

PROPOSED RULEMAKING

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 121 AND 129]

Additional RACT Requirements for Major Sources of NO_x and VOCs for the 2015 Ozone NAAQS

The Environmental Quality Board (Board) proposes to amend Chapters 121 and 129 (relating to general provisions; and standards for sources) to read as set forth in Annex A. This proposed rulemaking would amend Chapter 129 by adopting additional presumptive reasonably available control technology (RACT) requirements and RACT emission limitations for certain major stationary sources of oxides of nitrogen (NO_x) and volatile organic compound (VOC) emissions in existence on or before August 3, 2018, to address the 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS).

This proposed rulemaking would amend § 121.1 (relating to definitions) by adding the terms “combustion source” and “natural gas compression and transmission facility fugitive VOC air contamination source” to support the proposed amendments to Chapter 129.

This proposed rulemaking will be submitted to the United States Environmental Protection Agency (EPA) for approval as a revision to the Commonwealth’s State Implementation Plan (SIP) following promulgation of the final-form rulemaking.

This proposed rulemaking was adopted by the Board at its meeting on May 19, 2021.

A. *Effective Date*

This proposed rulemaking will be effective upon final-form publication in the *Pennsylvania Bulletin*.

B. *Contact Persons*

For further information, contact Viren Trivedi, Chief, Division of Permits, Bureau of Air Quality, Rachel Carson State Office Building, P.O. Box 8468, Harrisburg, PA 17105-8468, (717) 783-9476; or Jesse C. Walker, Assistant Counsel, Bureau of Regulatory Counsel, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposed rulemaking appears in section J of this preamble. Persons with a disability may use the Pennsylvania Hamilton Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available on the Department of Environmental Protection’s (Department) web site at www.dep.pa.gov (select “Public Participation,” then “Environmental Quality Board”).

C. *Statutory Authority*

This proposed rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (APCA) (35 P.S. § 4005(a)(1)), which grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth; and section 5(a)(8) of the APCA, which grants the Board the authority to adopt rules and regulations designed to implement the provisions of the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7671q).

D. *Background and Purpose*

This proposed rulemaking would establish §§ 129.111—129.115 (relating to additional RACT requirements for major sources of NO_x and VOCs for the 2015 ozone

NAAQS) to meet CAA requirements. Emissions of NO_x and VOCs are precursors for ground-level ozone formation. Ground-level ozone, a public health and welfare hazard, is not emitted directly to the atmosphere from air contamination sources, but forms from the photochemical reaction between emissions of VOCs and NO_x in the presence of sunlight.

Ground-level ozone is a highly reactive gas which at sufficient concentrations can produce a wide variety of harmful effects. At elevated concentrations, ground-level ozone can adversely affect human health, vegetation, materials, economic values, and personal comfort and well-being. It can cause damage to important food crops, forests, livestock and wildlife. Repeated exposure to ground-level ozone pollution may cause a variety of adverse health effects for both healthy people and those with existing conditions including difficulty in breathing, chest pains, coughing, nausea, throat irritation and congestion. It can worsen bronchitis, heart disease, emphysema and asthma, reduce lung capacity and lead to increased morbidity. Asthma is a significant and growing threat to children and adults. High levels of ground-level ozone also affect animals including pets, livestock and wildlife in ways similarly to humans.

The EPA is responsible for establishing NAAQS, or maximum allowable concentrations in the ambient air, for six criteria pollutants considered harmful to public health and welfare, including the environment: ground-level ozone; particulate matter; NO_x; carbon monoxide; sulfur dioxide; and lead. Section 109 of the CAA (42 U.S.C.A. § 7409) established two types of NAAQS: primary standards, which are limits set to protect public health; and secondary standards, which are limits set to protect public welfare and the environment, including protection against visibility impairment and from damage to animals, crops, vegetation and buildings. The EPA established primary and secondary ground-level ozone NAAQS to protect public health and welfare.

On April 30, 1971, the EPA promulgated primary and secondary NAAQS for photochemical oxidants, which include ozone, under section 109 of the CAA. See 36 FR 8186 (April 30, 1971). These were set at an hourly average of 0.08 parts per million (ppm) total photochemical oxidants not to be exceeded more than 1 hour per year. On February 8, 1979, the EPA announced a revision to the then-current 1-hour standard. See 44 FR 8202 (February 8, 1979). The final rulemaking revised the level of the primary 1-hour ozone standard from 0.08 ppm to 0.12 ppm and set the secondary standard identical to the primary standard. This revised 1-hour standard was reaffirmed on March 9, 1993. See 58 FR 13008 (March 9, 1993).

Section 110(a) of the CAA (42 U.S.C.A. § 7410(a)) gives states the primary responsibility for achieving the NAAQS. Section 110(a) of the CAA provides that each state shall adopt and submit to the EPA a plan to implement measures (a SIP) to enforce the NAAQS or a revision to the NAAQS promulgated under section 109(b) of the CAA. A SIP includes the regulatory programs, actions and commitments a state will carry out to implement its responsibilities under the CAA. Once approved by the EPA, a SIP is legally enforceable under both Federal and state law.

Section 172(c)(1) of the CAA (42 U.S.C.A. § 7502(c)(1)) provides that SIPs for nonattainment areas must include

“reasonably available control measures,” including RACT, for affected sources of emissions. RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. See 44 FR 53762 (September 17, 1979). Section 182 of the CAA (42 U.S.C.A. § 7511a) requires that, for areas that exceed the NAAQS for ozone, states shall develop and administer a program that mandates that certain major stationary sources implement RACT. Under sections 182(f)(1) and 184(b)(2) of the CAA (42 U.S.C.A. §§ 7511a(f)(1) and 7511c(b)(2)), these RACT requirements are applicable to all sources in this Commonwealth that emit or have a potential to emit 100 tons per year (TPY) or more of NO_x. Under sections 182(b)(2) and 184(b)(2) of the CAA (42 U.S.C.A. § 7511c(b)(2)), these RACT requirements are applicable to all sources in this Commonwealth that emit or have a potential to emit at least 50 TPY of VOCs.

For RACT implementation purposes, this entire Commonwealth is treated as a “moderate” ozone nonattainment area, because this Commonwealth is included in the Ozone Transport Region (OTR) established by operation of law under sections 176A and 184 of the CAA (42 U.S.C.A. §§ 7506a and 7511c). Section 184(b) of the CAA addresses provisions for the SIP of a state included in the OTR. Section 184(b)(1)(B) of the CAA requires that states in the OTR, including this Commonwealth, submit a SIP revision requiring implementation of RACT for all major stationary sources of NO_x and VOC emissions in the state and not just for those sources that are located in designated nonattainment areas of the state. The proposed RACT requirements would apply to all major facilities or sources in this Commonwealth that emit or have a potential to emit equal to or greater than 100 TPY of NO_x or 50 TPY of VOCs, as required under section 184 of the CAA for states in the OTR. Consequently, the Commonwealth’s SIP must include RACT regulations applicable Statewide to affected major stationary sources of NO_x and VOC emissions. The Commonwealth’s RACT regulations under §§ 129.91—129.95 (relating to stationary sources of NO_x and VOCs) were implemented Statewide in January 1994 for the 1979 and 1993 1-hour ozone standard. See 24 Pa.B. 467 (January 15, 1994). Additionally, because the five-county Philadelphia area was designated as severe ozone nonattainment for the 1979 1-hour standard, existing sources of 25 TPY or more of either pollutant in the five-county Philadelphia area were required under section 182(d) of the CAA to implement the RACT requirements in §§ 129.91—129.95. These requirements remain applicable to these sources of 25 TPY or more in the five-county Philadelphia area.

On July 18, 1997, the EPA concluded that revisions to the then-current 1-hour ozone primary standard to provide increased public health protection were appropriate at this time to protect public health with an adequate margin of safety. Further, the EPA determined that it was appropriate to establish a primary standard of 0.08 ppm averaged over 8 hours. At this time, the EPA also established a secondary standard equal to the primary standard. See 62 FR 38856 (July 18, 1997). In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for the 1997 8-hour ozone NAAQS. See 69 FR 23858, 23931 (April 30, 2004).

On March 27, 2008, the EPA lowered the primary and secondary 8-hour ozone standards from 0.08 ppm to 0.075 ppm. See 73 FR 16436 (March 27, 2008). The EPA made designations for the 2008 8-hour ozone standards on April 30, 2012, with an effective date of July 20, 2012. The EPA

designated all or portions of Allegheny, Armstrong, Beaver, Berks, Bucks, Butler, Carbon, Chester, Delaware, Fayette, Lancaster, Lehigh, Montgomery, Northampton, Philadelphia, Washington and Westmoreland Counties as “marginal” nonattainment for the 2008 8-hour ozone NAAQS, with the rest of this Commonwealth designated unclassifiable/attainment. See 77 FR 30088, 30143 (May 21, 2012).

The Commonwealth’s RACT regulations under §§ 129.96—129.100 (relating to additional RACT requirements for major sources of NO_x and VOCs) were implemented in April 2016 for the 1997 and 2008 8-hour ozone standards. See 46 Pa.B. 2036 (April 23, 2016).

On October 26, 2015, the EPA lowered the primary and secondary 8-hour ozone standards from 0.075 ppm to 0.070 ppm. See 80 FR 65292 (October 26, 2015). The EPA made designations for the 2015 8-hour ozone standards on June 4, 2018, with an effective date of August 3, 2018. On June 4, 2018, the EPA designated Bucks, Chester, Delaware, Montgomery and Philadelphia Counties as “marginal” nonattainment, with the rest of this Commonwealth designated attainment/unclassifiable. See 83 FR 25776, 25828 (June 4, 2018). The Department’s preliminary analysis of the 2020 ambient air ozone season monitoring data shows that all ozone samplers in this Commonwealth are monitoring attainment of the 2015 8-hour ozone NAAQS except these three: the Bristol sampler in Bucks County and the Philadelphia Air Management Services Northeast Airport and Northeast Waste samplers in Philadelphia County; all ozone samplers in this Commonwealth are projected to monitor attainment of the 2008 and 1997 8-hour ozone NAAQS.

The EPA’s final rules to implement the 2008 and 2015 8-hour ozone NAAQS require states with areas classified as “moderate” nonattainment or higher to submit a demonstration, as a revision to the SIP, that their current regulations fulfill 8-hour ozone RACT requirements for all control technique guideline (CTG) categories and all major non-CTG sources. See 80 FR 12264 (March 6, 2015) and 83 FR 62998 (December 6, 2018). Therefore, a re-evaluation of what constitutes RACT for affected sources must be fulfilled each time the EPA revises a NAAQS. This was the case in 1997 when the EPA replaced the 1993 1-hour ozone standard with the 8-hour ozone standard and was the case in 2008 and 2015 for the 8-hour ozone standard. State regulations to control emissions of NO_x and VOCs from major stationary sources will be reviewed by the EPA to determine if the provisions meet the RACT requirements of the CAA and its implementing regulations designed to attain and maintain the ozone NAAQS. Therefore, the Commonwealth must submit a SIP revision to demonstrate how it will attain and maintain the 2015 8-hour ozone standard in the nonattainment areas.

The EPA’s past implementation of regulations for revised NAAQS ozone standards have required OTR states to submit RACT SIP revisions based on the timeframe provided in section 184 of the CAA as measured from the effective date of designations made for those revised NAAQS, rather than from November 15, 1990. This requirement was first codified in 40 CFR 51.916 (relating to what are the requirements for an Ozone Transport Region under the 8-hour NAAQS?) for the 1997 8-hour ozone NAAQS, later codified for the 2008 8-hour ozone NAAQS in 40 CFR 51.1116 (relating to requirements for an Ozone Transport Region) and most recently codified for the 2015 8-hour ozone NAAQS in 40 CFR 51.1316 (relating to requirements for an Ozone Transport Region). Under these provisions, states in the OTR are required to

submit SIP revisions addressing the RACT requirements of section 184 of the CAA not later than 2 years after the effective date of designations for nonattainment areas for the revised 2015 8-hour ozone NAAQS, or by August 3, 2020.

The Department must ensure that the 1997, 2008 and 2015 8-hour ozone NAAQS are attained and maintained by implementing permanent and Federally-enforceable control measures. Reductions in ozone precursor emissions that are achieved following the adoption and implementation of RACT emission control measures for source categories covered by this proposed rulemaking will assist the Commonwealth in making substantial progress in achieving and maintaining the 1997, 2008 and 2015 8-hour ozone NAAQS. The Board has determined that the proposed requirements are reasonably necessary to attain and maintain the health-based and welfare-based 8-hour ozone NAAQS in this Commonwealth and to satisfy related CAA requirements.

The Department conducted a generic RACT analysis to determine if additional controls would represent RACT for the 2015 8-hour ozone NAAQS. That generic analysis identified existing affected source categories by size and fuel type; identified available feasible NO_x or VOC control options, or both, for each type of existing source; estimated emission reduction potential for each control technology; identified costs for technologies, using appropriate updates; and evaluated cost-effectiveness using the guidance provided in the EPA Air Pollution Control Cost Manual, EPA/452/B-02-001, 6th Edition, January 2002, as amended, for both uncontrolled and controlled sources (combinations of technologies). After conducting this analysis, the Department determined the RACT for each source category.

Based on this analysis, the Board has determined that additional cost-effective controls represent RACT for the 2015 8-hour ozone NAAQS. There are ten existing source categories that would be affected by this proposed rulemaking: combustion units; municipal solid waste landfills; municipal waste combustors; process heaters; turbines; stationary internal combustion engines; cement kilns; glass melting furnaces; lime kilns; and direct-fired heaters, furnaces or ovens; as well as other existing source categories that are not regulated elsewhere under Chapter 129.

The proposed RACT requirements would apply to all sources in this Commonwealth that emit or have a potential to emit 100 TPY or more of NO_x or 50 TPY of VOCs. There are approximately 500 Title V facilities in this Commonwealth under the Department's jurisdiction that may be subject to this proposed rulemaking. The Department preliminarily determined that the owners and operators of approximately 10–30 affected major facilities under the Department's jurisdiction meet the definition of "small business" specified in section 3 of the Regulatory Review Act (71 P.S. § 745.3). The owners and operators of the affected facilities are familiar with the existing requirements for emissions control, recordkeeping and reporting for their entity and have the professional and technical skills needed for continued compliance with these requirements.

The Board has determined that this proposed rulemaking would fulfill requirements for re-evaluation and be less resource intensive than imposing case-by-case analysis for affected facilities in the covered categories. As more fully discussed in section E of this preamble, the Board proposes a compliance option hierarchy whereby the owner or operator of a subject source that cannot

meet the presumptive RACT emission limitations and requirements under proposed § 129.112 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) may apply for a facility-wide or system-wide NO_x emissions averaging plan under proposed § 129.113 (relating to facility-wide or system-wide NO_x emissions averaging plan general requirements) or an alternative case-by-case RACT determination under proposed § 129.114 (relating to alternative RACT proposal and petition for alternative compliance schedule).

The Department consulted with the Air Quality Technical Advisory Committee (AQTAC) in the development of this proposed rulemaking. On October 17, 2019, the Department presented an overview of this proposed rulemaking to AQTAC. On February 13, 2020, the Department presented more refined concepts of this proposed rulemaking to AQTAC. The draft proposed Annex A was presented to AQTAC as an action item at its meeting on April 16, 2020. However, the AQTAC postponed voting and requested additional information for a special meeting on May 7, 2020. After discussion at its meeting of May 7, 2020, the AQTAC voted 17-2-0 to concur with the Department's recommendation to move this proposed rulemaking forward to the Board for consideration as a proposed rulemaking. The draft proposed Annex A was presented to the Small Business Compliance Advisory Committee (SBCAC) on April 22, 2020. The SBCAC voted 7-0-0 to concur with the Department's recommendation to move this proposed rulemaking forward to the Board for consideration as proposed rulemaking. The Department also conferred with the Citizens Advisory Council's (CAC) Policy and Regulatory Oversight Committee concerning this proposed rulemaking on May 8, 2020. On May 19, 2020, the full CAC concurred with the Department's recommendation to move this proposed rulemaking forward to the Board for consideration.

The Department made revisions to this proposed rulemaking after presentations were made to the AQTAC, SBCAC and CAC, which are explained more thoroughly in section E. The Department revised § 129.112(g)(1)(xv) to correct a cross-reference. The Department deleted § 129.112(g)(1)(xvi) and (xvii), which specified emission rates for the electric generating units at the Brunner Island Steam Electric Plant. The Department deleted § 129.112(g)(1)(vii), (viii) and (x)—(xiv) because the presumptive NO_x RACT emission limitations and requirements were no longer deemed approvable by the EPA as a result of the United State Court of Appeals for the Third Circuit's decision in *Sierra Club v. EPA*, (*Sierra Club*) 972 F.3d 290 (3d Cir. 2020). The Department also deleted plant-specific Portland cement kiln and lime kiln emission rates in § 129.112(h) and (j). Section 129.112(g)(1), (h) and (j) are revised as explained in section E. The Department also deleted § 129.112(g)(2)(v) for simple cycle or regenerative cycle combustion turbines with a rated output equal to or greater than 60,000 bhp to evaluate emerging NO_x control technology as explained in section E. The Department also revised § 129.112(g)(3)(i) and (ii) from 2,500 bhp to 3,500 bhp due to a correction made to the cost analysis.

E. Summary of Regulatory Requirements

§ 121.1. Definitions

This proposed rulemaking would amend § 121.1 to add the terms "combustion source" and "natural gas compression and transmission facility fugitive VOC air contamination source" to support the proposed amendments to Chapter 129. The term originally presented to the AQTAC

on May 7, 2020, was “natural gas compression and transmission facility VOC air contamination source.” That term has been amended in this proposed rulemaking to “natural gas compression and transmission facility fugitive VOC air contamination source” and the definition has also been amended from what was presented to AQTAC on May 7, 2020, based on a comment received from a member of the AQTAC.

A natural gas compression and transmission facility fugitive VOC air contamination source is defined as the group of fugitive-VOC-emitting components associated with an individual stationary source. As defined in § 121.1, fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. The group of fugitive-VOC-emitting components is considered an individual VOC emitting source and the fugitive VOC emissions from the group of fugitive-VOC-emitting components are not aggregated with the VOC emissions from the associated individual stationary source. For example, a dehydrator unit would be an individual stationary source. All fugitive-VOC-emitting components such as flanges, crankcase vents, compressor seals, seal vents, valves and connectors associated with this dehydrator unit would be grouped together as a separate natural gas compression and transmission facility fugitive VOC air contamination source. Additionally, all pipeline pigging operations at the natural gas compression or transmission facility would be grouped together as one individual fugitive-VOC-emitting source.

If a natural gas compression and transmission facility fugitive VOC air contamination source has a potential to emit VOCs greater than 2.7 TPY, then a VOC RACT presumptive requirement or limitation under § 129.112 would not apply. The owner or operator would be subject to § 129.114 and required to submit a case-by-case VOC RACT proposal.

§ 129.111. *Applicability*

Proposed subsection (a) provides that, except as specified in subsection (c), the NO_x requirements of this section and §§ 129.112—129.115 would apply Statewide to the owner and operator of a major NO_x emitting facility, and the VOC requirements of this section and §§ 129.112—129.115 would apply Statewide to the owner and operator of a major VOC emitting facility that were in existence 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, 129.77 and 129.101—129.107. The owner or operator shall identify and list the sources in paragraphs (1) and (2) in the written notification required under § 129.115(a) (relating to written notification, compliance demonstration and recordkeeping and reporting requirements).

Proposed subsection (b) provides that, except as specified in subsection (c), the NO_x requirements of this section and §§ 129.112—129.115 would apply Statewide to the owner and operator of a NO_x emitting facility, and the VOC requirements of this section and §§ 129.112—129.115 would apply Statewide to the owner and operator of a VOC emitting facility when the installation of a new source or a modification or change in operation of an existing source after 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, 129.72, 129.73, 129.75, 129.77 and 129.101—129.107. The owner or operator shall identify and list the sources in paragraphs (1) and (2) in the written notification required under § 129.115(a).

Proposed subsection (c) establishes that §§ 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 of 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).

Proposed subsection (d) establishes that 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 the effective date of the final-form rulemaking.

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

Proposed subsection (a) establishes that 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 in paragraph (1) or (2), unless an alternative compliance schedule is submitted and approved under subsections (n)—(p) or under § 129.114. Paragraph (1) specifies the compliance date of January 1, 2023, for a source subject to § 129.111(a). Paragraph (2) specifies the compliance date of 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). The owner or operator shall meet the applicable standards or regulations within the time frame required by standards or regulations even if the permit is not revised to incorporate the standards or regulations.

Proposed subsection (b) establishes that the owner and operator of the combustion unit types listed in paragraph (1)(i) and (ii) that are located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 shall comply with the applicable presumptive RACT requirement for that source, which includes, among other things, inspection and adjustment requirements. Paragraph (3) specifies that 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)—(5) and 129.97(b)(1)—(3) (relating to presumptive RACT emissions limitations; and presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule).

Proposed subsection (c) establishes that the owner and operator of a source listed in this subsection located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 shall comply with the applicable presumptive RACT requirement, which is the installation, maintenance and operation of the source in accordance with the manufacturer’s specifications and with good operating practices.

Proposed subsection (d) establishes that, 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 comply with the specified presumptive RACT requirement, which is the installation, maintenance and operation of 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.

Proposed subsection (e) establishes that the owner and operator of a municipal solid waste landfill subject to § 129.111 shall comply with the applicable presumptive RACT requirement specified in paragraphs (1)–(3). Paragraph (2) was amended and paragraph (3) was added after the advisory committee meetings to incorporate new Federal requirements for municipal solid waste landfills.

Proposed subsection (f) establishes that the owner and operator of a municipal waste combustor subject to § 129.111 shall comply with the presumptive RACT emission limitation of 150 ppmvd NO_x @ 7% oxygen. The presumptive NO_x emission limitation presented to the AQTAC on May 7, 2020, was 180 ppmvd NO_x @ 7% oxygen. After the advisory committee meetings, the Ozone Transport Commission provided updated information on the emissions from municipal waste combustors. The Department re-analyzed continuous emissions monitoring system (CEMS) data for NO_x emissions from these sources in this Commonwealth in light of the additional information from the Ozone Transport Commission, and revised the presumptive RACT emission limitation to 150 ppmvd NO_x @ 7% oxygen in Annex A of this proposed rulemaking. The Board is specifically seeking comment on the presumptive RACT emission limitation of 150 ppmvd NO_x @ 7% oxygen.

Proposed subsection (g) establishes that, 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 paragraphs (1)–(4). Subsection (g)(1) was revised after the advisory committee and CAC meetings. Subparagraphs (xvi) and (xvii) as presented to the advisory committees and the CAC specified limitations for the electric generating units at the Brunner Island Steam Generating Plant based on the requirements expressed in the consent decree signed on May 16, 2018, between the Sierra Club, Talen Energy Corporation and Brunner Island, LLC. The Department determined that the requirements of subparagraphs (xvi) and (xvii) are not RACT for the Brunner Island facility and deleted these subparagraphs in this proposed rulemaking. The Department deleted § 129.112(g)(1)(vii), (viii) and (x)–(xiv) because the form of these presumptive NO_x RACT provisions was no longer deemed to be approvable by the EPA as a result of the Third Circuit Court of Appeals *Sierra Club* decision. In *Sierra Club*, the Third Circuit issued an opinion vacating and remanding three aspects of the EPA's May 9, 2019, approval of the Commonwealth's 2016 RACT II Rule based on the administrative record. See 84 FR 20274 (May 9, 2019). Because of operating parameter variability and other plant-specific characteristics of large coal-fired combustion units, the Department concludes that a case-by-case approach for NO_x RACT is more appropriate than setting a presumptive NO_x RACT emission limitation for all large coal-fired combustion units. Case-by-case RACT determinations include a top-

down analysis. The Department will review the proposed case-by-case determinations and incorporate the final determinations and associated conditions into the facility's Title V operating permit upon consideration of public comments. The RACT determinations incorporated into the Title V operating permit would then be submitted to the EPA as part of the SIP revision. A coal-fired combustion unit with a rated heat input equal to or greater than 250 million Btu/hour that is not a circulating fluidized bed coal-fired combustion unit is currently required to submit an alternative RACT proposal under § 129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule). The enumerator for subparagraph (ix) in § 129.112(g)(1) was revised to subparagraph (vii). The enumerators for subparagraphs (xiv) and (xv) in § 129.112(g)(1) were revised to subparagraphs (vii) and (viii). The Department added clarification that § 129.112(g)(1)(viii) only applies to circulating fluidized bed coal-fired combustion units. The Department made minor clarifying revisions to § 129.112(g)(1)(vi) and (vii). After the advisory committee meetings, the Department revised § 129.112(g)(1)(vi) to establish two different fuel categories for circulating fluidized bed boilers. The categories are gob and culm, which are types of waste coal or coal refuse. The Department is seeking comment on the presumptive NO_x RACT emission limitation for circulating fluidized bed boilers firing primarily culm. After the advisory committee meetings, the Department deleted § 129.112(g)(2)(v) for simple cycle or regenerative cycle combustion turbines with a rated output equal to or greater than 60,000 bhp. The Department determined that the baseline NO_x emission rates for this category are wide-ranging and, therefore, not appropriate to establish a presumptive NO_x RACT emission limit at this time. In addition, it is more appropriate for owners and operators of turbines in this category to submit case-by-case RACT proposals that employ emerging retrofit NO_x reduction technologies, such as can-annular, reverse-flow combustion systems. After the advisory committee meetings, the Department revised § 129.112(g)(3)(i) and (ii) from 2,500 bhp to 3,500 bhp due to a correction made to the cost analysis.

Proposed subsection (h) establishes that the owner and operator of a Portland cement kiln subject to § 129.111 shall comply with the applicable presumptive RACT emission limitation in paragraphs (1)–(3). The draft proposed rulemaking Annex A presented to the advisory committees and the CAC included paragraphs (1)–(5). After the advisory committee and CAC meetings, paragraph (1) was revised from what was presented to the advisory committees and the CAC based on a comment received from a member of AQTAC. The proposed NO_x RACT emission limitation for a long wet-process cement kiln in paragraph (1) was revised from 2.30 to 3.88 pounds of NO_x per ton of clinker produced. Also, after the advisory committee and CAC meetings, the Department determined that the plant-specific cement kiln emission rates in paragraphs (4) and (5) were unnecessary and paragraphs (4) and (5) are deleted in this proposed rulemaking.

Proposed subsection (i) establishes that the owner and operator of a glass melting furnace subject to § 129.111 shall comply with the applicable presumptive RACT emission limitation in paragraphs (1)–(5).

Proposed subsection (j) establishes that the owner and operator of a lime kiln subject to § 129.111 shall comply with the applicable presumptive RACT emission limitation. Subsection (j) was revised after the advisory committee and CAC meetings. The draft proposed rulemaking

Annex A presented to the advisory committees and the CAC included paragraphs (1)—(4). When expressed as pounds of NO_x per ton of lime produced rather than pounds of NO_x per hour, the applicable operating permit plant-specific lime kiln emission rates for the three lime kilns in paragraphs (1)—(3) comply with the presumptive RACT emission limitation in paragraph (4) of 4.6 pounds of NO_x per ton of lime produced. Therefore, the Department deletes paragraphs (1)—(4) and amends subsection (j) to only specify the presumptive RACT emission limitation of 4.6 pounds of NO_x per ton of lime produced.

Proposed subsection (k) establishes that the owner and operator of a direct-fired heater, furnace or oven with a rated heat input equal to or greater than 20 million Btu/hour subject to § 129.111 shall comply with the applicable presumptive RACT emission limitation.

Proposed subsection (l) provides that the requirements and emission limitations of this section would 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 the effective date of the final-form rulemaking under §§ 129.91—129.95 or under §§ 129.96—129.100 to control, reduce or minimize NO_x emissions or VOC emissions, or both, from the air contamination source unless the RACT permit contains more stringent requirements or emission limitations, or both.

Proposed subsection (m) provides that the requirements and emission limitations of this section would supersede the requirements and emission limitations of §§ 129.201—129.205, 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, 145.111—145.113 or 145.141—145.146 are more stringent.

Proposed subsection (n) establishes that 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 to the Department or appropriate approved local air pollution control agency, in writing, requesting an alternative compliance schedule in accordance with paragraphs (1) and (2).

Proposed subsection (o) provides that the Department or appropriate approved local air pollution control agency would 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.

Proposed subsection (p) provides that approval or denial under subsection (o) of the timely and complete petition for an alternative compliance schedule submitted under subsection (n) would 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.

Proposed subsection (q) provides that 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. Subsection (q) was added after the advisory committee meetings to address concerns from the EPA.

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

Proposed subsection (a) provides that the owner or operator of a major NO_x emitting facility subject to § 129.111 that includes an air contamination source subject to a NO_x RACT emission limitation in § 129.112 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.

Proposed subsection (b) provides that the owner or operator of each facility that elects to comply with subsection (a) shall submit a written NO_x emissions averaging plan 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 specified in paragraph (1) or (2).

Proposed subsection (c) provides that 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.

Proposed subsection (d) provides that 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.

Proposed subsection (e) provides that 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.

Proposed subsection (f) provides that the application for the operating permit modification or a plan approval, if otherwise required, specified in subsections (b)—(e) must include the information identified in paragraphs (1)—(3). Paragraph (1) specifies that the application must identify each air contamination source included in the NO_x emissions averaging plan. Paragraph (2) specifies that the application must list each air contamination source's applicable emission limitation in § 129.112. Paragraph (3) specifies that the application must include methods for demonstrating compliance and recordkeeping and reporting requirements in accordance with § 129.115 for each source included in the NO_x emissions plan submitted under subsection (b).

Proposed subsection (g) provides that 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.

Proposed subsection (h) provides that the Department or appropriate approved local air pollution control agency will review the timely and complete NO_x emissions averaging plan submitted in accordance with subsection (b) and approve, deny or modify the NO_x emissions averaging plan, in writing.

Proposed subsection (i) provides that 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.

Proposed subsection (j) provides that 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.

Proposed subsection (k) provides that 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 APCA or the CAA, or regulations adopted under the APCA or the CAA, 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).

Proposed subsection (l) provides that 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.

Proposed subsection (m) provides that the owner and operator of the air contamination source 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.

Proposed subsection (n) provides that 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

Proposed subsection (a) provides that the owner or operator of an air contamination source subject to

§ 129.112 located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.111 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).

Proposed subsection (b) provides that 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 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).

Proposed subsection (c) provides that 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 VOC RACT emission limitation in accordance with subsection (d).

Proposed subsection (d) provides that the owner or operator proposing an alternative RACT requirement or RACT emission limitation under subsection (a), (b) or (c) shall comply with all of the requirements in paragraphs (1)—(7).

Proposed subsection (e) provides that the Department or appropriate approved local air pollution control agency will review the timely and complete alternative RACT proposal submitted in accordance with subsection (d) and approve, modify or deny in writing the application as specified in paragraphs (1)—(3).

Proposed subsection (f) provides that the proposed alternative RACT requirement or RACT emission limitation and the implementation schedule 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 prior to the owner or operator implementing the alternative RACT requirement or RACT emission limitation.

Proposed subsection (g) provides that 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 the effective date of the 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.

Proposed subsection (h) provides that 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.

Proposed subsection (i) provides that compliance with the requirements in § 129.99(a)—(h) assures compliance with the provisions in subsections (a)—(h), except for sources subject to § 129.112(b)(11), (h)(4) and (5) or (i)—(k).

Proposed subsection (j) provides that 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, requesting an alternative compliance schedule in accordance with paragraphs (1) and (2).

Proposed subsection (k) provides that 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) and approve or deny the petition in writing.

Proposed subsection (l) provides that 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) 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 the effective date of the 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), except to the extent the existing plan approval or operating permit contains more stringent requirements.

Proposed subsection (m) provides that approval or denial under subsection (k) of the timely and complete petition for an alternative compliance schedule submitted under subsection (j) 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.

Proposed subsection (n) provides that the Department will submit each petition for an alternative compliance schedule approved under subsection (k) 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. Subsection (n) was added after the advisory committee meetings to address concerns from the EPA.

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

Proposed subsection (a) provides that the owner and operator of an air contamination source subject to this section and § 129.111 shall submit a written notification to the appropriate Regional Manager by 6 months after the effective date of the final-form rulemaking that proposes how the owner and operator intend to comply with the requirements of this section and §§ 129.111—129.114. This written notification shall include the information specified in paragraphs (1)—(6). After the advisory committee meetings, the language of subsection (a)(1), (2), (4) and (5) was revised to clarify the information that is required to be included in the written notification.

Proposed subsection (b) provides that, 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 shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation by performing the monitoring or testing procedures under paragraphs (1)—(5). Due to the deletion of § 129.112(g)(1)(vii), (viii) and (x)—(xiv), the Department amended § 129.115(b)(1)

to reference § 129.112(g)(1) and deleted § 129.115(b)(1)(i). The enumerators for subparagraphs (ii) and (iii) in § 129.115(b)(1) were amended to subparagraphs (i) and (ii). The Department amended § 129.115(b)(4) to reference § 129.112(g)(1). After the advisory committee meetings, the Department amended § 129.115(b)(5) to require stack testing to demonstrate initial compliance and subsequently on a schedule set forth in the applicable permit.

Proposed subsection (c) provides that the owner or operator of a combined-cycle combustion turbine may comply with the requirements in § 129.112(g)(2)(ii) 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 applicable factor listed in paragraphs (1)—(4).

The draft proposed Annex A presented to the advisory committees contained a typographical error such that the enumerator for subsection (c) was used twice. The Annex A published with this proposed rulemaking is amended to correct this error.

Proposed subsection (d) provides that, except as specified in §§ 129.112(n) and 129.114(j), the owner and operator of an air contamination source subject to subsection (a) shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation in accordance with the procedures in subsection (a) not later than the applicable date in paragraphs (1) and (2).

Proposed subsection (e) provides that an owner or operator of an air contamination source subject to this section and §§ 129.111—129.113 may request a waiver from the requirement to demonstrate compliance with the applicable emission limitation listed in § 129.112 if the requirements in paragraphs (1)—(4) are met.

Proposed subsection (f) provides that 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 as set forth in paragraphs (1)—(3). This subsection clarifies the owners' and operators' reporting obligations for an air contamination source as a result of the Third Circuit Court of Appeals ruling in *Sierra Club*. Due to the deletion of § 129.112(g)(1)(vii), (viii) and (x)—(xiv), the Department deleted § 129.115(f)(3).

Proposed subsection (g) provides that, 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.

Proposed subsection (h) provides that, 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.

Proposed subsection (i) provides that the owner or operator of a combustion unit subject to § 129.112(b) shall record each adjustment conducted under the procedures in § 129.112(b). This record must contain, at a minimum, the information specified in paragraphs (1)—(6).

Proposed subsection (j) provides that 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 the information specified in paragraphs (1)—(4).

Proposed subsection (k) provides that 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.

F. *Benefits, Costs and Compliance*

Benefits

The Department estimates that implementation of the proposed control measures could reduce NO_x emissions by as much as 9,000 TPY from engines, turbines and municipal waste combustors. These reductions in NO_x emissions would benefit the health and welfare of approximately 12.8 million residents and numerous animals, crops, vegetation and natural areas of this Commonwealth by reducing the amount of ground-level ozone air pollution. Reduced ambient concentrations of ground-level ozone would reduce the incidences of hospital admissions for respiratory ailments, including asthma, and improve the quality of life for citizens overall. While children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to high levels of ambient ground-level ozone while engaged in activities that involve physical exertion.

Adoption of the presumptive RACT limitations and RACT requirements in this proposed rulemaking would allow this Commonwealth to make substantial progress in achieving and maintaining the 1997, 2008 and 2015 8-hour ozone NAAQS Statewide. Implementation of and compliance with the proposed RACT control measures would assist the Commonwealth in reducing the levels of ozone precursor emissions that contribute to potential nonattainment of the 2015 8-hour ozone NAAQS. As a result, the proposed RACT control measures are reasonably necessary to attain and maintain the health-based and welfare-based 8-hour ozone NAAQS in this Commonwealth and to satisfy related CAA requirements.

The EPA estimated that the monetized health benefits of attaining the 2008 8-hour ozone NAAQS of 0.075 ppm range from \$8.3 billion to \$18 billion on a National basis by 2020. Prorating that benefit to this Commonwealth, based on population, results in a public health benefit of \$337 million to \$732 million. Similarly, the EPA estimated that the monetized health benefits of attaining the 2015 8-hour ozone NAAQS of 0.070 ppm range from \$1.5 billion to \$4.5 billion on a National basis by 2025. Prorating that benefit to this Commonwealth, based on population, results in a public health benefit of \$63 million to \$189 million. The Department is not stating that these estimated monetized health benefits would all be the result of implementing the proposed RACT measures, but the EPA estimates are indicative of the benefits to Commonwealth residents of attaining and maintaining the 2008 and 2015 8-hour ozone NAAQS

through the implementation of control measures to reduce ozone precursor emissions in the aggregate from different source categories.

This proposed rulemaking may create economic opportunities for NO_x and VOC emission control technology innovators, manufacturers and distributors through an increased demand for new or improved equipment. In addition, the owners and operators of regulated facilities may be required to install and operate an emissions monitoring system or equipment necessary for an emissions monitoring method to comply with this proposed rulemaking, thereby creating an economic opportunity for the emissions monitoring industry.

Compliance costs

Compliance costs will vary for each facility depending on which compliance option is chosen by the owners and operators of a facility. This proposed rulemaking includes two alternative compliance options: a provision allowing the owner and operator of an affected facility that cannot meet the applicable NO_x RACT or VOC RACT emission limitation to elect to meet the applicable NO_x RACT requirement or NO_x RACT emission limitation in § 129.112 by averaging NO_x emissions on either a facility-wide or system-wide basis; and a provision allowing the affected owner and operator to submit a case-specific RACT proposal for an alternative RACT requirement or RACT emission limitation to the Department for approval.

Under proposed § 129.113, the owner or operator of an affected major NO_x emitting facility that includes an air contamination source subject to a NO_x RACT requirement or emission limitation in § 129.112 that cannot meet the applicable presumptive NO_x RACT requirement or NO_x RACT emission limitation may elect to meet the requirement or emission limitation 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 in this Commonwealth and within the same nonattainment area.

Under proposed § 129.114, the owner or operator of an air contamination source that cannot meet the applicable presumptive RACT requirement or RACT emission limitation of § 129.112 may propose an alternative NO_x RACT requirement, NO_x RACT emission limitation, VOC RACT requirement or VOC RACT emission limitation.

Under these alternative compliance provisions, the owner or operator is required to demonstrate to the Department's satisfaction that it is economically or technically infeasible to meet the applicable proposed NO_x RACT or VOC RACT emission limitation. As such, these provisions may minimize compliance costs to the owner or operator of an affected facility.

The RACT emission limitations and RACT requirements established by this proposed rulemaking will not require the owner or operator to submit an application for amendments to an existing operating permit. These requirements will be incorporated when the permit is renewed if less than 3 years remain in the permit term, as specified under § 127.463(c) (relating to operating permit revisions to incorporate applicable standards). If 3 years or more remain in the permit term, the requirements would be incorporated as applicable requirements in the permit within 18 months of the promulgation of the final-form rulemaking, as required under § 127.463(b). The owner or operator shall meet the applicable standards or regulations within the time frame required by standards or regulations even if the permit is not revised to incorporate the standards or regulations.

Compliance assistance plan

The Department plans to educate and assist the public and the regulated community in understanding the proposed requirements and how to comply with them. The Department will continue to work with the Department's provider of the Small Business Stationary Source Technical and Environmental Compliance Assistance services. These services are currently provided by the Environmental Management Assistance Program (EMAP) of the Pennsylvania Small Business Development Centers. The Department has partnered with EMAP to fulfill the Department's obligation to provide confidential technical and compliance assistance to small businesses as required by the APCA, section 507 of the CAA (42 U.S.C.A. § 7661f) and authorized by the Small Business and Household Pollution Prevention Program Act (35 P.S. §§ 6029.201—6029.209).

In addition to providing one-on-one consulting assistance and onsite assessments, EMAP also operates a toll-free phone line to field questions from small businesses, as well as businesses wishing to start up in, or relocate to, this Commonwealth. EMAP operates and maintains a resource-rich environmental assistance web site and distributes an electronic newsletter to educate and inform small businesses about a variety of environmental compliance issues.

Paperwork requirements

The recordkeeping and reporting requirements for owners and operators of applicable sources under this proposed rulemaking are minimal because the records required are in line with the records already required to be kept for emission inventory purposes and for other Federal and State requirements.

G. Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. Implementation of the proposed RACT requirements would allow the Department and approved local air pollution control agencies to maintain or increase the reductions of NO_x and VOC emissions from the regulated sources in this Commonwealth, sustain the gains made in healthful air quality and ensure continued protection of the environment and the public health and welfare of the citizens of this Commonwealth.

H. Sunset Review

This Board is not establishing a sunset date for this proposed rulemaking, since it is needed for the Department to carry out its statutory authority. The Department will closely monitor this proposed rulemaking after promulgation as a final-form rulemaking in the *Pennsylvania Bulletin* for its effectiveness and recommend updates to the Board as necessary.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on July 14, 2021, the Department submitted a copy of this proposed rulemaking and a copy

of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria in section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor.

J. Public Comments

Interested persons are invited to submit to the Board written comments, suggestions, support or objections regarding this proposed rulemaking. Comments, suggestions, support or objections must be received by the Board by October 12, 2021.

Comments may be submitted to the Board by accessing the Board's online comment system at <http://www.ahs.dep.pa.gov/eComment>.

Comments may also be submitted by e-mail to RegComments@pa.gov. A subject heading of this proposed rulemaking and a return name and address must be included in each transmission.

If an acknowledgement of comments submitted online or by e-mail is not received by the sender within 2 working days, the comments should be retransmitted to the Board to ensure receipt. Comments submitted by facsimile will not be accepted.

Comments may also be submitted to the Board by mail or express mail. Written comments should be mailed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477. Express mail should be sent to the Environmental Quality Board, Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301.

K. Public Hearings

The Board will hold three public hearings for the purpose of accepting comments on this proposed rulemaking. The hearings will be held at 1 p.m. on the following dates:

September 7, 2021 Department of Environmental Protection
Southwest Regional Office
Waterfront Conference Rooms
A and B
400 Waterfront Drive
Pittsburgh, PA 15222

September 8, 2021 Department of Environmental Protection
Southeast Regional Office
Schuylkill Conference Rooms
2 East Main Street
Norristown, PA 19401

September 9, 2021 Department of Environmental Protection
Southcentral Regional Office
Susquehanna Conference Rooms
A and B
909 Elmerton Avenue
Harrisburg, PA 17110

Persons wishing to present testimony at a hearing are requested to contact the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526, RA-EPEQB@pa.gov, at least 1 week in advance of the hearing to reserve a time to present testimony. Language interpretation services are available upon request. Persons in need of language interpretation services must contact Jennifer Swan at (717) 787-4526 by 5 p.m. on August 30, 2021.

Verbal testimony is limited to 5 minutes for each witness. Witnesses are requested to submit two written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans with Disabilities Act of 1990 should contact the Board at (717) 787-4526 or through the Pennsylvania Hamilton Relay Service at (800) 654-5984 (TDD) or (800) 654-5988 (voice users) to discuss how the Board may accommodate their needs.

PATRICK McDONNELL,
Chairperson

Fiscal Note: 7-561. No fiscal impact; (8) recommends adoption.

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:

* * * * *

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

$$C. E. = \frac{[CO_2]}{[CO_2] + [CO]} \times 100\%$$

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.

* * * * *

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: The following sections are proposed to be added and 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 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 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, 129.77 and 129.101—129.107. The owner or operator shall identify and list the following sources and facilities in the written notification required under § 129.115(a) (relating to written notification, compliance demonstration and recordkeeping and reporting requirements):

(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, 129.77 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, 129.77 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 and the VOC requirements of this section and §§ 129.112—129.115 apply Statewide to the owner and operator of a VOC emitting facility when the installation of a new source or a modification or change in

operation of an existing source after 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, 129.77 and 129.101—129.107. The owner or operator shall identify and list the following sources and facilities in the written notification required under § 129.115(a):

(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, 129.77 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, 129.77 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 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.)

§ 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 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 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) (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 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).

(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, recon-

struction, or modification on or after May 30, 1991, but before July 18, 2014), which are adopted and incorporated by reference in § 122.3.

(3) 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 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 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.

(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 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.

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

(A) 85 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) Simple cycle or regenerative cycle combustion turbine with a rated output equal to or greater than 3,000 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 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).

(ii) 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 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, 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, §§ 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, 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.*), 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.*), 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 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.), 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.), 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 record-keeping 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 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.), 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.), 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 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) (relating to alternative RACT proposal and petition for alternative compliance schedule) assures compliance with the provisions in subsections (a)—(h), except for sources subject to § 129.112(b)(11), (h)(4) and (h)(5) or (i)—(k).

(j) 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, 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.), 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.), 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) 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) and approve or deny the petition in writing.

(l) 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) 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), except to

the extent the existing plan approval or operating permit contains more stringent requirements.

(m) Approval or denial under subsection (k) of the timely and complete petition for an alternative compliance schedule submitted under subsection (j) 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) The Department will submit each petition for an alternative compliance schedule approved under subsection (k) 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 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. This written notification shall include the following information:

(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) 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) 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) The following information for each air contamination source listed in paragraph (1):

(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).

(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).

(5) The following information for each air contamination source listed in paragraph (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 paragraph (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 (2)(ii).

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

(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).

(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 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) 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).

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

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

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

(d) Except as specified in § 129.112(n) and § 129.114(j) (relating to alternative RACT proposal and petition for alternative compliance schedule), the owner and operator of an air contamination source subject to subsection (a) 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, 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.), 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.), 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 to the Department in the following manner:

(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 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 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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