

# PROPOSED RULEMAKING

## ENVIRONMENTAL QUALITY BOARD

[ 25 PA. CODE CHS. 121 AND 129 ]

### Additional RACT Requirements for Major Sources of NO<sub>x</sub> and VOCs

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. The proposed rulemaking would amend Chapter 129 to adopt presumptive reasonably available control technology (RACT) requirements and RACT emission limitations for certain major stationary sources of oxides of nitrogen (NO<sub>x</sub>) and volatile organic compound (VOC) emissions.

The proposed rulemaking would revise § 121.1 (relating to definitions) to add or amend “CEMS—continuous emissions monitoring system,” “process heater” and “stationary internal combustion engine” to support the proposed amendments to Chapter 129.

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

This proposed rulemaking is given under Board order at its meeting of November 19, 2013.

#### A. Effective Date

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

#### B. Contact Persons

For further information, contact Kirit Dalal, Chief, Division of Air Resource Management, P. O. Box 8468, Rachel Carson State Office Building, Harrisburg, PA 17105-8468, (717) 772-3436; or Robert “Bo” Reiley, 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 AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available electronically on the Department of Environmental Protection’s (Department) web site at [www.dep.state.pa.us](http://www.dep.state.pa.us) (DEP Search/Keyword: Public Participation).

#### C. Statutory Authority

The proposed rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (act) (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 act, 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

The EPA is required under section 109 the CAA (42 U.S.C.A. § 7409) to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants of which

ozone is one. The NAAQS are established by the EPA as the maximum concentrations in the atmosphere for specific air contaminants to protect public health and welfare.

Ozone is a highly reactive gas which at sufficient concentrations can produce a wide variety of harmful effects. At elevated concentrations, 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 ozone pollution may cause a variety of adverse health effects for 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, and reduce lung capacity. Asthma is a significant and growing threat to children and adults. High levels of ozone also affect animals in ways similar to humans.

The EPA promulgated primary and secondary NAAQS for photochemical oxidants under section 109 of the CAA at 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. The EPA announced a revision to the then-current 1-hour standard at 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 subsequently reaffirmed at 58 FR 13008 (March 9, 1993).

Section 110 of the CAA (42 U.S.C.A. § 7410) gives states primary responsibility for achieving the NAAQS. The principal mechanism at the state level for complying with the CAA is the SIP. 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 182 of the CAA (42 U.S.C.A. § 7511a) requires that, for areas that exceed the NAAQS for ozone, states shall develop and implement a program that mandates that certain major stationary sources develop and implement a RACT program. 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).

Under section 182(f)(1) of the CAA and section 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 greater than 100 tons per year of NO<sub>x</sub>. Under sections 182(b)(2) and 184(b)(2) of the CAA, the RACT requirement are applicable to all sources in this Commonwealth that emit or have a potential to emit greater than 50 tons per year of VOCs. NO<sub>x</sub> and VOC controls are required Statewide because of the Commonwealth’s inclusion in the Northeast Ozone Transport Region. See section 184(a) of the CAA. Additionally, because the five-county Philadelphia area was designated as severe ozone nonattainment for the 1-hour standard, sources of greater than 25 tons per year of either pollutant are required to implement RACT under section 182(d) of the CAA. The Commonwealth’s RACT regulations in §§ 129.91—129.95 (relating to sta-

tionary sources of NO<sub>x</sub> and VOCs) were implemented for the 1-hour ozone standard. These regulations were effective January 15, 1994.

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

The EPA lowered the 8-hour standard from 0.08 ppm to 0.075 ppm at 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. See 77 FR 30160 (May 21, 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 nonattainment for the 2008 8-hour ozone NAAQS. See 77 FR 30088, 30143 (May 21, 2012). Therefore, the Commonwealth must submit a SIP revision to demonstrate how it will attain and maintain the 2008 8-hour ozone standard in the nonattainment areas.

A re-evaluation of what measures constitute RACT is a requirement to be fulfilled each time a NAAQS is promulgated, as happened in 1997 and 2008 for ozone. According to the EPA's Final Rule to Implement the 8-Hour Ozone NAAQS, areas classified as "moderate" nonattainment or higher must submit a demonstration, as a revision to the SIP, that their current rules fulfill 8-hour ozone RACT requirements for all Control Techniques Guidelines (CTG) categories and all major, non-CTG sources. See 70 FR 71612 (November 29, 2005).

According to this implementation rule, demonstrations can be made with either a new RACT determination or a certification that previously-required RACT controls represent RACT for the 8-hour ozone NAAQS. The certification should be accompanied by appropriate supporting information, such as consideration of information received during the public comment period. The RACT SIP revision submittal is in addition to the 8-hour ozone attainment demonstration plan for the area, which will also be a revision to the Commonwealth's SIP. The RACT SIP revision was required to be submitted to the EPA by September 15, 2006.

The Commonwealth submitted a SIP revision in September 2006 certifying that RACT determinations made for the 1-hour ozone standard in 1994 under §§ 129.91—129.95 were RACT for the 8-hour standard, including for those sources where a determination was made that "no controls" continued to represent RACT for the 1-hour ozone standard. However, the EPA informally indicated to the Department that based on *NRDC v. EPA*, 571 F.3d 1245 (July 10, 2009), a reanalysis rather than certification is necessary for sources for which the Department previously determined that "no controls" represented RACT for the 1-hour ozone standard.

As a result of the EPA's decision, the Department conducted a generic RACT analysis of those sources where a "no controls" decision was previously made under §§ 129.91—129.95 for the 1-hour ozone standard to determine if additional controls would represent RACT for the 8-hour ozone NAAQS. That generic analysis identified

source categories looking at size and fuel type; identified available feasible NO<sub>x</sub> or VOC, or both, control options for each type of existing source; estimated emission reduction potential for each control technology; identified costs for technologies, using appropriate updates; evaluated cost-effectiveness per EPA guidance, for both uncontrolled and controlled sources (combinations of technologies); and chose emission limit achievable by cost-effective technologies using benchmark cost/ton.

Based on this analysis, the Board determined that additional cost-effective controls represent RACT for the 8-hour ozone NAAQS. There are nine source categories that will be affected by this proposed rulemaking: combustion units; boilers; process heaters; turbines; engines; municipal solid waste landfills; municipal waste combustors; cement kilns; and other sources that are not regulated elsewhere under Chapter 129.

All together this proposed rulemaking would affect the owners and operators of approximately 810 individual sources at 192 major facilities throughout this Commonwealth. Under this proposed rulemaking, the Board anticipates that the total NO<sub>x</sub> emission reductions will be approximately 158,421 tons per year.

The Board determines that this proposed rulemaking will 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 where the owner or operator of a subject source that cannot meet the presumptive RACT emission limitations and requirements under proposed § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) may apply for facility-wide/system-wide NO<sub>x</sub> emissions averaging under proposed § 129.98 (relating to facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification general requirements) or an alternative case-by-case RACT determination under proposed § 129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule).

The Board determines that the requirements under this proposed rulemaking are reasonably necessary to attain and maintain the 8-hour ozone NAAQS.

#### E. Summary of Regulatory Requirements

##### § 121.1. Definitions

The proposed rulemaking would revise § 121.1 to add or amend "CEMS—continuous emissions monitoring system," "process heater" and "stationary internal combustion engine" to support the proposed amendments to Chapter 129.

##### § 129.96. Applicability

Under proposed subsection (a), the proposed regulation would apply Statewide to the owner and operator of a major NO<sub>x</sub> emitting facility or a major VOC emitting facility, or both, that was in existence on or before July 20, 2012.

Under proposed subsection (b), the proposed regulation would apply Statewide to the owner and operator of a NO<sub>x</sub> emitting facility or VOC emitting facility, or both, when the installation of a new source or a modification or change in operation of an existing source after July 20, 2012, results in the source or facility meeting the definition of a major NO<sub>x</sub> 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—129.52c, 129.54—129.69, 129.71—129.73, 129.75, 129.77, 129.101—129.107 and 129.301—129.310.

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

Under proposed subsection (a), the owner and operator of a source listed in one or more of subsections (b)—(h) located at a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, shall comply with the applicable presumptive RACT requirement or RACT emission limitation, or both, beginning with the specified compliance date, unless an alternative compliance schedule is submitted and approved under subsections (k)—(m) or § 129.99.

Under proposed subsection (b), the owner and operator of the listed combustion units that are located at a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, shall comply with the presumptive RACT requirement applicable to that source, which includes, among other things, inspection and adjustment requirements.

Under proposed subsection (c), the owner and operator of a source listed in this subsection located at a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, shall comply with the applicable presumptive RACT requirement, which includes, among other things, the operation of the source in accordance with the manufacturer's specifications and good engineering practices.

Under proposed subsection (d), the owner and operator of a combustion unit or other combustion source located at a major VOC emitting facility subject to § 129.96 (relating to applicability) shall comply with the presumptive RACT requirement of good engineering practices for the control of the VOC emissions from the combustion unit or other combustion source.

Under proposed subsection (e), the owner and operator of a municipal solid waste landfill subject to § 129.96 shall comply with the applicable presumptive RACT requirement identified under paragraphs (1) and (2).

Under proposed subsection (f), the owner and operator of a municipal waste combustor subject to § 129.96 shall comply with the applicable presumptive RACT requirement identified under paragraphs (1) and (2).

Under proposed subsection (g), the owner and operator of a NO<sub>x</sub> air contamination source listed in this subsection located at a major NO<sub>x</sub> emitting facility or a VOC air contamination source listed in this subsection located at a major VOC emitting facility, or both, subject to § 129.96 may not cause, allow or permit NO<sub>x</sub> or VOCs, or both, to be emitted from the air contamination source for which the source is major in excess of the applicable RACT emission limitation under paragraphs (1)—(4).

Under proposed subsection (h), the owner and operator of a Portland cement kiln subject to § 129.96 shall comply with the applicable presumptive RACT emission limitation under paragraphs (1)—(3).

Under proposed subsection (i), among other things, the requirements and emission limitations of this proposed 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)—(h) prior to the effective date of adoption of this proposed rulemaking except to the extent the RACT permit contains more stringent requirements or emission limitations, or both.

Under proposed subsection (j), among other things, the requirements and emission limitations of this section do not supersede the requirements and emission limitations of §§ 129.201—129.205, 145.111—145.113 and 145.141—145.146 (relating to additional NO<sub>x</sub> requirements; emissions of NO<sub>x</sub> from stationary internal combustion engines; and emissions of NO<sub>x</sub> from cement manufacturing) except to the extent this section contains more stringent requirements or emission limitations, or both.

Under proposed subsection (k), the owner or operator of a major NO<sub>x</sub> emitting facility or a major VOC emitting facility, or both, subject to § 129.96 that includes an air contamination source subject to one or more of subsections (b)—(h) that cannot meet the applicable 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 paragraphs (1) and (2).

Under proposed subsection (l), 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 (k) and approve or deny the petition in writing.

Under proposed subsection (m), approval or denial under subsection (l) of the timely and complete petition for an alternative compliance schedule submitted under subsection (k) 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.

§ 129.98. *Facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification general requirements*

Under proposed subsection (a), the owner or operator of a major NO<sub>x</sub> emitting facility that includes an air contamination source subject to a NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 that cannot meet the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation may elect to meet the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 by averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average. System-wide emissions averaging must be among sources under common control of the same owner or operator in this Commonwealth.

Under proposed subsection (b), the owner or operator of each facility that elects to comply with subsection (a) shall submit an operating permit modification that incorporates the requirements of this section for averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average to the Department or appropriate approved local air pollution control agency by the applicable date in paragraphs (1) and (2).

Under proposed subsection (c), each NO<sub>x</sub> emitting source included in the operating permit modification for averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average submitted under subsection (b) must be an air contamination source subject to a NO<sub>x</sub> RACT emission limitation in § 129.97.

Under proposed subsection (d), the operating permit modification for averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average submitted under subsection (b) must demonstrate that the aggregate NO<sub>x</sub> emissions emitted by the air contamination sources included in the facility-wide or

system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification using a 30-day rolling average are not greater than 90% of the sum of the NO<sub>x</sub> emissions that would be emitted by the group of included sources if each source complied with the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 on a source-specific basis.

Under proposed subsection (e), the owner or operator shall calculate the alternative facility-wide or system-wide NO<sub>x</sub> RACT emissions limitation using a 30-day rolling average for the air contamination sources included in the operating permit modification submitted under subsection (b) by using the equation in this subsection to sum the emissions for all of the sources included in the operating permit modification.

Under proposed subsection (f), the operating permit modification specified in subsections (b)–(e) may include facility-wide or system-wide averaging emissions using a 30-day rolling average only for NO<sub>x</sub> emitting sources or NO<sub>x</sub> emitting facilities that are owned or operated, or both, by the applicant.

Under proposed subsection (g), the operating permit modification specified in subsections (b)–(f) must include the information identified under paragraphs (1)–(3).

Under proposed subsection (h), an air contamination source or facility, or both, included in the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification may be included in only one facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT proposal.

Under proposed subsection (i), the Department or appropriate approved local air pollution control agency will issue a modification to the operating permit.

Under proposed subsection (j), the owner or operator of an air contamination source or facility, or both, included in the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification shall submit the reports and records specified in subsection (g)(3) to the Department or appropriate approved local air pollution control agency to demonstrate compliance with § 129.100 (relating to compliance demonstration and recordkeeping requirements).

Under proposed subsection (k), the owner or operator of an air contamination source or facility, or both, included in a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification that achieves emission reductions in accordance with other emission limitations required under the act or the CAA, or regulations adopted under the act or the CAA, that are not NO<sub>x</sub> RACT emission limitations may not substitute those emission reductions for the emission reductions required by the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification.

Under proposed subsection (l), the owner or operator of an air contamination source subject to a NO<sub>x</sub> emission limitation in § 129.97 that is not included in a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification submitted under subsection (b) shall operate the source in compliance with the applicable NO<sub>x</sub> emission limitation in § 129.97.

Under proposed subsection (m), the owner and operator of an air contamination source included in a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification submitted under subsection (b) shall be liable for a violation of the operating permit modifica-

tion or this section at that source or other source in the operating permit modification.

*§ 129.99. Alternative RACT proposal and petition for alternative compliance schedule*

Under proposed subsection (a), the owner or operator of an air contamination source that cannot meet the applicable presumptive RACT requirement or RACT emission limitation of § 129.97 or participate in either a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification under § 129.98 may propose an alternative NO<sub>x</sub> RACT emission limitation or VOC RACT emission limitation, or both, in accordance with subsection (d).

Under proposed subsection (b), the owner or operator of a NO<sub>x</sub> air contamination source with a potential emission rate equal to or greater than 5.0 tons of NO<sub>x</sub> per year that is not subject to § 129.97 or §§ 129.201–129.205 located at a major NO<sub>x</sub> emitting facility subject to § 129.96 shall propose a NO<sub>x</sub> RACT emission limitation in accordance with subsection (d).

Under proposed subsection (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 § 129.97 located at a major VOC emitting facility subject to § 129.96 shall propose a VOC RACT emission limitation in accordance with subsection (d).

Under proposed subsection (d), the owner or operator proposing an alternative RACT emission limitation under subsection (a), (b) or (c) shall comply with all of the proposal requirements under paragraphs (1)–(7).

Under proposed subsection (e), the Department or appropriate approved local air pollution control agency will review and approve, modify or deny the application as indicated under paragraphs (1)–(3).

Under proposed subsection (f), the proposed alternative RACT emission limitation must be approved, denied or modified by the Department or appropriate approved local air pollution control agency through the issuance of a plan approval or operating permit modification prior to the owner or operator implementing the alternative RACT emission limitation.

Under proposed subsection (g), the emission limit and requirements specified in the plan approval or operating permit under subsection (f) supersedes the emission limit and requirements in the existing plan approval or operating permit issued to the owner or operator of the source except to the extent the existing plan approval or operating permit contains more stringent requirements.

Under proposed subsection (h), the Department will submit each approved alternative RACT emission limitation to the EPA for approval as a revision to the SIP. The owner and operator of the facility will bear the costs of public hearings and notification required for EPA SIP approval.

Under proposed subsection (i), the owner and operator of a facility proposing to comply with the applicable 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).

Under proposed subsection (j), the Department or appropriate approved local air pollution control agency will review the written petition requesting an alternative

compliance schedule submitted in accordance with subsection (h) and approve or deny the petition in writing.

Under proposed subsection (k), 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 (j) supersede the emission limit and requirements in the existing plan approval or operating permit, except to the extent the existing plan approval or operating permit contains more stringent requirements.

Under proposed subsection (l), approval or denial under subsection (j) of the timely and complete petition for an alternative compliance schedule submitted under subsection (i) 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.

*§ 129.100. Compliance demonstration and recordkeeping requirements*

Under proposed subsection (a), the owner and operator of an air contamination source subject to the requirements of this proposed regulation shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation by performing the monitoring or testing procedures under paragraphs (1) and (2), except as provided in subsection (c).

Under proposed subsection (b), 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 time frames under paragraphs (1) and (2).

Under proposed subsection (c), an owner or operator of an air contamination source subject to this section and §§ 129.96—129.98 may request a waiver from the requirement to demonstrate compliance with the applicable emission limitation listed in § 129.97 if the requirements under paragraphs (1)—(4) are met.

Under proposed subsection (d), the owner and operator of an air contamination source subject to this section and §§ 129.96—129.99 shall keep records to demonstrate compliance with §§ 129.96—129.99 as set forth in paragraphs (1)—(3).

Under proposed subsection (e), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable NO<sub>x</sub> emission rate threshold specified in § 129.99(b) and the requirements of § 129.97 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.

Under proposed subsection (f), 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 § 129.99(c) and the requirements of § 129.97 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.

Under proposed subsection (g), the owner or operator of a combustion unit subject to § 129.97(b)(1) shall record each adjustment conducted under the procedures in § 129.97(b)(1) in a permanently bound log book or other method approved by the Department or appropriate approved local air pollution control agency. This log book must contain, at a minimum, the information in paragraphs (1)—(6).

Under proposed subsection (h), the owner or operator of an oil-fired, gas-fired or combination oil-fired and gas-fired unit subject to § 129.97(b)(2) shall maintain records including a certification from the fuel supplier of the type of fuel. For each shipment of residual oil, the record must include the items in paragraphs (1) and (2).

Under proposed subsection (i), the owner or operator of a Portland cement kiln subject to § 129.97(h) shall maintain a daily operating log for each Portland cement kiln. The record for each kiln must include the items in paragraphs (1)—(4).

*F. Benefits, Costs and Compliance*

*Benefits*

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.

The proposed rulemaking may create economic opportunities for NO<sub>x</sub> 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 the 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. The proposed rulemaking would include a provision for the owner and operator of an affected facility that cannot meet the applicable NO<sub>x</sub> RACT or VOC RACT emission limitation to elect to meet the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 by averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average or submit a case-specific RACT proposal for an alternative emission limitation to the Department for approval.

Under these provisions, the owner or operator shall demonstrate to the Department's satisfaction that it is economically or technically infeasible to meet the applicable proposed NO<sub>x</sub> RACT or VOC RACT emission limitation. These provisions may minimize compliance costs to the owner or operator of an affected facility.

Emission limitations established by regulation will not require the submission of applications for amendments to existing operating permits. These requirements will be incorporated as applicable requirements at the time of permit renewal, if less than 3 years remain in the permit term.

*Compliance Assistance Plan*

The Department will continue to work with the Small Business Assistance Program to aid the facilities less able to handle permitting matters with in-house staff. Through increased preapplication meetings with facilities, the Department is targeting the benefit to industry and the Department for faster review of permit applications.

*Paperwork Requirements*

The proposed rulemaking will not increase the paperwork that is already generated during the normal course of business operations.

*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. The proposed RACT requirements would allow the Department and approved local air pollution control agencies to maintain or increase the reductions of NO<sub>x</sub> 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*

These regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether they effectively fulfill the goals for which they were intended.

*I. Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on April 7, 2014, 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 to 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 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 of comments, recommendations or objections raised.

*J. Public Comments*

Interested persons are invited to submit written comments, suggestions or objections regarding the proposed rulemaking to the Board. Comments, suggestions or objections must be received by the Board by June 30, 2014. In addition to the submission of comments, interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by the

Board by June 30, 2014. The one-page summary will be distributed to the Board and available publicly prior to the meeting when the final-form rulemaking will be considered.

Comments including the submission of a one-page summary of comments may be submitted to the Board online, by mail or express mail as follows. Comments may be submitted online to the Board by accessing the Board's Regulatory Comment System at <http://www.ahs.dep.pa.gov/RegComments>. If an acknowledgement of comments submitted online is not received by the sender within 2 business days, the comments should be retransmitted to the Board to ensure receipt. 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. Comments submitted by facsimile will not be accepted.

*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:

- May 27, 2014 Department of Environmental Protection  
Southwest Regional Office  
Waterfront Conference Rooms A and B  
400 Waterfront Drive  
Pittsburgh, PA 15222
- May 28, 2014 Department of Environmental Protection  
Southeast Regional Office  
Delaware and Schuylkill Conference Rooms  
2 East Main Street  
Norristown, PA 19401
- May 29, 2014 Department of Environmental Protection  
Rachel Carson State Office Building  
Conference Room 105  
400 Market Street  
Harrisburg, PA 17105

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 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 10 minutes for each witness. Witnesses are requested to submit three 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 AT&T Relay Service at (800) 654-5984 (TDD) or (800) 654-5988 (voice users) to discuss how the Board may accommodate their needs.

E. CHRISTOPHER ABRUZZO,  
*Chairperson*

**Fiscal Note:** 7-485. 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:

\* \* \* \* \*

*CEMS—Continuous emissions monitoring system—*  
[ **For purposes of Chapter 127, Subchapter E, all** ]  
All of the equipment that may be required to meet the data acquisition and availability requirements [ **of Chapter 127, Subchapter E to** ] established under the act or Clean Air Act to monitor, measure, calculate, sample, condition, analyze and provide a permanent record of emissions from an affected unit on a continuous basis.

\* \* \* \* \*

*Process*—A method, reaction or operation in which materials are handled or whereby materials undergo physical change—that is, the size, shape, appearance, temperature, state or other physical property of the material is altered—or chemical change—that is, a substance with different chemical composition or properties is formed or created. The term includes all of the equipment, operations and facilities necessary for the completion of the transformation of the materials to produce a physical or chemical change. There may be several processes in series or parallel necessary to the manufacture of a product.

**Process heater—**

(i) **An enclosed device using controlled flame, that is not a boiler, the primary purpose of which is to transfer heat to a process material or to a heat transfer material for use in a process unit.**

(ii) **The term does not include an enclosed device that meets either of the following circumstances:**

(A) **Has the primary purpose of generating steam.**

(B) **In which the material being heated is in direct contact with the products of combustion, including:**

(I) **A furnace.**

(II) **A kiln.**

(III) **An unfired waste heat recovery heater.**

(IV) **A unit used for comfort heat, space heat or food preparation for onsite consumption.**

(V) **An autoclave.**

*Project*—A physical change in or change in the method of operation of an existing facility, including a new emissions unit.

\* \* \* \* \*

*Stationary internal combustion engine*—[ **For purposes of § 129.203 (relating to stationary internal**

**combustion engines), an ] An internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is designed to be capable of being carried or moved from one location to another and is not a mobile air contamination source.**

\* \* \* \* \*

**CHAPTER 129. STANDARDS FOR SOURCES  
ADDITIONAL RACT REQUIREMENTS FOR MAJOR  
SOURCES OF NO<sub>x</sub> AND VOCs**

(*Editor's Note:* Sections 129.96—129.100 are new and printed in regular type to enhance readability.)

**§ 129.96. Applicability.**

(a) This section and §§ 129.97—129.100 apply State-wide to the owner and operator of a major NO<sub>x</sub> emitting facility or a major VOC emitting facility, or both, that was in existence on or before July 20, 2012, for which a requirement or emission limitation, or both, has not been established in §§ 129.51—129.52c, 129.54—129.69, 129.71—129.73, 129.75, 129.77, 129.101—129.107 and 129.301—129.310.

(b) This section and §§ 129.97—129.100 apply State-wide to the owner and operator of a NO<sub>x</sub> emitting facility or VOC emitting facility, or both, when the installation of a new source or a modification or change in operation of an existing source after July 20, 2012, results in the source or facility meeting the definition of a major NO<sub>x</sub> 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—129.52c, 129.54—129.69, 129.71—129.73, 129.75, 129.77, 129.101—129.107 and 129.301—129.310.

**§ 129.97. 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)—(h) located at a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, subject to § 129.96 (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 (k)—(m) or § 129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule).

(1) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(2) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking.) or 1 year after the date the source meets the definition of a major NO<sub>x</sub> emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.96(b).

(b) The owner and operator of a source in this subsection located at a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, subject to § 129.96 shall comply with the following:

(1) Except as specified in paragraph (2), the presumptive RACT requirement for a combustion unit with a rated heat input equal to or greater than 20 million Btu/hour and less than 50 million Btu/hour, which is the performance of an annual adjustment to or tune-up of the combustion process. The adjustment must include, at a minimum, the following:

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

(ii) Inspection and adjustment of the flame pattern or characteristics necessary to minimize total emissions of  $\text{NO}_x$  and, to the extent possible, emissions of  $\text{CO}$ .

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

(2) The presumptive RACT requirement for an oil-fired, gas-fired or combination oil-fired and gas-fired combustion unit with a rated heat input equal to or greater than 20 million Btu/hour and less than 50 million Btu/hour, which is the performance of all adjustments consistent with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers (EPA-340/1-83-023)," September 1983 or as amended.

(3) The applicable recordkeeping requirements of § 129.100(d) or (e) (relating to compliance demonstration and recordkeeping requirements).

(c) The owner and operator of a source in this subsection located at a major  $\text{NO}_x$  emitting facility or major VOC emitting facility, or both, subject to § 129.96 shall comply with the following presumptive RACT requirement, which is the installation, maintenance and operation of the source in accordance with the manufacturer's specifications and good engineering practices:

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

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

(3) An internal combustion engine rated at less than 500 bhp (gross).

(4) An incinerator, thermal oxidizer or catalytic oxidizer used primarily for air pollution control.

(5) A unit of fuel-burning equipment, a gas turbine or an internal combustion engine with an annual capacity factor of less than 5%.

(6) An emergency standby engine operating less than 500 hours in a 12-month rolling period.

(d) The owner and operator of a combustion unit or other combustion source located at a major VOC emitting facility subject to § 129.96 shall comply with the presumptive RACT requirement of good engineering 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 § 129.96 shall comply with the following applicable presumptive RACT requirement:

(1) For a municipal solid waste landfill constructed on or before May 30, 1991, 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 applicable Federal or state plans in 40 CFR Part 62 (relating to approval and promulgation of state plans for designated facilities and pollutants).

(2) For a municipal solid waste landfill constructed after May 30, 1991, new source performance standards in 40 CFR Part 60, Subpart WWW (relating to standards of

performance for municipal solid waste landfills), which are adopted and incorporated by reference in § 122.3.

(f) The owner and operator of a municipal waste combustor subject to § 129.96 shall comply with the following applicable presumptive RACT requirement:

(1) For a municipal waste combustor constructed on or before September 20, 1994, the emission guidelines and compliance times in 40 CFR Part 60, Subpart Cb (relating to emissions guidelines and compliance times for large municipal waste combustors that are constructed on or before September 20, 1994), which are adopted and incorporated by reference in § 122.3, and applicable Federal or state plans in 40 CFR Part 62.

(2) For a municipal waste combustor constructed after September 20, 1994, or for a municipal waste combustor that commenced a modification or reconstruction after June 19, 1996, the new source performance standards in 40 CFR Part 60, Subpart Eb (relating to standards of performance for large municipal waste combustors for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996), which are adopted and incorporated by reference in § 122.3.

(g) The owner and operator of a  $\text{NO}_x$  air contamination source in this subsection located at a major  $\text{NO}_x$  emitting facility or a VOC air contamination source in this subsection located at a major VOC emitting facility, or both, subject to § 129.96 may not cause, allow or permit  $\text{NO}_x$  or VOCs, or both, to be emitted from the air contamination source for which the source is major in excess of the applicable RACT emission limitation:

(1) A combustion unit or process heater:

(i) For a natural gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour, 0.08 lb  $\text{NO}_x$ /million Btu heat input.

(ii) For a distillate oil-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour, 0.12 lb  $\text{NO}_x$ /million Btu heat input.

(iii) For a residual oil-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour, 0.20 lb  $\text{NO}_x$ /million Btu heat input.

(iv) For a refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour, 0.25 lb  $\text{NO}_x$ /million Btu heat input.

(v) For 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, 0.45 lb  $\text{NO}_x$ /million Btu heat input.

(vi) For a coal-fired combustion unit with a rated heat input equal to or greater than 250 million Btu/hour that is:

(A) A circulating fluidized bed combustion unit, 0.20 lb  $\text{NO}_x$ /million Btu heat input.

(B) A tangentially fired combustion unit, 0.35 lb  $\text{NO}_x$ /million Btu heat input.

(C) Another combustion unit, 0.40 lb  $\text{NO}_x$ /million Btu heat input.

(2) A combustion turbine:

(i) For a 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 when firing:



(A) Natural gas or a noncommercial gaseous fuel, 42 ppmvd NO<sub>x</sub> @ 15% oxygen.

(B) Fuel oil, 75 ppmvd NO<sub>x</sub> @ 15% oxygen.

(C) Natural gas or a noncommercial gaseous fuel, 2 ppmvd VOC (as propane) @ 15% oxygen.

(D) Fuel oil, 2 ppmvd VOC (as propane) @ 15% oxygen.

(ii) For a combined cycle or combined heat and power combustion turbine with a rated output equal to or greater than 180 MW when firing:

(A) Natural gas or a noncommercial gaseous fuel, 4 ppmvd NO<sub>x</sub> @ 15% oxygen.

(B) Fuel oil, 8 ppmvd NO<sub>x</sub> @ 15% oxygen.

(C) Natural gas or a noncommercial gaseous fuel, 2 ppmvd VOC (as propane) @ 15% oxygen.

(D) Fuel oil, 2 ppmvd VOC (as propane) @ 15% oxygen.

(iii) For a simple cycle or regenerative cycle combustion turbine with a rated output equal to or greater than 1,000 bhp when firing:

(A) Natural gas or a noncommercial gaseous fuel, 42 ppmvd NO<sub>x</sub> @ 15% oxygen.

(B) Fuel oil, 75 ppmvd NO<sub>x</sub> @ 15% oxygen.

(C) Natural gas or a noncommercial gaseous fuel, 9 ppmvd VOC (as propane) @ 15% oxygen.

(D) Fuel oil, 9 ppmvd VOC (as propane) @ 15% oxygen.

(3) A stationary internal combustion engine:

(i) For a lean burn stationary internal combustion engine with a rating equal to or greater than 500 bhp fired with:

(A) Natural gas, 3.0 grams NO<sub>x</sub>/bhp-hr.

(B) Natural gas, liquid fuel or dual-fuel, 0.4 gram VOC/bhp-hr.

(ii) For a stationary internal combustion engine with a rating equal to or greater than 500 bhp fired with liquid fuel or dual-fuel, 8.0 grams NO<sub>x</sub>/bhp-hr.

(iii) For a rich burn stationary internal combustion engine with a rating equal to or greater than 500 bhp fired with:

(A) Natural gas, 2.0 grams NO<sub>x</sub>/bhp-hr.

(B) Natural gas, 1.0 gram VOC/bhp-hr.

(4) A unit firing multiple fuels simultaneously:

(i) The applicable RACT multiple fuel emission limit shall be determined on a total heat input fuel weighted basis 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.

(ii) A fuel representing less than 1% of the unit's annual fuel consumption on a heat input basis is excluded when determining the applicable RACT multiple fuel emission limit calculated in accordance with subparagraph (i).

(iii) 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 § 129.96 shall comply with the following applicable presumptive RACT emission limitation:

(1) 3.88 pounds of NO<sub>x</sub> per ton of clinker produced for a long wet-process cement kiln as defined in § 145.142 (relating to definitions).

(2) 3.44 pounds of NO<sub>x</sub> per ton of clinker produced for a long dry-process cement kiln as defined in § 145.142.

(3) 2.36 pounds of NO<sub>x</sub> 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 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)—(h) prior to \_\_\_\_\_, (*Editor's Note:* The blank refers to the effective date of adoption of this proposed rulemaking.) under §§ 129.91—129.95 (relating to stationary sources of NO<sub>x</sub> and VOCs) to control, reduce or minimize NO<sub>x</sub> emissions or VOC emissions, or both, from the air contamination source except to the extent the RACT permit contains more stringent requirements or emission limitations, or both.

(j) The requirements and emission limitations of this section do not supersede the requirements and emission limitations of §§ 129.201—129.205, 145.111—145.113 and 145.141—145.146 (relating to additional NO<sub>x</sub> requirements; emissions of NO<sub>x</sub> from stationary internal combustion engines; and emissions of NO<sub>x</sub> from cement manufacturing) except to the extent this section contains more stringent requirements or emission limitations, or both, for the owner or operator of a major NO<sub>x</sub> emitting facility subject to § 129.96 to control, reduce or minimize NO<sub>x</sub> emissions from an air contamination source subject to §§ 129.201—129.205, §§ 145.111—145.113 or §§ 145.141—145.146.

(k) The owner or operator of a major NO<sub>x</sub> emitting facility or a major VOC emitting facility, or both, subject to § 129.96 that includes an air contamination source subject to one or more of subsections (b)—(h) that cannot meet the applicable 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) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(ii) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) or 6 months after the date that the

source meets the definition of a major NO<sub>x</sub> emitting facility, whichever is later, for a source subject to § 129.96(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)—(h).

(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 \_\_\_\_\_ (*Editor's Note:* The blank refers to the date 3 years after the effective date of adoption of this proposed rulemaking.)

(l) 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 (k) and approve or deny the petition in writing.

(m) Approval or denial under subsection (l) of the timely and complete petition for an alternative compliance schedule submitted under subsection (k) 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.

**§ 129.98. Facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification general requirements.**

(a) The owner or operator of a major NO<sub>x</sub> emitting facility subject to § 129.96 (relating to applicability) that includes an air contamination source subject to a NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) that cannot meet the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation may elect to meet the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 by averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average. System-wide emissions averaging must be among sources under common control of the same owner or operator in this Commonwealth.

(b) The owner or operator of each facility that elects to comply with subsection (a) shall submit an operating permit modification that incorporates the requirements of this section for averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average to the Department or appropriate approved local air pollution control agency by the applicable date as follows:

(1) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(2) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) or 6 months after the date that the

source meets the definition of a major NO<sub>x</sub> emitting facility, whichever is later, for a source subject to § 129.96(b).

(c) Each NO<sub>x</sub> emitting source included in the operating permit modification for averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average submitted under subsection (b) must be an air contamination source subject to a NO<sub>x</sub> RACT emission limitation in § 129.97.

(d) The operating permit modification for averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average submitted under subsection (b) must demonstrate that the aggregate NO<sub>x</sub> emissions emitted by the air contamination sources included in the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification using a 30-day rolling average are not greater than 90% of the sum of the NO<sub>x</sub> emissions that would be emitted by the group of included sources if each source complied with the applicable NO<sub>x</sub> RACT requirement or NO<sub>x</sub> RACT emission limitation in § 129.97 on a source-specific basis.

(e) The owner or operator shall calculate the alternative facility-wide or system-wide NO<sub>x</sub> RACT emissions limitation using a 30-day rolling average for the air contamination sources included in the operating permit modification submitted under subsection (b) by using the following equation to sum the emissions for all of the sources included in the operating permit modification:

$$\left[ \sum_{i=1}^n Ri_{\text{actual}} * Hi \right] \leq \left[ \sum_{i=1}^n Ri_{\text{allowable}} * Hi \right] * 0.9$$

Where:

Ri<sub>actual</sub> = The daily actual NO<sub>x</sub> emission rate for air contamination source i, lb/mmBtu, using a 30-day rolling average.

Ri<sub>allowable</sub> = The applicable NO<sub>x</sub> emission rate limitation for air contamination source i, lb/mmBtu, specified in § 129.97.

Hi = The daily actual heat input for air contamination source i, mmBtu, using a 30-day rolling average.

n = The number of air contamination sources included in the operating permit modification.

0.9 = The 90% limit specified under subsection (d).

(f) The operating permit modification specified in subsections (b)—(e) may include facility-wide or system-wide averaging emissions using a 30-day rolling average only for NO<sub>x</sub> emitting sources or NO<sub>x</sub> emitting facilities that are owned or operated, or both, by the applicant.

(g) The operating permit modification specified in subsections (b)—(f) must include the following information:

(1) Identification of each air contamination source included in the NO<sub>x</sub> emissions averaging RACT operating permit modification.

(2) Each air contamination source's applicable emission limitation in § 129.97.

(3) Methods for demonstrating compliance and record-keeping and reporting requirements in accordance with § 129.100 (relating to compliance demonstration and recordkeeping requirements) for each source included in the NO<sub>x</sub> emissions averaging RACT operating permit modification submitted under subsection (b).

(h) An air contamination source or facility, or both, included in the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification sub-

mitted in accordance with subsections (b)—(g) may be included in only one facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT proposal.

(i) The Department or appropriate approved local air pollution control agency will issue a modification to the operating permit.

(j) The owner or operator of an air contamination source or facility, or both, included in the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification submitted in accordance with subsections (b)—(h) shall submit the reports and records specified in subsection (g)(3) to the Department or appropriate approved local air pollution control agency on the schedule specified in subsection (g)(3) to demonstrate compliance with § 129.100.

(k) The owner or operator of an air contamination source or facility, or both, included in a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification submitted in accordance with subsections (b)—(h) 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<sub>x</sub> RACT emission limitations may not substitute those emission reductions for the emission reductions required by the facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification 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<sub>x</sub> emission limitation in § 129.97 that is not included in a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification submitted under subsection (b) shall operate the source in compliance with the applicable NO<sub>x</sub> emission limitation in § 129.97.

(m) The owner and operator of an air contamination source included in a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification submitted under subsection (b) shall be liable for a violation of the operating permit modification or this section at that source or other source in the operating permit modification.

**§ 129.99. Alternative RACT proposal and petition for alternative compliance schedule.**

(a) The owner or operator of an air contamination source subject to § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) located at a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, subject to § 129.96 (relating to applicability) that cannot meet the applicable presumptive RACT requirement or RACT emission limitation of § 129.97 or participate in either a facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification under § 129.98 (relating to facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification general requirements) may propose an alternative NO<sub>x</sub> RACT emission limitation or VOC RACT emission limitation, or both, in accordance with subsection (d).

(b) The owner or operator of a NO<sub>x</sub> air contamination source with a potential emission rate equal to or greater than 5.0 tons of NO<sub>x</sub> per year that is not subject to § 129.97 or §§ 129.201—129.205 (relating to additional NO<sub>x</sub> requirements) located at a major NO<sub>x</sub> emitting facility subject to § 129.96 shall propose a NO<sub>x</sub> 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 § 129.97 located at a major VOC emitting facility subject to § 129.96 shall propose a VOC RACT emission limitation in accordance with subsection (d).

(d) The owner or operator proposing an alternative 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) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(ii) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) or 6 months after the date that the source meets the definition of a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, whichever is later, for a source subject to § 129.96(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<sub>x</sub> emitting facility or major VOC emitting facility, or both.

(3) Include in the RACT proposal the proposed alternative NO<sub>x</sub> RACT emission limitation or VOC 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 emission limitation as soon as possible but not later than:

(i) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(ii) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking.) or 1 year after the date that the source meets the definition of a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, whichever is later, for a source subject to § 129.96(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 § 129.100 (relating to compliance demonstration and recordkeeping 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 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 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 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 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 \_\_\_\_\_, (*Editor's Note:* The blank refers to the effective date of adoption of this proposed 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 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 notification required for EPA SIP approval.

(i) The owner and operator of a facility proposing to comply with the applicable 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) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(ii) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) or 6 months after the date that the source meets the definition of a major NO<sub>x</sub> emitting facility, whichever is later, for a source subject to § 129.96(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 a 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 \_\_\_\_\_ (*Editor's Note:* The blank refers to the date 3 years after the effective date of adoption of this proposed rulemaking.).

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

(k) 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 (j) 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 \_\_\_\_\_, (*Editor's Note:* The blank refers to the effective date of adoption of this proposed 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 (j), except to the extent the existing plan approval or operating permit contains more stringent requirements.

(l) Approval or denial under subsection (j) of the timely and complete petition for an alternative compliance schedule submitted under subsection (i) 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.

#### **§ 129.100. Compliance demonstration and record-keeping requirements.**

(a) Except as provided in subsection (c), the owner and operator of an air contamination source subject to a NO<sub>x</sub> emission limitation or VOC emission limitation, or both, listed in § 129.97 (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-day rolling average.

(2) 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).

(b) 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) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a) (relating to applicability).

(2) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 1 year after the effective date of adoption of this proposed rulemaking.) or 1 year after the date that the source meets the definition of a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, whichever is later, for a source subject to § 129.96(b).

(c) An owner or operator of an air contamination source subject to this section, §§ 129.96 and 129.97 and § 129.98 (relating to facility-wide or system-wide NO<sub>x</sub> emissions averaging RACT operating permit modification general requirements) may request a waiver from the requirement to demonstrate compliance with the applicable emission limitation listed in § 129.97 if the following requirements are met:

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

(i) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(ii) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date 6 months after the effective date of adoption of this proposed rulemaking.) or 6 months after the date that the source meets the definition of a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, whichever is later, for a source subject to § 129.96(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) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date within 12 months prior to the effective date of adoption of this proposed rulemaking.) for a source subject to § 129.96(a).

(ii) \_\_\_\_\_, (*Editor's Note:* The blank refers to the date within 12 months prior to the effective date of adoption of this proposed rulemaking.) or within 12 months prior to the date that the source meets the definition of a major NO<sub>x</sub> emitting facility or major VOC emitting facility, or both, whichever is later, for a source subject to § 129.96(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<sub>x</sub> emission limitation or VOC emission limitation, or both.

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

(d) The owner and operator of an air contamination source subject to this section, §§ 129.96—129.98 and § 129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule) shall keep records to demonstrate compliance with §§ 129.96—129.99 in the following manner:

(1) The records shall include sufficient data and calculations to demonstrate that the requirements of §§ 129.96—129.99 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 shall be retained for 5 years and made available to the Department or appropriate approved local air pollution control agency upon written request.

(e) The owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable NO<sub>x</sub> emission rate threshold specified in § 129.99(b) and the requirements of § 129.97 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.

(f) 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 § 129.99(c) and the requirements of § 129.97 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.

(g) The owner or operator of a combustion unit subject to § 129.97(b)(1) shall record each adjustment conducted under the procedures in § 129.97(b)(1) in a permanently bound log book or other method approved by the Department or appropriate approved local air pollution control agency. This log book 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<sub>x</sub> and CO emission rates.

(5) The final excess oxygen rate.

(6) Other information required by the applicable operating permit.

(h) The owner or operator of an oil-fired, gas-fired or combination oil-fired and gas-fired unit subject to § 129.97(b)(2) shall maintain records including a certification from the fuel supplier of the type of fuel. For each shipment of residual oil, the record must include:

(1) A certification of the nitrogen content of the fuel.

(2) Identification of the sampling method and sampling protocol used to determine the nitrogen content of the fuel.

(i) The owner or operator of a Portland cement kiln subject to § 129.97(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.

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