as the basis for subsequent source testing frequency. The source test and source test protocol must be representative of the current operation of the equipment, or a new Source Test Protocol will be required to be submitted pursuant to paragraph (g)(3).

(B) For Units installed after [Date of Adoption], ~~within six months of Unit's initial start-up~~ according to the conditions set forth in the permit to construct and establish the date of this source test as the basis for subsequent source

testing frequency unless an extension of time has been approved in writing by the Executive Officer.

- (3) An owner or operator of a Unit required to conduct a source test pursuant to this subdivision shall:
- (A) Submit a complete Source Test Protocol for approval at least 60 days prior to conducting the initial source test; and
 - (B) Conduct the source test within 90 days after issuance of a written approval of the Source Test Protocol by the Executive Officer.
- (4) Unless requested by the Executive Officer, after the approval of the initial Source Test Protocol pursuant to paragraph (g)(3), an owner or operator of a Unit is not required to resubmit a Source Test Protocol for approval if:
- (A) The method of operation of the Unit has not been altered in a manner that requires a complete permit application submittal;
 - (B) Rule or South Coast AQMD permit emission limits have not changed since the previous source test;
 - (C) There have been no changes in the source test method(s) that is referenced in the approved Source Test Protocol; and
 - (D) The approved Source Test Protocol is representative of the operation and configuration of the Unit.
- (35) An owner or operator of a Unit shall conduct the source test to demonstrate ~~Compliance~~ compliance with the ~~NO_x and CO Phase I emission limits of subdivision (e)~~ applicable Combustion-Based Emission Limits and ~~determination determine~~ of stack-gas oxygen and carbon dioxide concentrations ~~for this rule shall be determined according to the following procedures:~~
- (A) Using an independent contractor to conduct testing, which is approved by the Executive Officer under the Laboratory Approval Program for the applicable test methods;
 - (B) Using a South Coast AQMD approved Source Test Protocol;
 - (C) At the maximum Heat Input of the Unit normal operating range;
 - (D) At a Heat Input of less than 35 percent of the Rated Heat Input Capacity; and
 - (E) Using at least one of the following applicable test methods:
 - (Ai) ~~SCAQMD~~ South Coast AQMD Source Test Method 100.1 – Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling (March 1989);

- (~~B~~ii) ASTM Method D6522-00 – Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers;
 - (~~C~~iii) United States Environmental Protection Agency Conditional Test Method CTM-030 – Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers;
 - (~~D~~iv) ~~SCAQMD~~ South Coast AQMD Source Test Method 7.1 – Determination of Nitrogen Oxide Emissions from Stationary Sources (March 1989);
 - (~~E~~v) ~~SCAQMD~~ South Coast AQMD Source Test Method 10.1 – Carbon Monoxide and Carbon Dioxide by Gas Chromatograph/Non-Dispersive Infrared Detector (GC/NDIR) – Oxygen by Gas Chromatograph-Thermal Conductivity (GC/TCD) (March 1989); or
 - (~~F~~vi) Any alternative test method determined approved before the test in writing by the Executive Officers of ~~the SCAQMD~~ South Coast AQMD; ~~and~~ the California Air Resources Board, and ~~by~~ the United States Environmental Protection Agency.
- (46) ~~For any An~~ owner or operator who ~~chooses~~ elects to comply with the Table 1 limits using ~~pound per million BTU~~, NOx emissions in pounds per million BTU-Btu of ~~heat input~~ Heat Input shall ~~be~~ calculated the NOx emissions using procedures in 40 CFR Part 60, Appendix A, Method 19, Sections 2 and 3.
- (5) ~~Records of source tests shall be maintained on site and made available to SCAQMD personnel upon request. Emissions determined to exceed any limits established by this rule through the use of any of the test methods specified in subparagraphs (d)(3)(A) through (d)(3)(F) and paragraph (d)(4) shall constitute a violation of this rule.~~
- (6) ~~All compliance determinations shall be made by SCAQMD or using an independent contractor to conduct testing, which is approved by the Executive Officer under the Laboratory Approval Program for the applicable test methods.~~
- (7) ~~For equipment with two or more units in series or multiple units with a common exhaust, the An~~ owner or operator of equipment with two or more Units in series or multiple Units with a common exhaust, including an afterburner, thermal oxidizer, or vapor incinerator subject to Rule 1147 – NOx Reductions from

Miscellaneous Sources (Rule 1147) may elect to demonstrate compliance with the applicable emission limits in Table 1 by one of the following:

- (A) Test each ~~unit~~-Unit separately and demonstrate each ~~unit's~~-Unit's compliance with the applicable emission limit; or
- (B) Test only after the last ~~unit~~-Unit in the series and at the end of a common exhaust for multiple ~~units~~Units, when all ~~units~~-Units are operating, and demonstrate that the series of ~~units~~Units meet either:
 - (i) The lowest applicable emission limit in Table 1, or the applicable rule limit to for any of the ~~units~~-Units in series; or
 - (ii) A ~~heat input~~-Heat Input weighted average of all the applicable emission limits in Table 1 using ~~the following calculation~~. Equation 1 (Eq. 1):

$$\text{Weighted Limit} = \frac{\sum_1^N (EL_X \times Q_X)}{\sum_1^N Q_X} \quad \text{(Eq. 1)}$$

Where:

N = ~~total~~-Total number of ~~units~~-Units or processes

X = ~~each~~-Each individual ~~unit~~-Unit or process

EL_x = ~~emission~~-Emission limit for ~~unit~~-Unit or process X

Q_x = ~~heat input~~-Heat Input for ~~unit~~-Unit or process X during test

(8) Emissions determined to exceed any limit established by this rule using any of the test methods specified in subparagraph (g)(5)(E) shall constitute a violation of this rule.

(h) Compliance by Certification for Units Subject to Phase I Emission Limits

(1) The owner or operator of a Unit subject to Phase I Emission Limits with a Rated Heat Input Capacity of 2 million Btu per hour (MMBtu/hr) or less may elect to demonstrate compliance with the applicable emission limit through a burner manufacturer's emission certification in lieu of source test by providing the following information with a permit application or with an application to renew a burner emission certification:

- (A) Emission certifications, provided by the burner(s) manufacturer or a manufacturer authorized burner(s) distributor and, which is signed and dated by the burner manufacturer's Responsible Official, that guarantees the burner(s), fuel and combustion air system, and combustion control system identified in the permit application comply with the applicable NOx

emission limit in Table 1 when used for specified processes and operating conditions, and within specified temperature ranges;

(B) The signed and dated emissions certifications separately provided by the manufacturer or manufacturer authorized distributor of the burner(s) addressed to:

(i) The owner or operator of the Unit; and

(ii) Executive Officer or designee;

(C) Any supporting documentation, submitted by the manufacturer or manufacturer authorized distributor of the burner(s) to the Executive Officer or designee, including emission test reports of at least five South Coast AQMD approved emission tests using a South Coast AQMD approved test protocol and methods for five different Units operating the same:

(i) Process;

(ii) Burner;

(iii) Fuel and combustion air system;

(iv) Combustion control system; and

(v) Temperature range;

(D) The emission test results specified in subparagraph (h)(1)(C) approved by the Executive Officer prior to submittal of the permit application or application to renew a burner emission certification; and

(E) A contract or purchase order, signed and dated by the Responsible Official representing the owner or operator of the Unit, for purchase of the burner(s), fuel and combustion air system, and combustion control system to be installed in the Unit as identified in the permit application and the signed and dated letter or bid from the burner manufacturer to the owner or operator of the Unit as specified in subparagraph (h)(1)(A).

(2) The Executive Officer will notify the owner or operator of a Unit in writing whether the manufacturer's emission certification has been approved. The certification will be valid for five years from the date of the written notification of approval and thereafter will expire.

(3) No later than 60 days prior to the date the manufacturer's emission certification expires pursuant to paragraph (h)(2), the owner or operator of a Unit shall:

(A) Submit a new application for a burner manufacturer's emission certification for review by the Executive Officer that includes all the information required in paragraph (h)(1); or

(B) Submit a source test protocol and demonstrate compliance by conducting a source test according to the requirements in subdivision (g) and establish the date of that source test as the basis for subsequent source testing frequency, unless an extension of time has been approved in writing by the Executive Officer.

(24) Any compliance determination conducted by the Executive Officer for a Unit complying with this subdivision that results in emissions in excess of those allowed in this rule shall constitute a violation.

(i) Demonstration of one pound or less of NOx per day

(1) One pound or less of NOx per day – monthly demonstration

On or before January 1, 2024, an owner or operator of a Unit electing to comply with paragraph (d)(54) by demonstrating that NOx emissions are less than one pound per day averaged over a calendar month shall:

(A) Install and maintain a non-resettable totalizing time meter on the Unit pursuant to paragraph (j)(87) and operate the Unit no more than the specified time per calendar month in Table 2 or as calculated using Equation 12 (Eq. 12); or

$$\text{Monthly Operating Hours} = D \div [R \times (EF \div HHV)] \quad \text{(Eq. 12)}$$

Where:

D = Number of Days in Calendar Month

R = Rated Heat Input (MMBtu/hr)

EF = Emission Factor for the Unit (lbs NOx/million standard cubic feet (MMScf) natural gas)

HHV = Higher Heating Value of Natural Gas (1,050 MMBtu/MMScf)

Table 2 – Less than One Pound per Day, Monthly Operating Limits

<u>Unit Rated Heat Input (Btu/hr)</u>	<u>Monthly Operating Limit (Hours)</u>
<u>≤ 400,000</u>	<u>320</u>
<u>>400,000 to ≤ 800,000</u>	<u>160</u>
<u>> 800,000 to < 1,200,000</u>	<u>100</u>

(B) Install and maintain a non-resettable totalizing fuel meter pursuant to paragraph (j)(87) corrected to Standard Conditions on the Unit and consume

no more than the Therms of fuel per month calculated using Equation 23 (Eq. 23).

$$\text{Monthly Therms of Fuel} = (D \div EF) \times HHV \times 10 \text{ (Eq. 23)}$$

Where:

D = Number of Days in Calendar Month

EF = Emission Factor for the Unit (lbs NOx/MMScf natural gas)

HHV = Higher Heating Value of Natural Gas (1,050 MMBtu/MMScf)

10 = Conversion ~~to~~ from MMBtu to Therms

(2) One pound or less of NOx per day – daily demonstration

An owner or operator of a Unit electing to comply with paragraph (d)(54) by demonstrating daily NOx emissions of one pound or less per day shall:

(A) Install and maintain a non-resettable totalizing time meter on the Unit pursuant to paragraph (j)(87) and operate the Unit no more than the specified time in Table 3; or

Table 3 – Less than One Pound per Day, Daily Operating Limits

<u>Unit Rated Heat Input (Btu/hr)</u>	<u>Daily Operating Limit (Hours)</u>
<u>≤ 400,000</u>	<u>16</u>
<u>>400,000 to ≤ 800,000</u>	<u>8</u>
<u>> 800,000 to ≤ 1,200,000</u>	<u>5</u>

(B) Install and maintain a non-resettable totalizing fuel meter on the Unit pursuant to paragraph (j)(87) and operate the Unit using less than or equal to 7,692 cubic feet per day of natural gas corrected to Standard Conditions and maintain records pursuant to paragraph (j)(98).

~~(e) Certification~~

~~(1) Unit Certification~~

~~For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, any manufacturer or distributor that distributes for sale or sells units or combustion systems for use in the SCAQMD may elect to apply to the Executive Officer to certify such units or combustion systems as compliant with subdivision (e).~~

~~(2) — Confirmation of Emissions~~

~~Any manufacturer's or distributor's application to the Executive Officer to certify a model of unit or combustion system as compliant with the emission limit and demonstration requirement of subdivision (c) shall obtain confirmation from an independent contractor that is approved by the Executive Officer under the Laboratory Approval Program for the necessary test methods prior to applying for certification that each unit model complies with the applicable requirements of subdivision (c). This confirmation shall be based upon SCAQMD approved emission tests. A SCAQMD approved protocol shall be adhered to during the confirmation testing of all units and combustion systems subject to this rule. Emission testing shall comply with the requirements of paragraphs (d)(1) through (d)(6) except that emission testing shall be conducted at greater than 90% rated heat input capacity and additional emission testing shall be conducted at a heat input of less than 35% of the rated heat input capacity.~~

~~(3) — When applying for unit(s) or combustion system(s) certification, the manufacturer or distributor shall submit to the Executive Officer the following:~~

~~(A) — A statement that the model of unit or combustion system is in compliance with subdivision (c). The statement shall be signed and dated by the manufacturer's or distributor's responsible official and shall attest to the accuracy of all statements;~~

~~(B) — General Information~~

~~(i) — Name and address of manufacturer or distributor;~~

~~(ii) — Brand name, if applicable;~~

~~(iii) — Model number(s), as it appears on the unit or combustion system rating plate(s);~~

~~(iv) — List of all combustion system components; and~~

~~(v) — Rated Heat Input Capacity, gross output of burner(s), and number of burners;~~

~~(C) — A description of each model of unit or combustion system being certified; and~~

~~(D) — A source test report verifying compliance with the applicable emission limit in subdivision (c) for each model to be certified. The source test report shall be prepared by the confirming independent contractor and shall contain all of the elements identified in the SCAQMD approved Protocol for each unit tested.~~

- ~~(4) — When applying for unit or combustion system certification, the manufacturer or distributor shall submit the information identified in paragraph (e)(3) no more than ninety (90) days after the date of the source test identified in subparagraph (e)(3)(D) and at least 120 days prior to the date of the proposed sale and installation of any SCAQMD certified unit or combustion system.~~
- ~~(5) — The Executive Officer shall certify a unit or combustion system model or models which complies with the provisions of subdivision (c) and of paragraphs (e)(2), (e)(3), and (e)(4).~~
- ~~(6) — Certification status shall be valid for seven years from the date of approval by the Executive Officer. After the seventh year, recertification shall be required by the Executive Officer according to the requirements of paragraphs (e)(2), (e)(3), and (e)(4).~~

(j) Monitoring, Recordkeeping, and Reporting Requirements

- (1) An owner or operator of a certified Unit pursuant to paragraph (h)(1) shall maintain records of Unit installation, operation, maintenance, repair, Combustion System modification, and test records of owners, operators, manufacturers, distributors, retailers, and installers of Units located in South Coast AQMD, and conduct such tests as deemed necessary to ensure compliance with this rule.
- (2) An owner or operator of a Unit(s) subject to a Phase II Emission Limit shall provide the following documentation to the Executive Officer:
 - (A) On or before January 1, 2024, documentation identifying the age of the Unit(s) pursuant to paragraph (f)(2) and anticipated date of replacement; and
 - (B) On or before January 1st of the year when a Unit's age reaches 17 years or older, as determined pursuant to paragraph (f)(2), an official document on company letterhead signed by the responsible party of the utility company that services the facility that includes:
 - (i) An explanation if service upgrades will be required by the utility company to power Unit(s) replacing existing Unit(s) to meet the applicable Phase II Emission Limit(s); and
 - (ii) The estimated timeframe required from the utility company to complete the service upgrades.
- (3) An owner or operator of a Unit 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 and permanent rating plates attached to the Unit and individual burners.

(4) An owner or operator of a Unit shall display and maintain the model number and Rated Heat Input Capacity of the Unit burner(s) on a permanent rating plate.

(5) The owner or operator of a Unit that is modified shall:

(A) Display the new Rated Heat Input Capacity on a new permanent supplemental rating plate installed in an accessible location on the Unit or burner; and

(B) Determine the date of Unit modification pursuant to the burner age determination requirements of subdivision (f).

(6) An owner or operator of a Unit subject to subdivision (g) shall maintain the following records, ~~for a period of not less than five years,~~ on site at the facility where the Unit is being operated:

(A) A copy of the written maintenance schedule and instructions by the manufacturer, distributor, installer, or maintenance company and retain a record of the maintenance activity;

(B) A copy of the South Coast AQMD certification or the South Coast AQMD approved source test reports, conducted by an independent third party, demonstrating that the specific Unit complies with the applicable emission limit; and

(C) Reports of the source test(s) conducted pursuant to a South Coast AQMD approved Source Test Protocol which include the Unit's model and serial numbers.

~~(7) Records of source tests pursuant to subdivision (g) and records pursuant to paragraph (j)(2) shall be maintained on site for at least five years and made available to the Executive Officer upon request.~~

(87) An owner or operator of a Unit requiring a non-resettable totalizing fuel meter or non-resettable time meter to comply with any provision in this rule shall:

(A) On or before January 1, 2024, install and operate a non-resettable totalizing fuel meter or non-resettable time meter, unless a metering system is currently installed, and the fuel meter or time meter is approved in writing by the Executive Officer;

(B) Each non-resettable totalizing fuel meter or non-resettable time meter shall be equipped with a permanent supply of electric power that cannot be unplugged, switched off, or reset except by the main power supply circuit for the building and associated equipment or the safety shut-off switch;

(C) Ensure that the continuous electric power to the non-resettable totalizing fuel meter or non-resettable time meter may only be shut off for maintenance or safety; and

(D) Ensure each non-resettable totalizing fuel meter or non-resettable time meter is calibrated and recalibrate the meter annually, thereafter, based on the manufacturer's recommended procedures. If the non-resettable totalizing fuel meter or non-resettable time meter was calibrated within one year prior to January 1, 2024, the next calibration shall be conducted within one year of the anniversary date of the prior calibration.

~~(98) An owner or operator of a Unit complying with the one pound or less of NOx emission limit pursuant to paragraph (d)(54) as demonstrated pursuant to subdivision (i) shall keep daily records documenting the use of the Unit, including, but not limited to, time records of Unit operation using a unit-specific non-resettable time meter, daily fuel consumption documented using a non-resettable fuel meter, and daily process rate. Daily records shall be retained on site for at least five years and be made available to the Executive Officer upon request.~~

(A) For an owner or operator demonstrating Unit compliance pursuant to subparagraph (i)(2)(A):

(i) Time records of Unit operation using a unit-specific non-resettable time meter;

(ii) Daily fuel consumption documented using a non-resettable fuel meter; and

(iii) Daily process rate.

(B) For an owner or operator demonstrating Unit compliance pursuant to subparagraph (i)(2)(B):

(i) Records documenting fuel gas consumption with a non-resettable fuel meter; and

(ii) Test protocol, calculations, and results of a test of gas pressure to the meter conducted by the local utility or an independent contractor. The documentation of gas pressure to the meter shall include a letter stating that the test was performed using the approved test protocol and the letter shall be signed by the person performing the test.

~~(10) —An owner or operator of a Unit complying with the one pound or less of NOx emission pursuant to paragraph (d)(5) as demonstrated pursuant to subparagraph (i)(2)(B) shall keep daily records documenting fuel gas consumption with a non-~~

~~resettable fuel meter and a test protocol, calculations, and results of a test of gas pressure to the meter conducted by the local utility or an independent contractor. The documentation of gas pressure to the meter shall include a letter stating that the test was performed using the approved test protocol and the letter shall be signed by the person performing the test. Records shall be retained on site for at least five years and be made available to the Executive Officer upon request.~~

(119) RECLAIM Facilities must continue to comply with reporting requirements pursuant to Regulation XX until the facility becomes a Former RECLAIM Facility.

(10) Records of source tests pursuant to subdivision (g) and records required pursuant to paragraphs (j)(1), (j)(2), (j)(3), (j)(6), and (j)(7) shall be retained on site for at least five years and made available to the Executive Officer upon request.

~~(f) — Enforcement~~

~~(1) — The Executive Officer may inspect certification records and unit installation, operation, maintenance, repair, combustion system modification, and test records of owners, operators, manufacturers, distributors, retailers, and installers of units located in the SCAQMD, and conduct such tests as are deemed necessary to ensure compliance with this rule. Tests shall include compliance determinations, as specified in paragraphs (d)(1) through (d)(4), (d)(6), and (d)(7).~~

~~(2) — A compliance determination specified under paragraph (f)(1) that finds emissions in excess of those allowed by this rule shall constitute a violation of this rule.~~

(k) Alternative Compliance Schedule Plan

(1) Alternative Compliance Schedule Plan Requirements

An owner or operator of a Facility with a Unit(s) subject to Phase II or Phase III Emission Limits may submit an Alternative Compliance Schedule Plan no later than one year prior to the compliance schedule specified in either clause (e)(2)(A)(i) or (e)(2)(A)(ii) paragraph (e)(2), whichever is applicable, to request an extended compliance schedule. Facilities with multiple Units subject to Phase II Emissions Limits must submit one Alternative Compliance Plan per facility no later than one year prior to the earliest compliance date specified in paragraph (e)(2). The Alternative Compliance Schedule Plan shall include the following:

(A) The unit(s) requiring the Alternative Compliance Schedule Plan;

(B) An official document on company letterhead signed by the responsible party of the utility company that services the facility that includes:

- (i) An explanation of the service upgrades required by the utility company;
 - (ii) Communications with the utility provider when the service upgrade was requested;
 - (iii) The estimated date the utility company will complete the service upgrades;
 - (iv) Additional information to substantiate that an Alternative Compliance Schedule Plan is necessary; and
 - (v) Documentation which demonstrates that the delays are outside of the control of the owner or operator.
- (2) Alternative Compliance Schedule Plan Review and Approval Process

The Executive Officer will notify the owner or operator ~~of a Facility~~ in writing whether the Alternative Compliance Schedule Plan is approved or disapproved. The Alternative Compliance Schedule Plan shall be approved if the following criteria is met, and they are subject to disapproval if any of the following, applicable criteria are not met:

 - (A) The owner or operator submitted a complete Alternative Compliance Schedule Plan at least one year prior to the compliance schedule specified in paragraph (e)(2); and
 - (B) The Alternative Compliance Schedule Plan includes all the required information in paragraph (k)(1).
- (3) Upon receiving approval of an Alternative Compliance Schedule Plan pursuant to paragraph (k)(2), the owner or operator ~~of a Facility~~ shall Decommission each Unit with a NOx emission limit that exceeds the applicable Phase II ~~or Phase III~~ Emission Limit within six months of the date specified in clause (k)(1)(B)(iii) in the approved Alternative Compliance Schedule Plan.
- (4) Within 45 days of receiving written notification from Executive Officer that the Alternative Compliance Schedule Plan is disapproved, the owner or operator shall correct any deficiencies and re-submit the Alternative Compliance Schedule Plan.
- (5) Upon receiving written notification from the Executive Officer that the Alternative Compliance Schedule Plan re-submitted pursuant to paragraph (k)(4) is disapproved, the owner or operator shall:
 - (A) Decommission each Unit with a NOx emission limit that exceeds the applicable Phase II ~~or Phase III~~ Emission Limit pursuant to the compliance schedule in paragraph (e)(2); or

- (B) Submit a complete permit application for each Unit in the disapproved Alternative Compliance Schedule Plan to apply for a permit condition that limits the NOx emissions to a level not to exceed the applicable Phase II ~~or Phase III~~ Emission Limit within 60 days from receiving the written disapproval of the re-submitted Alternative Compliance Schedule Plan; and
 - (C) Not operate a Unit that exceeds the applicable Phase II ~~or Phase III~~ Emission Limit pursuant to the schedule in paragraph (e)(2) ~~for Phase II Emission Limits and paragraph (e)(3) for Phase III Emission Limits.~~
- (6) Modifications to an Approved Alternative Compliance Schedule Plan
An owner or operator ~~of a Facility~~ that seeks approval to modify an approved Alternative Compliance Schedule Plan shall submit a request in writing to the Executive Officer to modify an approved Alternative Compliance Schedule Plan that includes all the submittal requirements pursuant to paragraph (k)(1).
- (7) The Executive Officer will review any modifications to an approved Alternative Compliance Schedule Plan in accordance with the review and approval process pursuant to paragraph (k)(2).
- (8) An owner or operator with an approved Alternative Compliance Schedule Plan shall submit written notification detailing the progress of the service upgrades to the Executive Officer 24 months from date the Alternative Compliance Schedule Plan was approved, and annually thereafter, until the end of the first year the applicable emission limits are met, which shall include:
 - (A) Actions taken on the service upgrade, signed by the responsible party of the utility company;
 - (B) Actions to implement the service upgrade yet to be completed; and
 - (C) Any anticipated changes to the compliance schedule in the approved Alternative Compliance Schedule Plan.
- (9) Notification of Pending Approval of an Alternative Compliance Schedule Plan
The Executive Officer will make the proposed Alternative Compliance Schedule Plan or proposed modifications to an approved Alternative Compliance Schedule Plan available to the public on the South Coast AQMD website 30 days prior to approval and update the status of the Alternative Compliance Schedule Plan once the Executive Officers deems it approved or disapproved.
- (810) Plan Fees
The review and approval of the following ~~an Alternative Compliance Schedule Plan or review and approval of a modification of an approved Alternative Compliance~~

~~Schedule Plan~~ shall be subject to applicable plan fees pursuant to Rule 306 – Plan Fees:

- (A) Alternative Compliance Schedule Plan;
- (B) Modification of an approved Alternative Compliance Schedule Plan; and
- (C) Notification on the increments of progress submitted pursuant to paragraph (k)(8).

(g) Exemptions

- (1) The provisions of this rule shall not apply to an owner or operator of the following equipment:
 - (A) Boilers, water heaters, thermal fluid heaters, or process heaters, including, but not limited to those that provide heat to a Unit through a heat exchange system, subject to the following SCAQMD-South Coast AQMD rules:
 - (i) Rules 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters;
 - (ii) Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; ~~or~~
 - (iii) Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters; or, including but not limited to those that provide heat to a unit through a heat exchange system;
 - (iv) Rule 1147.
 - (B) Units subject to registration pursuant to SCAQMD Rule 222;
 - ~~(C) —Units regulated under Regulation XX;~~
 - ~~(DBC)~~ Solid fuel-fired combustion equipment;
 - ~~(ECD)~~ Charbroilers as defined by Rule 1147;
 - ~~(FDE)~~ Fryers, including fryers used for nut, seed, or other food product oil roasting; and
 - ~~(GEF)~~ Emission control equipment, including but not limited to afterburners, thermal oxidizers, and vapor incinerators as defined by Rule 1147; and
 - ~~(FG)~~ Units with a Rated Heat Input Capacity less than 325,000 Btu per hour pursuant to paragraph (j)(4).

~~(2) — The provisions of paragraphs (e)(2), (e)(3) and subdivision (j) shall not apply to an owner or operator of a Unit with NO_x and CO emission not exceeding the applicable Phase II or Phase III Emission Limit upon [Date of Rule Adoption].~~

~~(2) — The provisions of paragraphs (e)(1) and (e)(3) of this rule shall not apply to units with daily NO_x emissions of 1 pound per day or less as documented by determined as follows, whichever is lower:~~

~~(A) — A rated heat input capacity of less than 325,000 BTU Btu per hour;~~

~~(B) — Compliance with a permit condition that limits NO_x emissions to 1 one pound per day or less;~~

~~(C) — Daily recordkeeping of unit operation, an installed unit specific non-resettable time meter, and the following specified rated heat input capacities A Rated Heat Input Capacities specified per operating the no more than the following specified number of hours every day:~~

~~(i) — Less than or equal to 400,000 BTU Btu per hour and operating less than or equal to 16 hours per day; or~~

~~(ii) — Less than or equal to 800,000 BTU Btu per hour and operating less than or equal to 8 eight hours per day; or~~

~~(iii) — Less than or equal to 1,200,000 BTU Btu per hour and operating less than or equal to 5 five hours per day.~~

~~(D) — Daily recordkeeping of unit use, including but not limited to time records of unit operation using a unit specific non-resettable time meter, daily fuel consumption documented using an non-resettable fuel meter, or daily process rate; or~~

~~(E) — Daily use of natural gas less than or equal to 7,692 cubic feet per day at standard temperature and pressure, documented by daily recordkeeping of fuel gas consumption with a non-resettable fuel meter and a test protocol, calculations, and results of a test of the gas pressure to the meter conducted by the local utility or an independent contractor. The documentation of gas pressure to the meter shall include a letter stating that the test was performed using the included protocol Source Test Protocol and the letter shall be signed by the person performing the test.~~

~~(3) — The provisions of paragraph (e)(3) of this rule shall not apply to units heated solely with infrared burners.~~

~~(h) — Mitigation Fee Compliance Option~~

~~(1) — An owner or operator of a unit may elect to delay the applicable compliance date in Table 2 three years by submitting an alternate compliance plan and paying an emissions mitigation fee to the SCAQMD in lieu of meeting the applicable NOx emissions limit in Table 1.~~

~~(2) — Compliance Demonstration~~

~~An owner or operator of a unit electing to comply with the mitigation fee compliance option shall:~~

~~(A) — Submit an alternate compliance plan and pay the mitigation fee to the Executive Officer at least 150 days prior to the applicable compliance date in Table 2; and~~

~~(B) — Maintain on-site verification of mitigation fee payment and SCAQMD approval of the alternate compliance plan that shall be made available upon request to SCAQMD staff.~~

~~(3) — Plan Submittal~~

~~The alternate compliance plan submitted pursuant to paragraphs (h)(1) and (h)(2) shall include:~~

~~(A) — A cover letter submitted to the SCAQMD identifying that the application is for a Rule 1153.1 (h) Mitigation Fee Compliance Plan, listing the applicable unit(s), and signed by the responsible official;~~

~~(B) — A completed SCAQMD Form 400A with company name, SCAQMD Facility ID, identification that the application is for a compliance plan (section 7 of form), identification that the request is for a Rule 1153.1 (h) Mitigation Fee Compliance Plan (section 9 of the form), and signature of the responsible official;~~

~~(C) — Attached documentation of unit fuel use for previous 3 years, description of weekly operating schedule, unit permit ID, unit heat rating (BTU/hour), and fee calculation;~~

~~(D) — Filing fee payment; and~~

~~(E) — Mitigation fee payment as calculated by Equation 1.~~

Equation 1:

$$MF = R * (3 \text{ years}) * (L1 - L0) * (AF) * (k)$$

Where,

MF = Mitigation fee, \$

~~R = Fee Rate = \$12.50 per pound (\$6.25 per pound for a small business with 10 or fewer employees and gross annual receipts of \$500,000 or less)~~

~~L_d = Default NO_x emission factor: 0.136 lbs of NO_x/mmBTU for gaseous fuels and 0.160 lb/mmBTU for fuel oils~~

~~L₀ = Applicable NO_x emissions limit specified in Table 1 in lbs/mmBTU~~

~~AF = Annual average fuel usage of unit for previous 5 years, mmsef/yr for natural gas or gallons for liquid fuel~~

~~k = unit conversion for cubic feet of natural gas to BTU = 1,050 BTU/sef; 95,500 BTU/gallon for LPG; and 138,700 BTU/gallon for fuel oil~~

~~(4) — Rule 1147 Mitigation Fee Plan Submittal~~

~~A mitigation fee compliance plan submitted pursuant to SCAQMD Rule 1147 may be used to comply with the requirements of this paragraph so long as the owner/operator of the unit notifies the Executive Officer at least 150 days prior to the applicable compliance date specified in Table 2.~~