

DRAFT FINAL-FORM RULEMAKING
Annex A
TITLE 25. ENVIRONMENTAL PROTECTION
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION
Subpart C. PROTECTION OF NATURAL RESOURCES
ARTICLE III. AIR RESOURCES

CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

The definitions in section 3 of the act (35 P.S. § 4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

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Combustion efficiency—A measure of the extent of a combustion reaction, abbreviated C. E. and computed as follows:

$$\text{C. E.} = \frac{[\text{CO}_2]}{[\text{CO}_2] + [\text{CO}]} \times 100\%$$

where: [CO₂] = concentration of carbon dioxide and
[CO] = concentration of carbon monoxide

Combustion source—

(i) A stationary device that combusts solid, liquid or gaseous fuel used to produce heat or energy for industrial, commercial or institutional use by direct heat transfer.

(ii) The term does not include:

(A) Brick kilns.

(B) Cement kilns.

(C) Lime kilns.

Combustion unit—A stationary equipment used to burn fuel primarily for the purpose of producing power or heat by indirect heat transfer.

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Major NO_x emitting facility—A facility which emits or has the potential to emit NO_x from the processes located at the site or on contiguous properties under the common control of the same person at a rate greater than one of the following:

(i) Ten TPY in an ozone nonattainment area designated as extreme under section 182(e) and (f) of the Clean Air Act (42 U.S.C.A. § 7511a(e) and (f)).

(ii) Twenty-five TPY in an ozone nonattainment area designated as severe under section 182(d) and (f) of the Clean Air Act.

(iii) Fifty TPY in an area designated as serious under section 182(c) and (f) of the Clean Air Act.

(iv) One hundred TPY in an area included in an ozone transport region established under section 184 of the Clean Air Act (42 U.S.C.A. § 7511c).

(v) ~~Twenty-five~~ **FOR PURPOSES OF §§ 129.91—129.95 (RELATING TO STATIONARY SOURCES OF NO_x AND VOCs), TWENTY-FIVE** TPY and is located in Bucks, Chester, Delaware, Montgomery or Philadelphia County. ~~This threshold does not apply to §§ 129.96—129.100 (relating to additional RACT requirements for major sources of NO_x and VOCs).~~

(vi) FOR PURPOSES OF §§ 129.96—129.100 AND 129.111—129.115 (RELATING TO ADDITIONAL RACT REQUIREMENTS FOR MAJOR SOURCES OF NO_x AND VOCs; AND ADDITIONAL RACT REQUIREMENTS FOR MAJOR SOURCES OF NO_x AND VOCs FOR THE 2015 OZONE NAAQS), ONE HUNDRED TPY STATEWIDE.

Major VOC emitting facility—A facility which emits or has the potential to emit VOCs from **THE** processes located at the site or on contiguous properties under the common control of the same person at a rate greater than one of the following:

(i) Ten TPY in an ozone nonattainment area designated as extreme under section 182(e) of the Clean Air Act.

(ii) Twenty-five TPY in an ozone nonattainment area designated as severe under section 182(d) of the Clean Air Act.

(iii) Fifty TPY in an area included in an ozone transport region established under section 184 of the Clean Air Act.

(iv) ~~Twenty-five~~ **FOR PURPOSES OF §§ 129.91—129.95, TWENTY-FIVE** TPY and is located in Bucks, Chester, Delaware, Montgomery or Philadelphia County. ~~This threshold does not apply to §§ 129.96—129.100.~~

(v) FOR PURPOSES OF §§ 129.96—129.100 AND 129.111—129.115, FIFTY TPY STATEWIDE.

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Natural-finish hardwood plywood panel—A panel on which the original grain pattern is enhanced by an essentially transparent finish frequently supplemented by filler and toner.

Natural gas compression and transmission facility fugitive VOC air contamination source—
The group of fugitive-VOC-emitting components associated with an individual stationary source. Both of the following apply:

(i) The group of fugitive-VOC-emitting components is considered an individual VOC-emitting source.

(ii) Fugitive VOC emissions from the group of fugitive-VOC-emitting components are not aggregated with the VOC emissions from the associated individual stationary source.

Necessary preconstruction approvals or permits—Those permits or approvals required under the Clean Air Act or the act and regulations adopted under the acts, which are part of the applicable SIP.

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CHAPTER 129. STANDARDS FOR SOURCES

**ADDITIONAL RACT REQUIREMENTS FOR MAJOR SOURCES
OF NO_x AND VOCs FOR THE 2015 OZONE NAAQS**

(Editor’s Note: Sections 129.111—129.115 are proposed to be added and are printed in regular type to enhance readability.)

§ 129.111. Applicability.

(a) Except as specified in subsection (c), the NO_x requirements of this section and §§ 129.112—129.115 apply Statewide to the owner and operator of a major NO_x emitting facility **THAT COMMENCED OPERATION ON OR BEFORE AUGUST 3, 2018**, and the VOC requirements of this section and §§ 129.112—129.115 apply Statewide to the owner and operator of a major VOC emitting facility that ~~were in existence~~ **COMMENCED OPERATION** on or before August 3, 2018, for which a requirement or emission limitation, or both, has not been established in §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, ~~129.71—129.73, 129.75~~ **129.71—129.75**, 129.77 and 129.101—129.107. The owner or operator shall identify and list the ~~following~~ sources and facilities **SUBJECT TO THIS SUBSECTION** in the written notification required under § 129.115(a) (relating to written notification, compliance demonstration and recordkeeping and reporting requirements) **AS FOLLOWS:**

(1) The sources and facilities **THAT COMMENCED OPERATION ON OR BEFORE AUGUST 3, 2018**, for which a requirement or emission limitation has not been established in §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, ~~129.71—129.73, 129.75~~ **129.71—129.75**, 129.77 and 129.101—129.107.

(2) The sources and facilities **THAT COMMENCED OPERATION ON OR BEFORE AUGUST 3, 2018, AND ARE** subject to §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, ~~129.71—129.73, 129.75 129.71—129.75~~, 129.77 and 129.101—129.107.

(b) Except as specified in subsection (c), the NO_x requirements of this section and §§ 129.112—129.115 apply Statewide to the owner and operator of a NO_x emitting facility **THAT COMMENCED OPERATION ON OR BEFORE AUGUST 3, 2018**, and the VOC requirements of this section and §§ 129.112—129.115 apply Statewide to the owner and operator of a VOC emitting facility **THAT COMMENCED OPERATION ON OR BEFORE AUGUST 3, 2018**, when the installation **AND OPERATION** of a new source **AFTER AUGUST 3, 2018**, or a modification or change in operation **AFTER AUGUST 3, 2018**, of ~~an existing~~ **A** source ~~after~~ **THAT COMMENCED OPERATION ON OR BEFORE** August 3, 2018, results in the source or facility meeting the definition of a major NO_x emitting facility or a major VOC emitting facility and for which a requirement or an emission limitation, or both, has not been established in §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, ~~129.71—129.73, 129.75 129.71—129.75~~, 129.77 and 129.101—129.107. The owner or operator shall identify and list the ~~following~~ sources and facilities **SUBJECT TO THIS SUBSECTION** in the written notification required under § 129.115(a) **AS FOLLOWS**:

(1) The sources and facilities for which a requirement or emission limitation has not been established in §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, ~~129.71—129.73, 129.75 129.71—129.75~~, 129.77 and 129.101—129.107.

(2) The sources and facilities subject to §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, ~~129.71—129.73, 129.75 129.71—129.75~~, 129.77 and 129.101—129.107.

(c) Sections 129.112—129.114 do not apply to the owner and operator of a NO_x air contamination source that has the potential to emit less than 1 TPY of NO_x located at a major NO_x emitting facility subject to subsection (a) or (b) or a VOC air contamination source that has the potential to emit less than 1 TPY of VOC located at a major VOC emitting facility subject to subsection (a) or (b). The owner or operator shall identify and list these sources in the written notification required under § 129.115(a).

(d) ~~This~~ **EXCEPT AS SPECIFIED IN SUBSECTION (e), THIS** section and §§ 129.112—129.115 do not apply to the owner and operator of a facility that is not a major-NO_x emitting facility or a major VOC emitting facility on or before ~~blank~~ *(Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)* **DECEMBER 31, 2022.**

(e) IF THE OWNER AND OPERATOR OF A FACILITY THAT COMPLIED WITH SUBSECTION (d) MEETS THE DEFINITION OF A MAJOR NO_x EMITTING

FACILITY OR A MAJOR VOC EMITTING FACILITY AFTER DECEMBER 31, 2022, THEN THE OWNER AND OPERATOR SHALL COMPLY WITH SUBSECTION (b).

§ 129.112. Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

(a) The owner and operator of a source listed in one or more of subsections (b)—(k) located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 (relating to applicability) shall comply with the applicable presumptive RACT requirement or RACT emission limitation, or both, beginning with the specified compliance date as follows, unless an alternative compliance schedule is submitted and approved under subsections (n)—(p) or § 129.114 (relating to alternative RACT proposal and petition for alternative compliance schedule):

(1) January 1, 2023, for a source subject to § 129.111(a).

(2) January 1, 2023, or 1 year after the date the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(b) The owner and operator of a source listed in this subsection that is located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 shall comply with the applicable presumptive RACT requirements in paragraph (1) and recordkeeping and reporting requirements in paragraph (2).

(1) The owner or operator of a:

(i) Combustion unit **OR PROCESS HEATER** with a rated heat input equal to or greater than 20 million Btu/hour and less than 50 million Btu/hour shall conduct a biennial tune-up in accordance with the procedures in 40 CFR 63.11223 (relating to how do I demonstrate continuous compliance with the work practice and management practice standards?).

(A) Each biennial tune-up shall occur not less than 3 months and not more than 24 months after the date of the previous tune-up.

(B) The biennial tune-up must include, at a minimum, the following:

(I) Inspection and cleaning or replacement of fuel-burning equipment, including the burners and components, as necessary, for proper operation as specified by the manufacturer.

(II) Inspection of the flame pattern and adjustment of the burner, as necessary, to optimize the flame pattern to minimize total emissions of NO_x and, to the extent possible, emissions of CO.

(III) Inspection and adjustment, as necessary, of the air-to-fuel ratio control system to ensure proper calibration and operation as specified by the manufacturer.

(ii) Combustion unit **OR PROCESS HEATER** with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up shall conduct a tune-up of the boiler one time in each 5-year calendar period in accordance with the following:

(A) Each tune-up shall occur not less than 3 months and not more than 60 months after the date of the previous tune-up.

(B) The tune-up must include, at a minimum, the following:

(I) Inspection and cleaning or replacement of fuel-burning equipment, including the burners and components, as necessary, for proper operation as specified by the manufacturer.

(II) Inspection of the flame pattern and adjustment of the burner, as necessary, to optimize the flame pattern to minimize total emissions of NO_x and, to the extent possible, emissions of CO.

(III) Inspection and adjustment, as necessary, of the air-to-fuel ratio control system to ensure proper calibration and operation as specified by the manufacturer.

(2) The applicable recordkeeping and reporting requirements of ~~§ 129.115(e), (f) or (g)~~ § **129.115(f) AND (i)** (relating to written notification, compliance demonstration and recordkeeping and reporting requirements).

(3) Compliance with the applicable presumptive RACT requirements in paragraph (1) and recordkeeping and reporting requirements in paragraph (2) assures compliance with the provisions in §§ 129.93(b)(2), (3), (4) and (5) and 129.97(b)(1), (2) and (3) (relating to presumptive RACT emissions limitations; and presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule).

(c) The owner and operator of a source listed in this subsection that is located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices:

(1) A NO_x air contamination source that has the potential to emit less than 5 TPY of NO_x.

(2) A VOC air contamination source that has the potential to emit less than 2.7 TPY of VOC.

(3) A natural gas compression and transmission facility fugitive VOC air contamination source that has the potential to emit less than 2.7 TPY of VOC.

(4) A boiler or other combustion source with an individual rated gross heat input less than 20 million Btu/ hour.

(5) A combustion turbine with a rated output less than 1,000 bhp.

- (6) A lean burn stationary internal combustion engine rated at less than 500 bhp (gross).
- (7) A rich burn stationary internal combustion engine rated at less than 100 bhp (gross).
- (8) An incinerator, thermal oxidizer ~~or~~ , catalytic oxidizer **OR FLARE** used primarily for air pollution control.
- (9) A fuel-burning unit with an annual capacity factor of less than 5%.
 - (i) For a combustion unit, the annual capacity factor is the ratio of the unit's heat input (in million Btu or equivalent units of measure) to the unit's maximum rated hourly heat input rate (in million Btu/hour or equivalent units of measure) multiplied by 8,760 hours during a period of 12 consecutive calendar months.
 - (ii) For an electric generating unit, the annual capacity factor is the ratio of the unit's actual electric output (expressed in MWe/hr) to the unit's nameplate capacity (or maximum observed hourly gross load (in MWe/hr) if greater than the nameplate capacity) multiplied by 8,760 hours during a period of 12 consecutive calendar months.
 - (iii) For any other unit, the annual capacity factor is the ratio of the unit's actual operating level to the unit's potential operating level during a period of 12 consecutive calendar months.
- (10) An emergency standby engine operating less than 500 hours in a 12-month rolling period.
- (11) An electric arc furnace.
- (d) Except as specified in subsection (c), the owner and operator of a combustion unit, brick kiln, cement kiln, lime kiln or other combustion source located at a major VOC emitting facility subject to § 129.111 shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices for the control of the VOC emissions from the combustion unit or other combustion source.
- (e) The owner and operator of a municipal solid waste landfill subject to § 129.111 shall comply with the following applicable presumptive RACT requirements. The owner or operator of a:

~~(1) Municipal solid waste landfill constructed, reconstructed or modified on or before May 29, 1991, shall comply with the emission guidelines and compliance times in 40 CFR Part 60, Subpart Cc (relating to emission guidelines and compliance times for municipal solid waste landfills), which are adopted and incorporated by reference in § 122.3 (relating to adoption of standards), and the applicable Federal or state plans in 40 CFR Part 62 (relating to approval and promulgation of state plans for designated facilities and pollutants). MUNICIPAL SOLID WASTE LANDFILL CONSTRUCTED, RECONSTRUCTED OR MODIFIED ON OR BEFORE JULY 17, 2014, AND THAT HAS NOT BEEN MODIFIED OR RECONSTRUCTED SINCE JULY 17, 2014, SHALL COMPLY WITH THE FEDERAL PLAN FOR MUNICIPAL SOLID WASTE~~

LANDFILLS IN 40 CFR PART 62, SUBPART 000 (RELATING TO FEDERAL PLAN REQUIREMENTS FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION ON OR BEFORE JULY 17, 2014 AND HAVE NOT BEEN MODIFIED OR RECONSTRUCTED SINCE JULY 17, 2014).

~~—(2) Municipal solid waste landfill constructed, reconstructed or modified on or after May 30, 1991, but on or before July 17, 2014, shall comply with the New Source Performance Standards in 40 CFR Part 60, Subpart WWW (relating to standards of performance for municipal solid waste landfills that commenced construction, reconstruction, or modification on or after May 30, 1991, but before July 18, 2014), which are adopted and incorporated by reference in § 122.3.~~

~~—(3) (2) Municipal solid waste landfill constructed, reconstructed or modified on or after July 18, 2014, shall comply with the New Source Performance Standards in 40 CFR Part 60, Subpart XXX (relating to standards of performance for municipal solid waste landfills that commenced construction, reconstruction, or modification after July 17, 2014), which are adopted and incorporated by reference in § 122.3.~~

(f) The owner and operator of a municipal waste combustor subject to § 129.111 shall comply with the presumptive RACT emission limitation of **150 110** ppmvd NO_x @ 7% oxygen.

(g) Except as specified in subsection (c), the owner and operator of a NO_x air contamination source listed in this subsection that is located at a major NO_x emitting facility or a VOC air contamination source listed in this subsection that is located at a major VOC emitting facility subject to § 129.111 may not cause, allow or permit NO_x or VOCs to be emitted from the air contamination source in excess of the applicable presumptive RACT emission limitation specified in the following paragraphs:

(1) The owner or operator of:

(i) A natural gas-fired, propane-fired or liquid petroleum gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.10 lb NO_x/million Btu heat input.

(ii) A distillate oil-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.12 lb NO_x/million Btu heat input.

(iii) A residual oil-fired or other liquid fuel-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.20 lb NO_x/million Btu heat input.

(iv) A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input.

(v) A coal-fired combustion unit with a rated heat input equal to or greater than 50 million Btu/hour and less than 250 million Btu/hour shall comply with 0.45 lb NO_x/million Btu heat input.

(vi) A circulating fluidized bed combustion unit firing waste products of coal mining, physical coal cleaning and coal preparation operations that contain coal, matrix material, clay and other organic and inorganic material with a rated heat input equal to or greater than 250 million Btu/hour shall comply with the following presumptive RACT emission limitations **AND RACT REQUIREMENTS** as applicable:

(A) 0.16 lb NO_x/million Btu heat input when firing primarily bituminous waste such as gob.

(B) 0.16 lb NO_x/million Btu heat input when firing primarily anthracite waste such as culm.

(C) CONTROL THE NO_x EMISSIONS EACH OPERATING DAY BY OPERATING THE INSTALLED AIR POLLUTION CONTROL TECHNOLOGY AND COMBUSTION CONTROLS AT ALL TIMES CONSISTENT WITH THE TECHNOLOGICAL LIMITATIONS, MANUFACTURER SPECIFICATIONS, GOOD ENGINEERING AND MAINTENANCE PRACTICES AND GOOD AIR POLLUTION CONTROL PRACTICES FOR CONTROLLING EMISSIONS.

(vii) A solid fuel-fired combustion unit that is not a coal-fired combustion unit with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input.

~~—(viii) A circulating fluidized bed coal-fired combustion unit subject to subparagraph (vi) shall control the NO_x emissions each operating day by operating the installed air pollution control technology and combustion controls at all times consistent with the technological limitations, manufacturer specifications, good engineering and maintenance practices and good air pollution control practices for controlling emissions.~~

(2) The owner or operator of a:

(i) Combined cycle or combined heat and power combustion turbine with a rated output equal to or greater than 1,000 bhp and less than ~~180 MW~~ **4,100 bhp** shall comply with the following presumptive RACT emission limitations as applicable:

(A) ~~42~~ **120** ppmvd NO_x @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(B) 5 ppmvd VOC (as propane) @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(C) ~~96~~ **150** ppmvd NO_x @ 15% oxygen when firing fuel oil.

(D) 9 ppmvd VOC (as propane) @ 15% oxygen when firing fuel oil.

(ii) COMBINED CYCLE OR COMBINED HEAT AND POWER COMBUSTION TURBINE WITH A RATED OUTPUT EQUAL TO OR GREATER THAN 4,100 bhp AND LESS THAN 180 MW SHALL COMPLY WITH THE FOLLOWING PRESUMPTIVE RACT EMISSION LIMITATIONS AS APPLICABLE:

(A) 42 ppmvd NO_x @ 15% OXYGEN WHEN FIRING NATURAL GAS OR A NONCOMMERCIAL GASEOUS FUEL.

(B) 5 ppmvd VOC (as propane) @ 15% OXYGEN WHEN FIRING NATURAL GAS OR A NONCOMMERCIAL GASEOUS FUEL.

(C) 96 ppmvd NO_x @ 15% OXYGEN WHEN FIRING FUEL OIL.

(D) 9 ppmvd VOC (as propane) @ 15% OXYGEN WHEN FIRING FUEL OIL.

(iii) Combined cycle or combined heat and power combustion turbine with a rated output equal to or greater than 180 MW shall comply with the following presumptive RACT emission limitations as applicable:

(A) 4 ppmvd NO_x @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(B) 2 ppmvd VOC (as propane) @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(C) 8 ppmvd NO_x @ 15% oxygen when firing fuel oil.

(D) 2 ppmvd VOC (as propane) @ 15% oxygen when firing fuel oil.

~~(iii)~~ **(iv)** Simple cycle or regenerative cycle combustion turbine with a rated output equal to or greater than 1,000 bhp and less than ~~3,000~~ **4,100** bhp shall comply with the following presumptive RACT emission limitations as applicable:

(A) ~~85~~ **120** ppmvd NO_x @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(B) 9 ppmvd VOC (as propane) @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(C) 150 ppmvd NO_x @ 15% oxygen when firing fuel oil.

(D) 9 ppmvd VOC (as propane) @ 15% oxygen when firing fuel oil.

~~(iv)~~ **(v)** Simple cycle or regenerative cycle combustion turbine with a rated output equal to or greater than ~~3,000~~ **4,100** bhp and less than 60,000 bhp shall comply with the following presumptive RACT emission limitations as applicable:

(A) 42 ppmvd NO_x @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(B) 9 ppmvd VOC (as propane) @ 15% oxygen when firing natural gas or a noncommercial gaseous fuel.

(C) 96 ppmvd NO_x @ 15% oxygen when firing fuel oil.

(D) 9 ppmvd VOC (as propane) @ 15% oxygen when firing fuel oil.

(3) The owner or operator of a:

(i) Lean burn stationary internal combustion engine with a rating equal to or greater than 500 bhp and less than 3,500 bhp shall comply with the following presumptive RACT emission limitations as applicable:

(A) 3.0 grams NO_x/bhp-hr when firing natural gas or a noncommercial gaseous fuel.

(B) 0.5 gram VOC/bhp-hr excluding formaldehyde when firing natural gas or a noncommercial gaseous fuel, liquid fuel or dual-fuel.

(ii) Lean burn stationary internal combustion engine with a rating equal to or greater than 3,500 bhp shall comply with the following presumptive RACT emission limitations as applicable:

(A) 0.6 gram NO_x/bhp-hr when firing natural gas or a noncommercial gaseous fuel.

(B) 0.5 gram VOC/bhp-hr excluding formaldehyde when firing natural gas or a noncommercial gaseous fuel, liquid fuel or dual-fuel.

(iii) Stationary internal combustion engine with a rating equal to or greater than 500 bhp shall comply with 1.6 grams NO_x/bhp-hr when firing liquid fuel or dual-fuel.

(iv) Rich burn stationary internal combustion engine with a rating equal to or greater than 100 bhp shall comply with the following presumptive RACT emission limitations as applicable:

(A) ~~0.6~~ 2.0 gram NO_x/bhp-hr when firing natural gas or a noncommercial gaseous fuel.

(B) 0.5 gram VOC/bhp-hr when firing natural gas or a noncommercial gaseous fuel.

(4) Except as specified in subparagraph (ii), the owner or operator of a unit firing multiple fuels shall comply with:

(i) The applicable RACT multiple fuel emission limit determined on a total heat input fuel weighted basis in accordance with the following:

(A) Using the following equation:

$$E_{HI\text{weighted}} = \frac{\sum_{i=1}^n E_i H_i}{\sum_{i=1}^n H_i}$$

Where:

$E_{HI\text{weighted}}$ = The heat input fuel weighted multiple fuel emission rate or emission limitation for the compliance period, expressed in units of measure consistent with the units of measure for the emission limitation.

E_i = The emission rate or emission limit for fuel i during the compliance period, expressed in units of measure consistent with the units of measure for the emission limitation.

H_i = The total heat input for fuel i during the compliance period.

n = The number of different fuels used during the compliance period.

(B) Excluding a fuel representing less than 2% of the unit's annual fuel consumption on a heat input basis when determining the applicable RACT multiple fuel emission limit calculated in accordance with clause (A).

(i) The determination in subparagraph (i) does not apply to a stationary internal combustion engine that is subject to the RACT emission limits in paragraph (3).

(h) The owner and operator of a Portland cement kiln subject to § 129.111 shall comply with the following presumptive RACT emission limitations as applicable:

(1) 3.88 pounds of NO_x per ton of clinker produced for a long wet-process cement kiln as defined in § 145.142 (relating to definitions).

(2) 3.0 pounds of NO_x per ton of clinker produced for a long dry-process cement kiln as defined in § 145.142.

(3) 2.30 pounds of NO_x per ton of clinker produced for:

(i) A preheater cement kiln as defined in § 145.142.

(ii) A precalciner cement kiln as defined in § 145.142.

(i) The owner and operator of a glass melting furnace subject to § 129.111 shall comply with the following presumptive RACT emission limitations as applicable:

- (1) 4.0 pounds of NO_x per ton of glass pulled for container glass furnaces.
 - (2) 7.0 pounds of NO_x per ton of glass pulled for pressed or blown glass furnaces.
 - (3) 4.0 pounds of NO_x per ton of glass pulled for fiberglass furnaces.
 - (4) 7.0 pounds of NO_x per ton of glass pulled for flat glass furnaces.
 - (5) 6.0 pounds of NO_x per ton of glass pulled for all other glass melting furnaces.
- (j) The owner and operator of a lime kiln subject to § 129.111 shall comply with the presumptive RACT emission limitation of 4.6 pounds of NO_x per ton of lime produced.
- (k) The owner and operator of a direct-fired heater, furnace ~~or~~, oven **OR OTHER COMBUSTION SOURCE** with a rated heat input equal to or greater than 20 million Btu/hour subject to § 129.111 shall comply with the presumptive RACT emission limitation of 0.10 lb NO_x/million Btu heat input ~~on a daily average basis or as determined through a stack test.~~
- (l) The requirements and emission limitations of this section supersede the requirements and emission limitations of a RACT permit issued to the owner or operator of an air contamination source subject to one or more of subsections (b)—(k) prior to *blank* (*Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.*), under §§ 129.91—129.95 (relating to stationary sources of NO_x and VOCs) or under §§ 129.96—129.100 (relating to additional RACT requirements for major sources of NO_x and VOCs) to control, reduce or minimize NO_x emissions or VOC emissions, or both, from the air contamination source unless the permit contains more stringent requirements or emission limitations, or both.
- (m) The requirements and emission limitations of this section supersede the requirements and emission limitations of §§ 129.201—129.205, **129.301—129.310**, 145.111—145.113 and 145.141—145.146 (~~relating to additional NO_x requirements; emissions of NO_x from stationary internal combustion engines; and emissions of NO_x from cement manufacturing~~) unless the requirements or emission limitations of §§ 129.201—129.205, §§ **129.301—129.310**, §§ 145.111—145.113 or §§ 145.141—145.146 are more stringent.
- (n) The owner or operator of a major NO_x emitting facility or a major VOC emitting facility subject to § 129.111 that includes an air contamination source subject to one or more of subsections (b)—(k) that cannot meet the applicable presumptive RACT requirement or RACT emission limitation without installation of an air cleaning device may submit a petition, in writing **OR ELECTRONICALLY**, requesting an alternative compliance schedule in accordance with the following:
- (1) The ~~written~~ petition shall be submitted to the Department or appropriate approved local air pollution control agency as soon as possible but not later than:

(i) ~~*blank (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)*~~ **DECEMBER 31, 2022**, for a source subject to § 129.111(a).

(ii) ~~*blank (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)*~~ **DECEMBER 31, 2022**, or 6 months after the date that the source meets the definition of a major NO_x emitting facility or a major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(2) The ~~written~~ petition must include:

(i) A description, including make, model and location, of each affected source subject to a RACT requirement or a RACT emission limitation in one or more of subsections (b)—(k).

(ii) A description of the proposed air cleaning device to be installed.

(iii) A schedule containing proposed interim dates for completing each phase of the required work to install the air cleaning device described in subparagraph (ii).

(iv) A proposed interim emission limitation that will be imposed on the affected source until compliance is achieved with the applicable RACT requirement or RACT emission limitation.

(v) A proposed final compliance date that is as soon as possible but not later than 3 years after the written approval of the petition by the Department or the appropriate approved local air pollution control agency. The approved petition shall be incorporated in an applicable operating permit or plan approval.

(o) The Department or appropriate approved local air pollution control agency will review the timely and complete written petition requesting an alternative compliance schedule submitted in accordance with subsection (n) and approve or deny the petition in writing.

(p) Approval or denial under subsection (o) of the timely and complete petition for an alternative compliance schedule submitted under subsection (n) will be effective on the date the letter of approval or denial of the petition is signed by the authorized representative of the Department or appropriate approved local air pollution control agency.

(q) The Department will submit each petition for an alternative compliance schedule approved under subsection (o) to the Administrator of the EPA for approval as a revision to the Commonwealth's SIP. The owner and operator of the facility shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.

§ 129.113. Facility-wide or system-wide NO_x emissions averaging plan general requirements.

(a) The owner or operator of a major NO_x emitting facility subject to § 129.111 (relating to applicability) that includes at least one air contamination source subject to a NO_x RACT emission limitation in § 129.112 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) that cannot meet the applicable NO_x RACT emission limitation may elect to meet the applicable NO_x RACT emission limitation in § 129.112 by averaging NO_x emissions on either a facility-wide or system-wide basis. System-wide emissions averaging must be among sources under common control of the same owner or operator within the same ozone nonattainment area in this Commonwealth.

(b) The owner or operator of each facility that elects to comply with subsection (a) shall submit a ~~written~~ NO_x emissions averaging plan **IN WRITING OR ELECTRONICALLY** to the Department or appropriate approved local air pollution control agency as part of an application for an operating permit modification or a plan approval, if otherwise required. The application incorporating the requirements of this section shall be submitted by the applicable date as follows:

(1) ~~blank (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)~~ **DECEMBER 31, 2022**, for a source subject to § 129.111(a).

(2) ~~blank (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)~~ **DECEMBER 31, 2022**, or 6 months after the date that the source meets the definition of a major NO_x emitting facility, whichever is later, for a source subject to § 129.111(b).

(c) Each NO_x air contamination source included in the application for an operating permit modification or a plan approval, if otherwise required, for averaging NO_x emissions on either a facility-wide or system-wide basis submitted under subsection (b) must be an air contamination source subject to a NO_x RACT emission limitation in § 129.112.

(d) The application for the operating permit modification or the plan approval, if otherwise required, for averaging NO_x emissions on either a facility-wide or system-wide basis submitted under subsection (b) must demonstrate that the aggregate NO_x emissions emitted by the air contamination sources included in the facility-wide or system-wide NO_x emissions averaging plan are not greater than the NO_x emissions that would be emitted by the group of included sources if each source complied with the applicable NO_x RACT emission limitation in § 129.112 on a source-specific basis.

(e) The application for the operating permit modification or a plan approval, if otherwise required, specified in subsections (b)—(d) may include facility-wide or system-wide NO_x emissions averaging only for NO_x emitting sources or NO_x emitting facilities that are owned or operated by the applicant.

(f) The application for the operating permit modification or a plan approval, if otherwise required, specified in subsections (b)—(e) must include the following information:

(1) Identification of each air contamination source included in the NO_x emissions averaging plan.

(2) Each air contamination source's applicable emission limitation in § 129.112.

(3) Methods for demonstrating compliance and recordkeeping and reporting requirements in accordance with § 129.115 (relating to written notification, compliance demonstration and recordkeeping and reporting requirements) for each source included in the NO_x emissions averaging plan submitted under subsection (b).

(g) An air contamination source or facility included in the facility-wide or system-wide NO_x emissions averaging plan submitted in accordance with subsections (b)—(f) may be included in only one facility-wide or system-wide NO_x emissions averaging plan.

(h) The Department or appropriate approved local air pollution control agency will:

(1) Review the timely and complete NO_x emissions averaging plan submitted in accordance with subsection (b).

(2) Approve the NO_x emissions averaging plan submitted under subsection (b), in writing, if the Department or appropriate approved local air pollution control agency is satisfied that the NO_x emissions averaging plan complies with the requirements of subsection (b) and that the proposed NO_x emissions averaging plan is RACT for the air contamination sources.

(3) Deny or modify the NO_x emissions averaging plan submitted under subsection (b), in writing, if the proposal does not comply with the requirements of subsection (b).

(i) The proposed NO_x emissions averaging plan submitted under subsection (b) will be approved, denied or modified by the Department or appropriate approved local air pollution control agency in accordance with subsection (h) in writing through the issuance of a plan approval or operating permit modification prior to the owner or operator implementing the NO_x emissions averaging plan.

(j) The owner or operator of an air contamination source or facility included in the facility-wide or system-wide NO_x emissions averaging plan submitted in accordance with subsections (b)—(g) shall submit the reports and records specified in subsection (f)(3) to the Department or appropriate approved local air pollution control agency to demonstrate compliance with § 129.115.

(k) The owner or operator of an air contamination source or facility included in a facility-wide or system-wide NO_x emissions averaging plan submitted in accordance with subsections (b)—(g) that achieves emission reductions in accordance with other emission limitations required under the act or the Clean Air Act, or regulations adopted under the act or the Clean Air Act, that are not NO_x RACT emission limitations may not substitute those emission reductions for the emission reductions required by the facility-wide or system-wide NO_x emissions averaging plan

submitted to the Department or appropriate approved local air pollution control agency under subsection (b).

(l) The owner or operator of an air contamination source subject to a NO_x RACT emission limitation in § 129.112 that is not included in a facility-wide or system-wide NO_x emissions averaging plan submitted under subsection (b) shall operate the source in compliance with the applicable NO_x RACT emission limitation in § 129.112.

(m) The owner and operator of the air contamination sources included in a facility-wide or system-wide NO_x emissions averaging plan submitted under subsection (b) shall be liable for a violation of an applicable NO_x RACT emission limitation at each source included in the NO_x emissions averaging plan regardless of each individual facility's NO_x emission rate.

(n) The Department will submit each NO_x emissions averaging plan approved under subsection (i) to the Administrator of the EPA for approval as a revision to the SIP. The owner and operator of the facility shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.

§ 129.114. Alternative RACT proposal and petition for alternative compliance schedule.

(a) The owner or operator of an air contamination source subject to § 129.112 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 (relating to applicability) that cannot meet the applicable presumptive RACT requirement or RACT emission limitation of § 129.112 may propose an alternative RACT requirement or RACT emission limitation in accordance with subsection (d).

(b) The owner or operator of a NO_x air contamination source with a potential emission rate equal to or greater than 5.0 tons of NO_x per year that is not subject to § 129.112 or §§ 129.201—129.205 (relating to additional NO_x requirements) located at a major NO_x emitting facility subject to § 129.111 shall propose a NO_x RACT requirement or RACT emission limitation in accordance with subsection (d).

(c) The owner or operator of a VOC air contamination source with a potential emission rate equal to or greater than 2.7 tons of VOC per year that is not subject to § 129.112 located at a major VOC emitting facility subject to § 129.111 shall propose a VOC RACT requirement or RACT emission limitation in accordance with subsection (d).

(d) The owner or operator proposing an alternative RACT requirement or RACT emission limitation under subsection (a), (b) or (c) shall:

(1) Submit a ~~written~~ RACT proposal **IN WRITING OR ELECTRONICALLY** in accordance with the procedures in § 129.92(a)(1)—(5), (7)—(10) and (b) (relating to RACT proposal requirements) to the Department or appropriate approved local air pollution control agency as soon as possible but not later than:

(i) ~~*blank* (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~ **DECEMBER 31, 2022**, for a source subject to § 129.111(a).

(ii) ~~*blank* (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~ **DECEMBER 31, 2022**, or 6 months after the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(2) Be in receipt of an approval issued by the Department or appropriate approved local air pollution control agency in writing through a plan approval or operating permit modification for a RACT proposal submitted under paragraph (1)(ii) prior to the installation, modification or change in the operation of the existing air contamination source that will result in the source or facility meeting the definition of a major NO_x emitting facility or major VOC emitting facility.

(3) Include in the RACT proposal the proposed alternative NO_x RACT requirement or RACT emission limitation or VOC RACT requirement or RACT emission limitation developed in accordance with the procedures in § 129.92(a)(1)—(5) and (b).

(4) Include in the RACT proposal a schedule for completing implementation of the RACT requirement or RACT emission limitation as soon as possible but not later than:

(i) ~~*blank* (Editor's Note: The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~, for a source subject to § 129.111(a).

(ii) ~~*blank* (Editor's Note: The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~, or 1 year after the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(5) Include interim dates in the schedule required under paragraph (4) for the:

(i) Issuance of purchase orders.

(ii) Start and completion of process, technology and control technology changes.

(iii) Completion of compliance testing.

(6) Include in the RACT proposal methods for demonstrating compliance and recordkeeping and reporting requirements in accordance with § 129.115 (relating to written notification, compliance demonstration and recordkeeping and reporting requirements) for each air contamination source included in the RACT proposal.

(7) Demonstrate to the satisfaction of the Department or the appropriate approved local air pollution control agency that the proposed requirement or RACT emission limitation is RACT for the air contamination source.

(e) The Department or appropriate approved local air pollution control agency will:

(1) Review the timely and complete alternative RACT proposal submitted in accordance with subsection (d).

(2) Approve the alternative RACT proposal submitted under subsection (d), in writing, if the Department or appropriate approved local air pollution control agency is satisfied that the alternative RACT proposal complies with the requirements of subsection (d) and that the proposed alternative requirement or RACT emission limitation is RACT for the air contamination source.

(3) Deny or modify the alternative RACT proposal submitted under subsection (d), in writing, if the proposal does not comply with the requirements of subsection (d).

(f) The proposed alternative RACT requirement or RACT emission limitation and the implementation schedule submitted under subsection (d) will be approved, denied or modified ~~by the Department or appropriate approved local air pollution control agency~~ in accordance with ~~subsection (e) in writing through the issuance of a plan approval or operating permit modification~~ **25 Pa. CODE CHAPTER 127 (RELATING TO CONSTRUCTION, MODIFICATION, REACTIVATION AND OPERATION OF SOURCES)** prior to the owner or operator implementing the alternative RACT requirement or RACT emission limitation.

(g) The emission limit and requirements specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (f) supersede the emission limit and requirements in the existing plan approval or operating permit issued to the owner or operator of the source prior to *blank* (*Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.*), on the date specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (f), except to the extent the existing plan approval or operating permit contains more stringent requirements.

(h) The Department will submit each alternative RACT requirement or RACT emission limitation approved under subsection (f) to the Administrator of the EPA for approval as a revision to the SIP. The owner and operator of the facility shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.

~~(i) Compliance with the requirements in § 129.99(a) —~~ **(h) AN OWNER OR OPERATOR SUBJECT TO SUBSECTION (a), (b) OR (c) AND § 129.99 THAT HAS NOT MODIFIED OR CHANGED A SOURCE THAT COMMENCED OPERATION ON OR BEFORE OCTOBER 24, 2016, AND HAS NOT INSTALLED AND COMMENCED OPERATION**

OF A NEW SOURCE AFTER OCTOBER 24, 2016, MAY, IN PLACE OF THE ALTERNATIVE RACT REQUIREMENT OR RACT EMISSION LIMITATION REQUIRED UNDER SUBSECTION (d), SUBMIT AN ANALYSIS, CERTIFIED BY THE RESPONSIBLE OFFICIAL, IN WRITING OR ELECTRONICALLY TO THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY ON OR BEFORE DECEMBER 31, 2022, THAT DEMONSTRATES THAT COMPLIANCE WITH THE ALTERNATIVE RACT REQUIREMENT OR RACT EMISSION LIMITATION APPROVED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY UNDER § 129.99(e) (relating to alternative RACT proposal and petition for alternative compliance schedule) assures compliance with the provisions in subsections ~~(a)–(h)~~ (a)–(c) AND (e)–(h), except for sources subject to ~~§ 129.112(b)(11), (h)(4) and (h)(5)~~ § 129.112(c)(11) or (i)–(k).

(1) THE OWNER OR OPERATOR OF A SUBJECT SOURCE OR FACILITY THAT EVALUATES AND DETERMINES THAT THERE IS NO NEW POLLUTANT SPECIFIC AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE AVAILABLE AT THE TIME OF SUBMITTAL OF THE ANALYSIS AND THAT EACH TECHNICALLY FEASIBLE AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE EVALUATED FOR THE ALTERNATIVE RACT REQUIREMENT OR RACT EMISSION LIMITATION APPROVED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY UNDER § 129.99(e) HAD A COST EFFECTIVENESS:

(i) EQUAL TO OR GREATER THAN \$7,500 PER TON OF NO_x EMISSIONS REDUCED OR \$12,000 PER TON OF VOC EMISSIONS REDUCED SHALL INCLUDE THE FOLLOWING INFORMATION IN THE ANALYSIS:

(A) A STATEMENT THAT EXPLAINS HOW THE OWNER OR OPERATOR DETERMINED THAT THERE IS NO NEW POLLUTANT SPECIFIC AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE AVAILABLE.

(B) A LIST OF THE TECHNICALLY FEASIBLE AIR CLEANING DEVICES, AIR POLLUTION CONTROL TECHNOLOGIES OR TECHNIQUES PREVIOUSLY IDENTIFIED AND EVALUATED UNDER § 129.92(b)(1)–(3) INCLUDED IN THE WRITTEN RACT PROPOSAL SUBMITTED UNDER § 129.99(d) AND APPROVED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY UNDER § 129.99(e).

(C) A SUMMARY OF THE ECONOMIC FEASIBILITY ANALYSIS PERFORMED FOR EACH TECHNICALLY FEASIBLE AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE LISTED IN CLAUSE (B) AND THE COST EFFECTIVENESS OF EACH TECHNICALLY FEASIBLE AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE AS

SUBMITTED PREVIOUSLY UNDER § 129.99(d) OR AS CALCULATED CONSISTENT WITH THE “EPA AIR POLLUTION CONTROL COST MANUAL” (SIXTH EDITION), EPA/452/B-02-001, JANUARY 2002, AS AMENDED.

(D) A STATEMENT THAT AN EVALUATION OF EACH ECONOMIC FEASIBILITY ANALYSIS SUMMARIZED IN CLAUSE (C) DEMONSTRATES THAT THE COST EFFECTIVENESS REMAINS EQUAL TO OR GREATER THAN \$7,500 PER TON OF NO_x EMISSIONS REDUCED OR \$12,000 PER TON OF VOC EMISSIONS REDUCED.

(E) ADDITIONAL INFORMATION REQUESTED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY THAT MAY BE NECESSARY FOR THE EVALUATION OF THE ANALYSIS.

(ii) LESS THAN \$7,500 PER TON OF NO_x EMISSIONS REDUCED OR \$12,000 PER TON OF VOC EMISSIONS REDUCED SHALL INCLUDE THE FOLLOWING INFORMATION IN THE ANALYSIS:

(A) A STATEMENT THAT EXPLAINS HOW THE OWNER OR OPERATOR DETERMINED THAT THERE IS NO NEW POLLUTANT SPECIFIC AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE AVAILABLE.

(B) A LIST OF THE TECHNICALLY FEASIBLE AIR CLEANING DEVICES, AIR POLLUTION CONTROL TECHNOLOGIES OR TECHNIQUES PREVIOUSLY IDENTIFIED AND EVALUATED UNDER § 129.92(b)(1)—(3) IN THE WRITTEN RACT PROPOSAL SUBMITTED UNDER § 129.99(d) AND APPROVED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY UNDER § 129.99(e).

(C) A SUMMARY OF THE ECONOMIC FEASIBILITY ANALYSIS PERFORMED FOR EACH TECHNICALLY FEASIBLE AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE LISTED IN CLAUSE (B) AND THE COST EFFECTIVENESS OF EACH TECHNICALLY FEASIBLE AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE AS SUBMITTED PREVIOUSLY UNDER § 129.99(d) OR AS CALCULATED CONSISTENT WITH THE “EPA AIR POLLUTION CONTROL COST MANUAL” (SIXTH EDITION), EPA/452/B-02-001, JANUARY 2002, AS AMENDED.

(D) A STATEMENT THAT AN EVALUATION OF EACH ECONOMIC FEASIBILITY ANALYSIS SUMMARIZED IN CLAUSE (C) DEMONSTRATES THAT THE COST EFFECTIVENESS REMAINS LESS THAN \$7,500 PER TON OF NO_x EMISSIONS REDUCED OR \$12,000 PER TON OF VOC EMISSIONS REDUCED.

(E) A NEW ECONOMIC FEASIBILITY ANALYSIS FOR EACH TECHNICALLY FEASIBLE AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE LISTED IN CLAUSE (B) IN ACCORDANCE WITH § 129.92(b)(4).

(F) ADDITIONAL INFORMATION REQUESTED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY THAT MAY BE NECESSARY FOR THE EVALUATION OF THE ANALYSIS.

(2) THE OWNER OR OPERATOR OF A SUBJECT SOURCE OR FACILITY THAT EVALUATES AND DETERMINES THAT THERE IS A NEW OR UPGRADED POLLUTANT SPECIFIC AIR CLEANING DEVICE, AIR POLLUTION CONTROL TECHNOLOGY OR TECHNIQUE AVAILABLE AT THE TIME OF SUBMITTAL OF THE ANALYSIS SHALL:

(i) PERFORM A TECHNICAL FEASIBILITY ANALYSIS AND AN ECONOMIC FEASIBILITY ANALYSIS IN ACCORDANCE WITH § 129.92(b).

(ii) SUBMIT THE ANALYSES PERFORMED UNDER SUBPARAGRAPH (i) TO THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY FOR REVIEW.

(iii) PROVIDE ADDITIONAL INFORMATION REQUESTED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY THAT MAY BE NECESSARY FOR THE EVALUATION OF THE ANALYSIS.

(j) THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY WILL:

(1) REVIEW THE ANALYSES SUBMITTED IN ACCORDANCE WITH SUBSECTION (i).

(2) PUBLISH NOTICE IN THE PENNSYLVANIA BULLETIN AND NEWSPAPERS OF GENERAL CIRCULATION FOR A MINIMUM 30-DAY PUBLIC COMMENT PERIOD AND AN OPPORTUNITY FOR A PUBLIC HEARING FOR THE ANALYSES SUBMITTED UNDER SUBSECTION (i) AND SUPPORTING DOCUMENTATION.

(3) PREPARE A SUMMARY OF THE PUBLIC COMMENTS RECEIVED ON THE ANALYSES AND RESPONSES TO THE COMMENTS.

(4) AS APPROPRIATE, ISSUE THE NECESSARY PLAN APPROVALS AND OPERATING PERMIT MODIFICATIONS IN CONFORMANCE WITH 25 Pa. CODE CHAPTER 127 FOR THE ANALYSES REVIEWED UNDER PARAGRAPH (1).

(k) THE DEPARTMENT WILL SUBMIT THE FOLLOWING INFORMATION TO THE ADMINISTRATOR OF THE EPA FOR APPROVAL AS A REVISION TO THE COMMONWEALTH'S SIP.

(1) THE ANALYSES, SUPPORTING DOCUMENTATION AND SUMMARY OF PUBLIC COMMENTS AND RESPONSES DESCRIBED IN SUBSECTION (j)(2) and (3).

(2) THE PLAN APPROVALS AND OPERATING PERMIT MODIFICATIONS ISSUED UNDER SUBSECTION (j)(4).

(l) The owner and operator of a facility proposing to comply with the applicable RACT requirement or RACT emission limitation under subsection (a), (b) or (c) through the installation of an air cleaning device may submit a petition, in writing **OR ELECTRONICALLY**, requesting an alternative compliance schedule in accordance with the following:

(1) The ~~written~~ petition requesting an alternative compliance schedule shall be submitted to the Department or appropriate approved local air pollution control agency as soon as possible but not later than:

(i) ~~blank (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)~~ **DECEMBER 31, 2022**, for a source subject to § 129.111(a).

(ii) ~~blank (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final form rulemaking.)~~ **DECEMBER 31, 2022**, or 6 months after the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(2) The ~~written~~ petition must include:

(i) A description, including make, model and location, of each air contamination source subject to a RACT requirement or RACT emission limitation in one or more of subsections (a)—(c).

(ii) A description of the proposed air cleaning device to be installed.

(iii) A schedule containing proposed interim dates for completing each phase of the required work to install the air cleaning device described in subparagraph (ii).

(iv) A proposed interim emission limitation that will be imposed on the affected air contamination source until compliance is achieved with the applicable RACT requirement or RACT emission limitation.

(v) A proposed final compliance date that is as soon as possible but not later than 3 years after the approval of the petition by the Department or the appropriate approved local air pollution

control agency. If the petition is for the replacement of an existing source, the final compliance date will be determined on a case-by-case basis. The approved petition shall be incorporated in an applicable operating permit or plan approval.

~~(k)~~ (m) The Department or appropriate approved local air pollution control agency will review the timely and complete ~~written~~ petition requesting an alternative compliance schedule submitted in accordance with subsection ~~(j)~~ (l) and approve or deny the petition in writing.

~~(4)~~ (n) The emission limit and requirements specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection ~~(k)~~ (m) supersede the emission limit and requirements in the existing plan approval or operating permit issued to the owner or operator of the source prior to *blank* (*Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.*), on the date specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection ~~(k)~~ (m), except to the extent the existing plan approval or operating permit contains more stringent requirements.

~~(m)~~ (o) Approval or denial under subsection ~~(k)~~ (m) of the timely and complete petition for an alternative compliance schedule submitted under subsection ~~(j)~~ (l) will be effective on the date the letter of approval or denial of the petition is signed by the authorized representative of the Department or appropriate approved local air pollution control agency.

~~(n)~~ (p) The Department will submit each petition for an alternative compliance schedule approved under subsection ~~(k)~~ (m) to the Administrator of the EPA for approval as a revision to the Commonwealth's SIP. The owner and operator of the facility shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.

§ 129.115. Written notification, compliance demonstration and recordkeeping and reporting requirements.

(a) The owner and operator of an air contamination source subject to this section and § 129.111 (relating to applicability) shall submit a ~~written~~ notification, **IN WRITING OR ELECTRONICALLY**, to the appropriate Regional Manager ~~by *blank* (*Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.*)~~ that proposes how the owner and operator intend to comply with the requirements of this section and §§ 129.111—129.114.

(1) THE NOTIFICATION SHALL BE SUBMITTED TO THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY AS SOON AS POSSIBLE BUT NOT LATER THAN:

(i) DECEMBER 31, 2022, FOR A SOURCE SUBJECT TO § 129.111(a).

(ii) DECEMBER 31, 2022, OR 6 MONTHS AFTER THE DATE THAT THE SOURCE MEETS THE DEFINITION OF A MAJOR NO_x EMITTING FACILITY OR MAJOR

VOC EMITTING FACILITY, WHICHEVER IS LATER, FOR A SOURCE SUBJECT TO § 129.111(b).

(2) This ~~written~~ notification shall ~~include the following information~~ IDENTIFY THE AIR CONTAMINATION SOURCES IN § 129.111(a) AS ONE OF THE FOLLOWING:

~~(1) The air contamination sources identified in § 129.111(a) as one of the following:~~

- (i) Subject to a RACT requirement or RACT emission limitation in §§ 129.112—129.114.
- (ii) Exempted from §§ 129.112—129.114.

~~(2)(3) The air contamination sources identified in § 129.111(b) as one of the following:~~

- (i) Subject to a RACT requirement or RACT emission limitation in §§ 129.112—129.114.
- (ii) Exempted from §§ 129.112—129.114.

~~(3)(4) The air contamination sources identified in § 129.111(c) that have a potential to emit less than 1 TPY of NO_x located at a major NO_x emitting facility subject to § 129.111(a) or (b) or a VOC air contamination source that has the potential to emit less than 1 TPY of VOC located at a major VOC emitting facility subject to § 129.111(a) or (b).~~

~~(4)(5) The following information for each air contamination source listed in paragraph ~~(1)~~ (2):~~

- (i) A description, including make, model and location, of each source.
- (ii) The applicable RACT requirement or RACT emission limitation, or both, in §§ 129.112—129.114 for each source listed in accordance with paragraph ~~(1)(i)~~ (2)(i).
- (iii) How the owner or operator shall comply with subparagraph (ii) for each source listed in subparagraph (i).

(iv) The reason why the source is exempt from the RACT requirements and RACT emission limitations in §§ 129.112—129.114 for each source listed in accordance with paragraph ~~(1)(ii)~~ (2)(ii).

~~(5)(6) The following information for each air contamination source listed in paragraph ~~(2)~~ (3):~~

- (i) A description, including make, model and location, of each source.
- (ii) The applicable RACT requirement or RACT emission limitation, or both, in §§ 129.112—129.114 for each source listed in paragraph ~~(2)(i)~~ (3)(i).
- (iii) How the owner or operator shall comply with subparagraph (ii) for each source listed in subparagraph (i).

(iv) The reason why the source is exempt from the RACT requirements and RACT emission limitations in §§ 129.112—129.114 for each source listed in accordance with paragraph ~~(2)(ii)~~ **(3)(ii)**.

~~(6)(7)~~ The following information for each air contamination source listed in paragraph ~~(3)~~ **(4)**:

(i) A description, including make, model and location, of each source.

(ii) Information sufficient to demonstrate that the source has a potential to emit less than 1 TPY of NO_x or 1 TPY of VOC, as applicable.

(b) Except as specified in subsection (d), the owner and operator of an air contamination source subject to a NO_x RACT requirement or RACT emission limitation or VOC RACT requirement or RACT emission limitation, or both, listed in § 129.112 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation by performing the following monitoring or testing procedures:

(1) For an air contamination source with a CEMS, monitoring and testing in accordance with the requirements of Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) using a 30-operating day rolling average, except for municipal waste combustors subject to § 129.112(f) **and**, combustion units or process heaters subject to § 129.112(g)(1) **AND DIRECT-FIRED HEATERS, FURNACES, OVENS OR OTHER COMBUSTION SOURCES SUBJECT TO § 129.112(k)**.

(i) A 30-operating day rolling average emission rate for each applicable RACT emission limitation shall be calculated for an affected air contamination source for each consecutive operating day.

(ii) Each 30-operating day rolling average emission rate for an affected air contamination source must include the emissions that occur during the entire operating day, including emissions from start-ups, shutdowns and malfunctions.

(2) For a Portland cement kiln with a CEMS, monitoring of clinker production rates in accordance with 40 CFR 63.1350(d) (relating to monitoring requirements).

(3) For a municipal waste combustor with a CEMS, monitoring and testing in accordance with the requirements in Chapter 139, Subchapter C, using a daily **rolling** average.

(4) For a combustion unit or process heater subject to § 129.112(g)(1) with a CEMS, monitoring and testing in accordance with the requirements in Chapter 139, Subchapter C, using a daily average.

(5) FOR A DIRECT-FIRED HEATER, FURNACE, OVEN OR OTHER COMBUSTION SOURCE SUBJECT TO § 129.112(k) WITH A CEMS, MONITORING AND TESTING

IN ACCORDANCE WITH THE REQUIREMENTS IN CHAPTER 139, SUBCHAPTER C, USING A DAILY AVERAGE.

(6) For an air contamination source without a CEMS, monitoring and testing in accordance with a Department-approved emissions source test that meets the requirements of Chapter 139, Subchapter A (relating to sampling and testing methods and procedures). The source test shall be conducted to demonstrate initial compliance and subsequently on a schedule set forth in the applicable permit.

(c) The owner or operator of a combined-cycle combustion turbine may comply with the requirements in ~~§ 129.112(g)(2)(ii)~~ § 129.112(g)(2)(iii) on a mass-equivalent basis. The actual emissions during the compliance period must be less than the allowable emissions during the compliance period. The allowable emissions are calculated by multiplying actual heat input in million Btu during the compliance period by the following:

(1) 0.015 lb NO_x/million Btu for sources subject to ~~§ 129.112(g)(2)(ii)(A)~~ § 129.112(g)(2)(iii)(A).

(2) 0.031 lb NO_x/million Btu for sources subject to ~~§ 129.112(g)(2)(ii)(B)~~ § 129.112(g)(2)(iii)(B).

(3) 0.014 lb VOC/million Btu for sources subject to ~~§ 129.112(g)(2)(ii)(C)~~ § 129.112(g)(2)(iii)(C).

(4) 0.030 lb VOC/million Btu for sources subject to ~~§ 129.112(g)(2)(ii)(D)~~ § 129.112(g)(2)(iii)(D).

(d) Except as specified in § 129.112(n) and ~~§ 129.114(j)~~ § 129.114(l) (relating to alternative RACT proposal and petition for alternative compliance schedule), the owner and operator of an air contamination source subject to subsection ~~(a)~~ (b) shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation in accordance with the procedures in subsection (a) not later than:

(1) January 1, 2023, for a source subject to § 129.111(a) (relating to applicability).

(2) January 1, 2023, or 1 year after the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(e) An owner or operator of an air contamination source subject to this section and §§ 129.111, 129.112 and 129.113 (relating to facility-wide or system-wide NO_x emissions averaging plan general requirements) may request a waiver from the requirement to demonstrate compliance with the applicable emission limitation listed in § 129.112 if the following requirements are met:

(1) The request for a waiver is submitted, in writing **OR ELECTRONICALLY**, to the Department not later than:

(i) ~~*blank* (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~ **DECEMBER 31, 2022**, for a source subject to § 129.111(a).

(ii) ~~*blank* (Editor's Note: The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~ **DECEMBER 31, 2022**, or 6 months after the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(2) The request for a waiver demonstrates that a Department-approved emissions source test was performed in accordance with the requirements of Chapter 139, Subchapter A on or after:

(i) ~~*blank* (Editor's Note: The blank refers to the date 1 year before the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~, for a source subject to § 129.111(a).

(ii) ~~*blank* (Editor's Note: The blank refers to the date 1 year before the effective date of adoption of this proposed rulemaking when published as a final-form rulemaking.)~~, or within 12 months prior to the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.111(b).

(3) The request for a waiver demonstrates to the satisfaction of the Department that the test results show that the source's rate of emissions is in compliance with the source's applicable NO_x emission limitation or VOC emission limitation.

(4) The Department approves, in writing, the request for a waiver.

(f) The owner and operator of an air contamination source subject to this section and §§ 129.111—129.114 shall keep records to demonstrate compliance with §§ 129.111—129.114 and submit ~~reporting REPORTS~~ to the Department ~~in the following manner~~ **IN ACCORDANCE WITH THE APPLICABLE REGULATIONS IN 25 Pa. CODE, PART 1, SUBPART C, ARTICLE III (RELATING TO AIR RESOURCES) AND AS SPECIFIED IN THE OPERATING PERMIT OR PLAN APPROVAL FOR THE AIR CONTAMINATION SOURCE AS FOLLOWS:**

(1) The records shall include sufficient data and calculations to demonstrate that the requirements of §§ 129.111—129.114 are met.

(2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

(3) The records necessary to determine compliance shall be reported to the Department on a schedule specified in the ~~Subpart C, Article III (relating to air resources) regulations~~

APPLICABLE REGULATION or as otherwise specified in the operating permit or plan approval for the air contamination source.

(g) Beginning with the compliance date specified in § 129.112(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable NO_x emission rate threshold specified in § 129.114(b) and the requirements of § 129.112 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.

(h) Beginning with the compliance date specified in § 129.112(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable VOC emission rate threshold specified in § 129.114(c) and the requirements of § 129.112 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.

(i) The owner or operator of a combustion unit **OR PROCESS HEATER** subject to § 129.112(b) shall record each adjustment conducted under the procedures in § 129.112(b). This record must contain, at a minimum:

- (1) The date of the tuning procedure.
- (2) The name of the service company and the technician performing the procedure.
- (3) The final operating rate or load.
- (4) The final NO_x and CO emission rates.
- (5) The final excess oxygen rate.
- (6) Other information required by the applicable operating permit.

(j) The owner or operator of a Portland cement kiln subject to § 129.112(h) shall maintain a daily operating log for each Portland cement kiln. The record for each kiln must include:

- (1) The total hours of operation.
- (2) The type and quantity of fuel used.
- (3) The quantity of clinker produced.
- (4) The date, time and duration of a start-up, shutdown or malfunction of a Portland cement kiln or emissions monitoring system.

(k) The records shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

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