Executive Summary
Final Rulemaking
Amendments to 25 *Pa. Code* Chapters 121 and 129
Additional RACT Requirements for Major Sources of NO_X and VOCs

The Department of Environmental Protection (DEP) recommends final-form amendments to Chapters 121 and 129 (relating to general provisions; and standards for sources) for consideration by the Environmental Quality Board (EQB or Board) in order to satisfy Federal Clean Air Act (CAA) obligations for reasonably available control technology (RACT) requirements statewide for the National Ambient Air Quality Standards (NAAQS) for ozone. The final-form amendments add 25 *Pa. Code* §§ 129.96—129.100 (relating to additional RACT requirements for major sources of NO_X and VOCs) which establish RACT requirements for the owner and operator of certain types of stationary air contamination sources located at any major NO_X emitting facility or any major VOC emitting facility that was in existence in Pennsylvania on or before July 20, 2012. The final-form amendments also add terms and definitions to 25 *Pa. Code* § 121.1 (relating to definitions) to support the interpretation of the final-form RACT provisions in Chapter 129.

Purpose of the Final Rulemaking

The final rulemaking is mandated by Federal law or regulation. Section 109(b) of the CAA (42 U.S.C.A. § 7409(b)) provides that the Administrator of the U.S. Environmental Protection Agency (EPA) must establish NAAQS for criteria air pollutants at requisite levels that protect public health and public welfare. The EPA set the ground-level ozone NAAQS in July 1997 at 0.08 part per million (ppm) averaged over 8 hours and lowered it in March 2008 to 0.075 ppm. See 62 FR 38855 (July 18, 1997) and 73 FR 16436 (March 27, 2008). The EPA designated areas of Pennsylvania as nonattainment for the 1997 and 2008 ozone NAAQS. See 69 FR 23858, 23931 (April 30, 2004) and 77 FR 30088, 30143 (May 21, 2012). Based on these designations and because Pennsylvania is located in the Ozone Transport Region, the Commonwealth is required to implement RACT requirements statewide for major stationary sources of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) as part of a Federally-approvable State Implementation Plan (SIP) for the 1997 and 2008 8-hour ozone NAAQS.

The RACT SIP submittal for the 2008 8-hour ozone standard was due to the EPA no later than July 20, 2014, two years after the effective date (July 20, 2012) of the 8-hour ozone nonattainment designations. Sources subject to RACT in ozone nonattainment areas must implement the requirements no later than January 1, 2017. See 80 FR 12282 (March 6, 2015).

The final rulemaking amends 25 *Pa. Code* Chapter 129 to establish presumptive RACT requirements and emission limitations for the owners and operators of certain major stationary sources of NO_x and VOC emissions. The source categories include combustion units, boilers, process heaters, turbines, engines, municipal solid waste landfills, municipal waste combustors, cement kilns and other NO_x and VOC emission sources not regulated by RACT requirements elsewhere in Chapter 129. The final rulemaking also includes provisions establishing a petition process for approval of an alternative compliance schedule by the Department or approved local air pollution control programs in Allegheny and Philadelphia Counties, a facility-wide or system-

wide NOx emissions averaging plan provision, an alternative RACT proposal petition process, and compliance demonstration and recordkeeping requirements.

This final-form regulation is reasonably necessary to attain and maintain the 8-hour ozone NAAQS and to satisfy related CAA requirements. The final rulemaking will be submitted to the EPA as a revision to the SIP upon publication in the *Pennsylvania Bulletin*.

Summary of the Final Rulemaking

The final-form regulation amends § 121.1 by revising the existing terms "CEMS—continuous emissions monitoring system," "major NOx emitting facility," "major VOC emitting facility" and "stationary internal combustion engine or stationary reciprocating internal combustion engine." The final rulemaking also adds new terms including "process heater," "refinery gas," "regenerative cycle combustion turbine," "simple cycle combustion turbine" and "stationary combustion turbine."

Section 129.96 (relating to applicability) establishes RACT applicability requirements for certain owners and operators of major NO_x emitting or major VOC emitting facilities. Section 129.96 clarifies that the final-form regulation does not apply to the owner and operator of a NO_x air contamination source at a major NO_x emitting facility or a VOC air contamination source at a major VOC emitting facility that has the potential to emit less than one ton per year (TPY) of NOx or VOC emissions. Section 129.96 has also been revised from proposed to final rulemaking to exempt the owner and operator of a facility which is not a major NO_x or VOC emitting facility on or before January 1, 2017.

Section 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) requires the owners and operators of affected major NO_x or VOC emitting facilities to comply with the applicable presumptive RACT requirement or emission limitation, beginning with the applicable compliance date. Section 129.97 also creates a mechanism for requesting an alternative compliance schedule. Changes were made from proposed to final rulemaking to clarify that the owner or operator of a NO_x emitting air contamination source that has the potential to emit less than 5 TPY of NO_x or a VOC emitting air contamination source that has the potential to emit less than 2.7 TPY of VOC shall install, operate and maintain the source in accordance with manufacturer's specifications and good operating practices. Section 129.97 has also been revised to establish emission limitations and operating parameters for coal-fired combustion units equipped with selective catalytic reduction system controls and selective non-catalytic reduction system controls. The final-form regulation also explains what the annual capacity factor is for specific types of sources.

Section 129.98 (relating to facility-wide or system-wide NO_x emissions averaging plan general requirements) establishes an alternative mechanism to authorize the averaging of NO_x emissions on either a facility-wide or system-wide basis using a 30-day rolling average when the owner and operator of a major NO_x emitting facility subject to § 129.96 that includes at least one air contamination source subject to a NO_x RACT emission limitation in § 129.97 is unable to meet the applicable NO_x RACT emission limitation specified in § 129.97. In response to EPA comments, system-wide averaging of NO_x emissions is restricted to sources under common

control in this Commonwealth that are located in the same ozone nonattainment area. The averaging equation in subsection (e) has been revised in the final-form regulation to clarify that if an air contamination source included in an emissions averaging plan is subject to a numerical emission rate limit that is more stringent than the applicable allowable emission rate limitation set forth in § 129.97, then the more stringent numerical emission rate limit must be used for the calculation of the allowable NO_x mass emissions. Minor clarifying changes were also made from proposed to final rulemaking to specify that the NO_x emissions averaging plan must be incorporated in an Operating Permit or Plan Approval issued by the Department or an approved local air pollution control agency.

Section 129.99 (relating to alternative RACT proposal and petition for alternative compliance schedule) allows an affected owner and operator of an air contamination source located at any major NO_x emitting facility or major VOC emitting facility subject to § 129.96 that is unable to meet the provisions listed in § 129.97 to submit a written petition to the Department or approved local air pollution control program for an alternative NO_x or VOC emission limitation. If the installation of an add-on air pollution control device is necessary to demonstrate compliance with the applicable RACT requirement or emission limitation, compliance is required no later than three years after the approval of the petition. Other minor clarifying changes were made to this section from proposed to final rulemaking.

Section 129.100 (relating to compliance demonstration and recordkeeping requirements) establishes recordkeeping requirements. The final-form regulation clarifies monitoring and testing procedures for an air contamination source. Procedures for calculating the "30-Day Rolling Average Emission Rate" for a combustion unit are also prescribed in § 129.100(a)(1) of the final rulemaking. The applicable monitoring and source testing requirements for Portland cement kilns and municipal waste combustors were also clarified in the final rulemaking.

Affected Parties

Sections 129.96—129.100 of the final-form RACT regulation apply statewide to the owner and operator of a major NO_x emitting facility or a major VOC emitting facility that was in existence in this Commonwealth on or before July 20, 2012. The final rulemaking also applies when the installation of a new source, a modification at or a change in operation of an existing source after July 20, 2012, results in the facility meeting the definition of either a major NO_x emitting facility or a major VOC emitting facility. In those cases where an owner or operator of a major NO_x emitting facility is not able to comply with the specified presumptive NO_x RACT requirements or emission limitations, the owner or operator may submit a request to the Department or approved local air pollution control agency to meet emission limitations by facility-wide or system-wide emissions averaging. An owner and operator subject to § 129.96 that is unable to meet the presumptive RACT requirements or emission limitations in § 129.97 may submit a request to the State or approved local agency for an alternative case-specific emission limitation. The final rulemaking is expected to have a minimal negative impact on the owners and operators of small businesses. The flexibility afforded all businesses (including small businesses) in the final rulemaking ensures minimal negative effect on their operations.

Advisory Groups

On November 7, 2014, the Air Quality Technical Advisory Committee (AQTAC) was briefed on the draft final-form regulation and public comments submitted to the Board on the proposed RACT rulemaking. AQTAC voted 11-5-0 (yes; no; abstain) to concur with DEP's recommendation to move the final rulemaking forward to the EQB for consideration. The draft final-form regulation was discussed with the Small Business Compliance Advisory Committee (SBCAC) on January 28, 2015. The SBCAC voted 6-2-0 to concur with DEP's recommendation to forward the final rulemaking to the EQB. The draft final-form regulation was discussed with the Citizens Advisory Council (CAC) Policy and Regulatory Oversight Committee on February 20, 2015, and May 12, 2015. The Policy and Regulatory Oversight Committee recommended that the CAC concur with DEP's recommendation to move the final rulemaking forward to the EQB. However, the CAC tabled their consideration of the draft final-form regulation at both its March 17 and May 20 meetings. Consideration of the draft final-form regulation by the full CAC is expected in September 2015.

Public Comments and Board Hearings

The EQB approved publication of the proposed rulemaking at its meeting of November 19, 2013. The proposed rulemaking was published in the *Pennsylvania Bulletin* on April 19, 2014, with a 73-day public comment period (44 Pa.B. 2392). Three public hearings were held by the Board on May 27, 28, and 29, 2014 in Pittsburgh, Norristown, and Harrisburg, PA, respectively. The public comment period closed on June 30, 2014. The EQB received comments from 134 commentators, including government entities, the electric generating and other industry sectors, environmental organizations, other states (including Delaware, Connecticut and New Jersey), the EPA and the Independent Regulatory Review Commission.