(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

The purpose of this rule is to reduce Oxides of Nitrogen (NOx) and Carbon Monoxide (CO) emissions from 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, Bakery Ovens, Tortilla Ovens, Dryers, Smokehouses, and Roasters that are used to prepare food or products for making beverages for human consumption.

- (c) Definitions
 - (1) ALTERNATIVE COMPLIANCE SCHEDULE PLAN means an alternative implementation plan for an owner or operator of a facility with Units subject to Phase II Emission Limits.
 - (2) BAKERY OVEN means a Commercial Food Oven used to heat, cook, or prepare baked products. Bakery Ovens including, but are not limited to, tunnel ovens, conveyor ovens, tray ovens, and griddle ovens.
 - (3) 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 South Coast AQMD, or in an application for certification pursuant to subdivision (e) of this rule, or in a South Coast AQMD permit, as applicable.
 - (4) COMMERCIAL FOOD OVEN means a device used to heat, cook, dry, or prepare food or products for making beverages for human consumption.
 - (5) 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.
 - (6) DRYING OVEN means a cooking device or chamber used to remove water or moisture to dry food products.
 - (7) FORMER RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market 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.

- (8) HEAT INPUT means the higher heating value of the fuel to the burner or Unit measured as British Thermal Unit(s) (Btu) per hour.
- (9) HEAT OUTPUT means the enthalpy of the working fluid at the output of a burner or Unit.
- (10) INFRARED 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 as infrared radiation; that is operated in a manner where the zone 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 per square foot of flame holding surface of 100,000 Btu per hour or less.
- (12) OXIDES OF NITROGEN (NOx) EMISSIONS means the sum of nitrogen oxide and nitrogen dioxide in flue gas, collectively expressed as nitrogen dioxide.
- (13) PARTS PER MILLION BY VOLUME (ppmv) means, for the purpose of this rule, Parts Per Million by Volume of a pollutant corrected to a dry basis at Standard Conditions corrected to three percent oxygen.
- (14) PHASE I EMISSION LIMITS means the NOx and CO emission limits specified in Table 1.
- (15) PHASE II EMISSION LIMITS means the NOx emission limits specified in Table 1, when applicable.
- (16) RATED HEAT INPUT CAPACITY means the gross Heat Input of the combustion Unit specified on a permanent rating plate attached by the manufacturer to the device. If the Unit or Combustion System has been altered or modified such that its gross Heat Input is higher or lower than the rated Heat Input capacity specified on the original manufacturer's permanent rating plate, the modified gross Heat Input shall be considered as the Rated Heat Input Capacity.
- (17) RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market program as of January 5, 2018, as established in Regulation XX.
- (18) 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;
 - (B) For a partnership or sole proprietorship: general partner or proprietor, respectively; or

- (C) For a government agency: a duly authorized person.
- (19) ROASTER means a Unit used to dry roast food products that include, but are not limited to, nuts, coffee beans, or other plant seeds. Roasters include Units with an integrated afterburner which consists of a single burner used as the heat source for the afterburner and Roaster.
- (20) SMOKEHOUSE means a Commercial Food Oven in which meat products are cured using smoke and heat.
- (21) SOURCE TEST PROTOCOL means a South Coast AQMD approved set of test procedures for determining compliance with emission limits for applicable equipment.
- (22) SPRAY DRYER means a Unit where liquids are atomized and dried into powder form by spraying the liquid feed into a heated chamber.
- (23) STANDARD CONDITIONS is as defined by Rule 102 Definition of Terms.
- (24) THERM means 100,000 BTU.
- (25) TORTILLA OVEN means a Commercial Food Oven used to cook, toast, or bake tortilla products which include tortilla and tortilla chip ovens.
- (26) UNIT means any Commercial Food Oven, including, but not limited to, Bakery Oven, Drying Oven, Roasters, Spray Dryer, Smokehouse, or Tortilla Ovens used to prepare food or products for making beverages for human consumption.
- (d) Requirements
 - (1) An owner or operator of an existing or new Unit subject to this rule shall not operate the Unit in a manner that exceeds the applicable NOx and CO emission limits, ppmv corrected to three percent oxygen, dry, specified in Table 1 according to the compliance schedule in subdivision (e).

Table 1 – NOX and CO Emission Emits					
Equipment	Phase I Emission Limit ¹		Phase II Emission Limit ²		
Categories	NOx	CO (ppmv)	NOx (ppmv)	CO (ppmv)	
Bakery Ovens	30 ppmv or 0.036 lb/MMBtu	800	0	0	
Tortilla Ovens	30 ppmv or 0.036 lb/MMBtu	800	N/A	N/A	
Tortilla Ovens (heated solely by Infrared Burners)	15 ppmv or 0.018 lb/MMBtu	800	N/A	N/A	
Cooking Ovens	30 ppmv or 0.036 lb/MMBtu	800	0	0	
Drying Ovens	30 ppmv or 0.036 lb/MMBtu	800	0	0	
Smokehouses	30 ppmv or 0.036 lb/MMBtu	800	0	0	
Spray Dryers	30 ppmv or 0.036 lb/MMBtu	800	N/A	N/A	
Roasters	30 ppmv or 0.036 lb/MMBtu	800	N/A	N/A	

Table 1 – NOx and CO Emission Limits

¹ Phase I Emission Limits apply on and after [*Date of Adoption*]

² Phase II Emission Limits, when applicable, apply on and after January 1, 2027

(2) 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 subdivision (d) pursuant to the compliance schedule in subdivision (e).

(3) One pound or less per day of NOx emission Limit

In lieu of complying with the emission limits in Table 1, an owner or operator of a Unit may elect to comply with NOx emissions of one pound or less per day or NOx emissions of one pound or less per day averaged over a calendar month and shall demonstrate compliance with the elected NOx limit pursuant to subdivision (i) and maintain records pursuant to subdivision (j).

(4) Decommissioned Unit(s)

An owner or operator of a Unit may elect to Decommission a Unit in lieu of reducing emissions to comply with Table 1 emission limits to pursuant to the schedule in paragraph (e)(5) for Phase I Emission Limits or pursuant to the schedule in subparagraph (e)(2)(A) for Phase II 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.
- (5) An owner or operator of a Unit shall perform 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.
- (6) An owner or operator of a Unit complying with the emission limits in Table 1 expressed as pounds per million Btu shall install and maintain non-resettable, totalizing fuel meters for the fuel(s) supplied to each Unit pursuant to paragraph (j)(7) prior to the compliance determination specified in subdivision (g).
- (7) An owner or operator of a Unit with a Combustion System that operates at only one firing rate, as required by permit condition, that complies with an emission limit expressed as pounds per million Btu shall install a non-resettable, totalizing time or fuel meter for each fuel pursuant to paragraphs (j)(8) and (j)(9).
- (e) Compliance Schedule
 - (1) An owner or operator of a Unit that is required to meet the NOx and CO 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) Submit a permit application for each Unit to limit the NOx and CO emissions to a level not to exceed the Phase I Emission Limits:
 - (i) On or before July 1, 2024, for any Unit where the original burner(s) is replaced or where the original burner age is 22 years or older, as determined pursuant to paragraph (f)(1), as of [*Date of Rule Adoption*]; or
 - (ii) On or before July 1 of the year when a Unit's original burner age reaches 22 years, as determined pursuant to paragraph (f)(1), by January 1 of that calendar year; and
 - (B) Not operate a Unit that exceeds the Phase I Emission Limits later than one of the following dates, whichever is sooner:
 - (i) 12 months after 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 old.

- (2) On and after January 1, 2027, an owner or operator of a Unit required to meet the NOx Phase II Emission Limits shall either:
 - (A) Decommission each Unit with a NOx emission limit that exceeds the Phase II Emission Limit pursuant to paragraph (d)(4):
 - On or before July 1, 2027, for any Unit where the Unit age is 25 years or older, as determined pursuant to paragraph (f)(2), as of January 1, 2027; or
 - On or before July 1 of the year when a Unit's age reaches 25 years, as determined pursuant to paragraph (f)(2), by January 1 of that calendar year; or
 - (B) Submit an application to modify an existing permit for each Unit to limit the NOx and CO emission to a level not to exceed the Phase II Emission Limits:
 - On or before July 1, 2027, for any Unit where the Unit age is 22 years or older, as determined pursuant to paragraph (f)(2), as of January 1, 2027; or
 - On or before July 1 of the year when a Unit's age reaches 22 years, as determined pursuant to paragraph (f)(2), by January 1 of that calendar year; and
 - (C) Not operate a Unit that exceeds the Phase II Emission Limits later than one of the following dates, whichever is sooner:
 - (i) 12 months after 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 Unit age is 25 years old.
- (3) Alternative Compliance Schedule for Units with a Phase II Emission Limit An owner or operator of a Unit that is required to meet the Phase II Emission Limit in Table 1 who can demonstrate to the Executive Officer that their utility company cannot provide the necessary power to the facility required to supply the zero ppmv Unit within the compliance schedule pursuant to paragraph (e)(2), shall submit an Alternative Compliance Schedule Plan pursuant to the requirements in subdivision (k). (4) An owner or operator of a Unit that elects to comply with the NOx emission limit of one pound or less per day pursuant to paragraph (d)(3) that fails to demonstrate compliance pursuant to subdivision (i) shall:
 - (A) Submit a permit application to meet the applicable emission limit in Table 1within 180 days of the failure to demonstrate compliance pursuant to

subdivision (i) or exceeds the NOx emission limit pursuant to paragraph (d)(3); and

- (B) Not operate a unit that exceeds the applicable emission limit in Table 1 later than one of the following dates, whichever is sooner:
 - (i) 12 months after 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 pursuant to paragraph (e)(2).
- (5) An owner or operator that elects to Decommission a Unit in lieu of complying with Phase I Emission Limits pursuant to paragraph (d)(4) shall Decommission the Unit no later than 30 months after the applicable permit application submittal date pursuant to paragraph (e)(1).
- (6) The owner or operator of any Unit that fails to meet the compliance by certification requirements specified in subparagraphs (h)(1)(A) through (h)(1)(E) or fails to submit manufacturer's emission certification, contract, or purchase order 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 emission limit in Table 1 through source test pursuant to subdivision (g) according to the following schedule:
 - (A) Submit a complete source test protocol within 180 days 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)(7).
- (7) An owner or operator of any Unit that fails to operate the Unit as specified in the manufacturer's emission certification in subparagraphs (h)(1)(A) through (h)(1)(E), including specified processes, operating conditions, and temperatures, shall demonstrate compliance with the applicable emission limit in Table 1 through source test pursuant to subdivision (g) according to the following schedule:
 - (A) Submit a complete source test protocol within 180 days 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)(7).
- (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 the 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 22 years old as of January 1, 2024, for any Unit where the burner age cannot be determined pursuant to paragraph (f)(1).
- (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 the 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, for any Unit where the Unit age cannot be determined pursuant to paragraph (f)(2).
- (g) Source Test Requirements for Units subject to Phase I Emission Limits
 - (1) An owner or operator of a Unit(s) subject to Phase I Emission Limits shall conduct simultaneous source tests for NOx and CO, averaged over a period of at least 15

and no more than 60 consecutive minutes, to demonstrate compliance with the applicable NOx and CO emission limits in Table 1.

- (2) 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 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.
- (3) After the approval of the initial Source Test Protocol pursuant to paragraph (g)(2), an owner or operator of a Unit shall resubmit a Source Test Protocol for approval if requested by the Executive Officer or if:
 - (A) The method of operation of the Unit has been altered in a manner that requires a complete permit application submittal;
 - (B) Rule or South Coast AQMD permit emission limits have changed since the previous source test;
 - (C) There have been changes in the source test method(s) that is referenced in the approved Source Test Protocol; and
 - (D) The approved Source Test Protocol is no longer representative of the operation and configuration of the Unit.
- (4) An owner or operator of a Unit shall conduct the source test to demonstrate compliance with the NOx and CO emission limits in Table 1 and determine stackgas oxygen and carbon dioxide concentrations:
 - (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) Within six months of Unit's initial start-up;
 - (D) At the maximum Heat Input of the Unit normal operating range;
 - (E) At a Heat Input of less than 35 percent of the Rated Heat Input Capacity; and
 - (F) Using at least one of the following applicable test methods:
 - South Coast AQMD Source Test Method 100.1 Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling (March 1989);
 - (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;

- (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;
- (iv) South Coast AQMD Source Test Method 7.1 Determination of Nitrogen Oxide Emissions from Stationary Sources (March 1989);
- (v) 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
- (vi) Any alternative test method determined approved before the test in writing by the Executive Officers of the South Coast AQMD and the California Air Resources Board, and by the United States Environmental Protection Agency.
- (5) An owner or operator who elects to comply with the Table 1 limits using NOx emissions in pounds per million Btu of Heat Input shall calculate the NOx emissions using procedures in 40 CFR Part 60, Appendix A, Method 19, Sections 2 and 3.
- (6) 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 separately and demonstrate each Unit's compliance with the applicable emission limit; or
 - (B) Test only after the last Unit in the series and at the end of a common exhaust for multiple Units, when all Units are operating, and demonstrate that the series of Units meet either:
 - (i) The lowest emission limit in Table 1, or the applicable rule limit for any of the Units in series; or
 - (ii) A Heat Input weighted average of all the applicable emission limits in Table 1 using the following calculation.

Weighted Limit =
$$\frac{\sum_{1}^{N} [(EL_x)*(Q_x)]}{\sum_{1}^{N} [Q_x]}$$

Where:

N = Total number of Units or processes X = Each individual Unit or process $EL_X = Emission limit for Unit or process X$ $Q_X = Heat Input for Unit or process X during test$

- (7) An owner or operator of a Unit subject to the emission limits in Table 1 shall conduct source tests pursuant to subdivision (g) to demonstrate compliance with the applicable NOx and CO emission limits in Table 1 every five calendar years, but no earlier than 48 calendar months after the previous source test.
- (8) Emissions determined to exceed any limit established by this rule using any of the test methods specified in subparagraph (g)(4)(F) 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 any Unit subject to Phase I Emission Limits with a Rated Heat Input Capacity of 2 million Btu per hour or less may elect to demonstrate compliance with the applicable emission limit through a burner manufacturer's emission certification in lieu of source test pursuant to subdivision (g) by providing the following information with a permit application:
 - (A) Emission certifications provided by the manufacturer or manufacturer authorized distributor of the burner(s) submits signed by the burner manufacturer's Responsible Official that guarantee the burner(s), fuel and combustion air system, and combustion control system identified in the application for the South Coast AQMD permit comply with the applicable NOx emission limits in Table 1 when used for specified processes and operating conditions, and within specified temperature ranges;
 - (B) The signed 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 South Coast AQMD Executive Officer prior to submittal of the application for permit; and
- (E) A contract or purchase order, signed by the Responsible Official of 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 letter or bid from the burner manufacturer to the owner or operator of the Unit as specified in subparagraph (h)(1)(A).
- (2) 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
 - One pound or less of NOx per day monthly demonstration
 On or before July 1, 2023, an owner or operator of a Unit electing to comply with paragraph (d)(3) 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)(10) and operate the Unit no more than the specified time per calendar month in Table 2 or as calculated using Equation 1 (Eq. 1); or

Monthly Operating Hours =
$$D \div [R \times (EF \div HHV)]$$
 (Eq. 1)
Where:

- D = Number of Days in Calendar Month
- R = Rated Heat Input (MMBtu/hr)
- EF = Emission Factor for the Unit (lbs NOx/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

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

(B) Install and maintain a non-resettable totalizing fuel meter pursuant to paragraph (j)(10) corrected to Standard Conditions on the Unit and consume no more than the Therms of fuel per month calculated using Equation 2 (Eq. 2).

Monthly Therms of Fuel = $(D \div EF) \times HHV \times 10$ (Eq. 2) 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)(3) by demonstrating the daily NOx emissions are one pound or less per day shall:

(A) Install and maintain a non-resettable totalizing time meter on the Unit pursuant to paragraph (j)(10) and operate the Unit no more than the specified time in Table 3; or

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

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

- (B) Install and maintain a non-resettable totalizing fuel meter on the Unit pursuant to paragraph (j)(10) 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)(11).
- (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 the South Coast AQMD, and conduct such tests as deemed necessary to ensure compliance with this rule.
 - (2) An owner or operator of a Unit that will be 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:
 - An explanation if service upgrades will be required by the utility company to power Unit(s) replacing existing Unit(s) to meet Phase II Emission Limits; 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.

- 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 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 for a period of not less than five years;
 - (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) Source test report(s) that identify that the source test was conducted pursuant to a South Coast AQMD approved Source Test Protocol. The model and serial numbers of the specified Unit shall clearly be indicated on the source test report(s),
- (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.
- (8) An owner or operator of a Unit requiring a non-resettable totalizing fuel 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, unless a metering system is currently installed, and the fuel meter is approved in writing by the Executive Officer;
 - (B) Each non-resettable totalizing fuel 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 may only be shut off for maintenance or safety; and
- (D) Ensure each non-resettable totalizing fuel meter is calibrated and recalibrate the meter annually, thereafter, based on the manufacturer's recommended procedures. If the non-resettable totalizing fuel 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.
- (9) An owner or operator required to monitor and maintain hours of operation records shall install a non-resettable totalizing time meter or equivalent method approved in writing by the Executive Officer.
- (10) An owner or operator of a Unit complying with the NOx emission limit of one pound or less per day in paragraph (d)(3) 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.
- (11) An owner or operator of a Unit complying with the NOx emission limit of one pound or less per day in paragraph (d)(3) as demonstrated pursuant to subparagraph (i)(2)(C) 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.
- (12) RECLAIM facilities must continue to comply with reporting requirements pursuant to Regulation XX until the facility becomes a Former RECLAIM facility.
- (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 Emission Limits may submit an Alternative Compliance Schedule Plan no later than 180 days prior to the compliance schedule in paragraph (e)(2) to request an extended compliance schedule. 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 180 days prior to the compliance schedule in paragraph (e)(2), and
- (B) The Alternative Compliance Schedule Plan includes all of 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 Phase II Emission Limit within six months of the date specified in clause (k)(1)(B)(iii) in an approve 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.
- (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 Decommission each Unit with a NOx

emission limit that exceeds the Phase II Emission Limit pursuant to the compliance schedule in paragraph (e)(2).

- (6) Upon receiving written notification from the Executive Officer that the Alternative Compliance Schedule re-submitted pursuant to paragraph (k)(4) is disapproved, the owner or operator shall:
 - (A) 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 Phase II Emission Limits within 60 days from receiving the written disapproval of the resubmitted Alternative Compliance Schedule Plan; and
 - (B) Not operate a Unit that exceeds the Phase II Emission Limits pursuant to the schedule in the approved Alternative Compliance Schedule Plan.
- (7) 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 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).
- (8) 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).
- (9) Plan Fees

The review and approval of 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.

- (l) Exemptions
 - (1) The provisions of this rule shall not apply to an owner or operator of the following:
 - (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 South Coast AQMD rules:
 - Rule 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;

- (iii) Rule 1146.2 Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters; or
- (iv) Rule 1147.
- (B) Solid fuel-fired combustion equipment;
- (C) Charbroilers as defined by Rule 1147;
- (D) Fryers, including fryers used for nut, seed, or other food product oil roasting;
- (E) Emission control equipment, including but not limited to afterburners, thermal oxidizers, and vapor incinerators as defined by Rule 1147; and
- (F) Units with a Rated Heat Input Capacity less than 325,000 Btu per hour pursuant to paragraph (j)(4).
- (2) The provisions of paragraph (e)(2) and subdivision (j) shall not apply to an owner or operator of a Unit with NOx and CO emission not exceeding the Phase II Emission Limits upon [*Date of Rule Adoption*].