# PROPOSED AMENDED RULE 1100. IMPLEM NOX FACILITIES

# IMPLEMENTATION SCHEDULE FOR

### (a) Purpose

The purpose of this rule is to establish the implementation schedule for Regulation XX NOx RECLAIM facilities that are transitioning to a command-and-control regulatory structure.

## (b) Applicability

This rule applies to any owner or operator of a RECLAIM or former RECLAIM facility that owns or operates equipment that meets the applicability provisions specified in:

- (1) <u>Rule 1110.2 Emissions from Gaseous- and Liquid- Fueled Engines</u>
- Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; or
- (23) Rule 1146.1 Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters.

#### (c) Definitions

- (1) ANNUAL HEAT INPUT means the total heat input to a unit during a calendar year.
- (2) ENGINE is any spark- or compression- ignited internal combustion engine, including engines used for control of VOC's, but not including engines used for self-propulsion.
- (23) FORMER RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX, that has received a final determination notification, and is no longer in the RECLAIM program.
- (34) HEAT INPUT means the chemical heat released due to assumed complete combustion of fuel in a unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- (4<u>5</u>) INDUSTRY-SPECIFIC CATEGORY means RECLAIM or former RECLAIM facilities subject to NOx emission limits in a rule adopted on or after November 2, 2018 for refineries or electricity generating facilities.

- (6) LOCATION means any single site at a building, structure, facility, or installation. For the purpose of this definition, a site is a space occupied or to be occupied by an engine. For engines which are brought to a facility to perform maintenance on equipment at its permanent or ordinary location, each maintenance site shall be a separate location.
- (57) NOx EMISSIONS means the sum of nitric oxides and nitrogen dioxides emitted, calculated as nitrogen dioxide.
- (8) PORTABLE ENGINE is an engine that, by itself or in or on a piece of equipment, is designed to be and capable of being carried or moved from one location to another. Indications of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, platform or mounting. The operator must demonstrate the necessity of the engine being periodically moved from one location to another because of the nature of the operation.

  An engine is not portable if:
  - (A) the engine or its replacement remains or will reside at the same location for more than 12 consecutive months. Any engine, such as a back-up or stand-by engine, that replaces an engine at a location and is intended to perform the same function as the engine being replaced, will be included in calculating the consecutive time period. In that case, the cumulative time of both engines, including the time between the removal of the original engine and installation of the replacement engine, will be counted toward the consecutive time period; or
  - (B) the engine remains or will reside at a location for less than 12 consecutive months where such a period represents the full length of normal annual source operations such as a seasonal source; or
  - (C) the engine is removed from one location for a period and then it or its equivalent is returned to the same location thereby circumventing the portable engine residence time requirements.
  - The period during which the engine is maintained at a designated storage facility shall be excluded from the residency time determination.
- (69) RATED HEAT INPUT CAPACITY means the heat input capacity as specified by the permit issued by the Executive Officer, or if not specified on the permit, as specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than

- the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.
- (7<u>10</u>) RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX.
- (811) RULE 1146 UNIT means any boiler, steam generator, water heater, or process heater subject to Rule 1146 with a rated heat input capacity that is equal to or greater than 5 million Btu per hour, excluding units specified in Rule 1146 exemptions.
- (912) RULE 1146.1 UNIT means any boiler, steam generator, or process heater subject to Rule 1146.1 with a rated heat input capacity that is greater than 2 million Btu per hour and less than 5 million Btu per hour, excluding units specified in Rule 1146.1 exemptions.
- (13) STATIONARY ENGINE is an engine which is either attached to a foundation or if not so attached, does not meet the definition of a portable or non-road engine and is not a motor vehicle as defined in Section 415 of the California Vehicle Code.
- (1014) TITLE V FACILITY means any facility that meets the criteria set forth in Rule 3001 Applicability.

#### (d) Rule 1110.2 Implementation Schedule

- (1) An owner or operator of a RECLAIM or former RECLAIM facility with any Rule 1110.2 stationary engine(s) shall:
  - (A) On or before January 1, 2023 meet the emissions limits listed in Rule

    1110.2 Table III-B unless exempt by Rule 1110.2 subparagraphs
    (d)(1)(H) or (i).
- (2) An owner or operator of a RECLAIM or former RECLAIM facility with any Rule 1110.2 portable engine(s):
  - (A) On or before January 1, 2023 meet the conditions listed in Rule 1110.2 (d)(2).
- (e) Rule 1146 and Rule 1146.1 Implementation Schedule
  - (1) An owner or operator of a RECLAIM or former RECLAIM facility with any Rule 1146 or Rule 1146.1 unit shall:
    - (A) On or before December 7, 2019, submit complete SCAQMD permit applications for any Rule 1146 and Rule 1146.1 units that currently do

- not meet the applicable NOx concentration limit specified in paragraph (de)(3);
- (B) On or before January 1, 2021 meet the applicable NOx concentration limit for a minimum of 75% of the cumulative total rated heat input capacity of all Rule 1146 and Rule 1146.1 units at the facility; and
- (C) On or before January 1, 2022 meet the applicable NOx concentration limit of 100% of Rule 1146 and Rule 1146.1 units at the facility.
- An owner or operator that elects to replace an existing Rule 1146 or Rule 1146.1 unit at a RECLAIM or former RECLAIM facility with a new unit may use the rated heat input capacity of the unit being replaced to meet the required percentage of the cumulative total rated heat input capacity for all Rule 1146 and Rule 1146.1 units at the facility specified under subparagraphs (de)(1)(B) and (de)(1)(C) provided the owner or operator:
  - (A) On or before December 7, 2019, submits complete SCAQMD permit applications for any applicable new Rule 1146 and Rule 1146.1 units, as well as accepts a permit condition that identifies which unit(s) will be replaced and no longer operated when the new units are installed or after January 1, 2023, whichever is earlier; and
  - (B) Replaces the existing unit on or before January 1, 2023.
- (3) The applicable NOx concentration limits specified in subparagraphs ( $\frac{\text{de}}{\text{O}}$ )(1)(B) and ( $\frac{\text{de}}{\text{O}}$ )(1)(C) are as follows:
  - (A) Rule 1146 units shall meet the NOx concentration limit for the category of equipment specified in Rule 1146, Table 1146-1 NOx Emission Limits and Compliance Schedule; and
  - (B) Rule 1146 units that meet the applicability provisions specified in Rule 1146 paragraph (c)(2) shall meet the ammonia emission limit specified in Rule 1146 paragraph (c)(2); and
  - (C) Rule 1146.1 units shall meet the NOx concentration limit for the category of equipment specified in Rule 1146.1, Table 1146.1-1 NOx Emission Limits and Compliance Schedule
- (4) In lieu of complying with the applicable emission limits specified in paragraph (de)(3), the owner or operator of the following unit(s) in operation prior to December 7, 2019 with an annual heat input less than or equal to as specified below, shall retain and comply with the unit's NOx emission limit and source testing requirements specified in the SCAQMD Permit to Operate as of December 7, 2018.

- (A) 90,000 therms per year and complying with the requirements specified in Rule 1146 paragraph (c)(5); or
- (B) 18,000 therms per year and complying with the requirements specified in Rule 1146.1 paragraph (c)(4).
- (5) Notwithstanding paragraph (de)(1), an owner or operator of a RECLAIM or former RECLAIM facility that has installed, modified, or has been issued a SCAQMD Permit to Construct or Permit to Operate for the following Rule 1146 or Rule 1146.1 units prior to December 7, 2018 shall meet the NOx emission limit specified in paragraph (de)(3) by December 7, 2033 or when 50 percent or more of the unit's burners are replaced, whichever is earlier:
  - (A) Fire-tube boilers, as defined in Rule 1146 paragraph (b)(7), subject to Rule 1146 subparagraph (c)(1)(G) or (c)(1)(J) complying with a previous NOx emission limit that is less than or equal to 9 ppm and greater than 5 ppm; or
  - (B) Units subject to Rule 1146 subparagraph (c)(1)(H) or (c)(1)(K) complying with a previous NOx emission limit that is less than or equal to 12 ppm and greater than 5 ppm; or
  - (C) Units subject to Rule 1146.1 subparagraph (c)(1)(E)complying with a previous NOx emission limit that is less than or equal to 12 ppm and greater than 9 ppm; or
  - (D) Fire-tube boilers, as defined in Rule 1146.1 paragraph (b)(7), fired on natural gas subject to Rule 1146.1 subparagraph (c)(1)(F) complying with a previous NOx emission limit that is less than or equal to 9 ppm; or
  - (E) Thermal fluid heaters, as defined in Rule 1146 paragraph (b)(26), subject to Rule 1146 subparagraph (c)(1)(L) complying with a previous NOx emission limit that is less than or equal to 20 ppm; or
  - (F) Thermal fluid heaters, as defined in Rule 1146.1 paragraph (b)(22), subject to Rule 1146.1 subparagraph (c)(1)(G) complying with a previous NOx emission limit that is less than or equal to 20 ppm.
- (6) Notwithstanding paragraph (de)(1), by December 7, 2033 or when 50 percent or more of the unit's burners are replaced, whichever is earlier, the owner or operator that has installed, modified, or has been issued a SCAQMD Permit to Construct or Permit to Operate prior to December 7, 2018 for the following units shall not operate in a manner that discharges NOx emissions (reference

- at 3 percent volume stack gas oxygen on a dry basis averaged over a period of 15 consecutive minutes) in excess of:
- (A) 7 ppm for Rule 1146 Group I units operating without air pollution control equipment for the after treatment of the emissions in the exhaust complying with a previous NOx emission limit of 7 ppm or less and greater than 5 ppm; or
- (B) 9 ppm for Rule 1146 Group III or Rule 1146.1 natural gas fired units complying with a previous NOx emission limit of 12 ppm or less and greater than 9 ppm.
- (7) The owner or operator of any Rule 1146 Group I unit complying with the requirements specified in subparagraph (de)(6)(A) that exceeds 300,000 therms of annual heat input from all fuels used shall:
  - (A) within 4 months after exceeding 300,000 therms of annual heat input, submit complete SCAQMD permit applications for the unit that does not meet the applicable NOx concentration limit specified in paragraph (de)(3); and
  - (B) within 18 months after exceeding 300,000 therms of annual heat input, demonstrate and maintain compliance with the applicable NOx concentration limit specified in paragraph (de)(3) for the life of the unit.
- (8) Any unit at a RECLAIM or former RECLAIM facility that is subject to a NOx emission limit in a different rule for an industry-specific category is not subject to the requirements contained in this subdivision.
- $(\underline{ef})$  The applicable monitoring, reporting, and recordkeeping requirements are as follows:
  - (1) For Title V facilities, an owner or operator of a RECLAIM facility shall comply with the monitoring, reporting, and recordkeeping requirements specified in Rule 2012.
  - (2) Except for Title V facilities, the owner or operator of a RECLAIM facility that becomes a former RECLAIM facility shall comply with the monitoring, reporting, and recordkeeping requirements in the applicable rule(s) as specified in subdivision (b) upon the date the facility becomes a former RECLAIM facility.
  - (3) The operator of any stationary engine that is located at a RECLAIM or former RECLAIM facility that is required to modify an existing continuous emission monitoring system (CEMS) or install a CEMS on an existing engine that is

subject to Rule 1110.2 (f)(1) shall comply with the compliance schedule in Rule 1110.2 Table VIII such that the operator shall submit to the Executive Officer applications for a new or modified CEMS within 90 days from when the facility becomes a former RECLAIM facility.