Executive Summary

Amendments to 25 Pa. Code Chapters 121 and 129 Control of VOC Emissions from Industrial Cleaning Solvents; General Provisions; Aerospace Manufacturing and Rework; and Additional RACT Requirements for Major Sources of NO_x and VOCs

Purpose and Summary of the Proposed Rulemaking

The Department of Environmental Protection (DEP) proposes amendments to Chapters 121 and 129 (relating to general provisions; and standards for sources) for consideration by the Environmental Quality Board (Board). The proposed rulemaking is designed to address volatile organic compound (VOC) emissions and would add § 129.63a (relating to control of VOC emissions from industrial cleaning solvents) and would amend §§ 121.1, 129.51, and 129.73 (relating to definitions; general; and aerospace manufacturing and rework) and specified sections of the recently promulgated additional RACT requirements for major sources of nitrogen oxides (NO_x) and VOCs (RACT 2).

VOCs are precursors to the formation of ground-level ozone, a public health and welfare hazard. State regulations to control VOC emissions from industrial cleaning solvents are required under Federal law. Reductions in VOC emissions that are achieved following the adoption and implementation of VOC emission control measures for stationary sources of VOC emissions will enable the Commonwealth to make progress in attaining and maintaining the 1997, 2008, and 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS).

Proposed § 129.63a would adopt reasonably available control technology (RACT) requirements and RACT emission limitations for existing stationary sources of volatile organic compound (VOC) emissions from industrial cleaning solvents that are not regulated elsewhere in Chapter 129 or 25 Pa. Code Chapter 130 (relating to standards for products). These requirements would apply to the owner and the operator of a facility at which an industrial cleaning solvent is used or applied in a cleaning activity to remove a contaminant, including an adhesive, ink, paint, dirt, soil, oil, or grease, from a cleaning unit operation or work production-related work area or from a part, product, tool, machinery, equipment, vessel, floor, or wall.

- Subsection (a) would establish the applicability.
- Subsection (b) would establish definitions to be used in this section.
- Subsection (c) would establish exceptions and exemptions.
- Subsection (d) would establish that the requirements of this section supersede the requirements of a RACT permit issued to the owner and operator of a source subject to this section prior to the date of adoption of proposed § 129.63a except to the extent the RACT permit contains more stringent requirements.
- Subsection (e) would establish emission limitations.
- Subsection (f) would establish work practice requirements for industrial cleaning solvents, used shop towels and waste materials.
- Subsection (g) would establish compliance demonstration requirements.
- Subsection (h) would establish recordkeeping and reporting requirements.
- Subsection (i) would establish the procedure for determining the composite vapor pressure of organic compounds in cleaning unit operation cleaning solvents.

- Subsection (j) would establish procedures for determining the vapor pressure of each single component compound in a cleaning unit operation industrial cleaning solvent.
- Subsection (k) would establish ASTM method references.

These proposed VOC emission limitations and other requirements are consistent with the RACT recommendations issued by the U.S. Environmental Protection Agency (EPA) in the 2006 Control Techniques Guidelines for Industrial Cleaning Solvents (2006 ICS CTG). Consistent with Section 4.2(a) of the Pennsylvania Air Pollution Control Act, 35 P.S. §4004.2(a), the VOC emission reduction measures in proposed § 129.63a are reasonably required to achieve and maintain the health-based and welfare-based 8-hour ground-level ozone NAAQS and to satisfy related Clean Air Act (CAA) requirements in this Commonwealth. The proposed amendments, if published as a final-form rulemaking in the *Pennsylvania Bulletin*, will be submitted to the EPA for approval as a revision to the Commonwealth's State Implementation Plan if the provisions meet the RACT requirements of the CAA and its implementing regulations.

The proposed rulemaking would make minor clarifying amendments to §§ 121.1 and 129.51 to support the addition of § 129.63a.

Section 129.73 would be amended to correct a numbering error in Table II (relating to allowable content of VOCs in aerospace coatings) that was promulgated April 10, 1999 (29 Pa. B. 1879, 1887).

Clarifying amendments would be proposed for §§ 129.96, 129.97, 129.99, and 129.100 under RACT 2 to update the VOC presumptive RACT regulations for which RACT 2 does not apply and to clarify certain requirements. RACT 2 was promulgated April 23, 2016 (46 Pa. B. 2036).

Affected Parties

DEP estimates that the owners and operators of about 576 facilities across the Commonwealth may be affected by proposed § 129.63a. Of these facility owners and operators, about 253 may meet the definition of small business (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) across the Commonwealth. DEP expects that the impact on these small businesses would be minimal. The owner and the operator of a facility that would be subject to proposed § 129.63a would likely incur little, if any, cost to implement the requirements of proposed § 129.63a. Industrial cleaning solvents such as Stoddard solvent, mineral spirits, and most other common solvents provided by suppliers have vapor pressures well below the proposed eight millimeters of mercury composite vapor pressure compliance limit. The owners and operators of potentially affected facilities such as automobile repair garages and metal parts manufacturing facilities using these common industrial cleaning solvents would likely not have to make any changes to their cleaning materials. Reporting, recordkeeping, and administrative costs have been minimized in proposed § 129.63a. Owners and operators of affected facilities would be required to maintain monthly records sufficient to demonstrate compliance with the applicable requirements at, above, and below the threshold of 2.7 tons (2,455 kilograms) of VOC emissions per 12-month rolling period for implementing the VOC emission control measures. DEP estimates that the annual financial impact on potentially affected facility owners and operators could range from an average savings of \$282 per affected facility owner and operator to an average cost of \$27 per affected facility owner and operator. The estimated amount of VOC emission reductions from the potentially affected 576 facility owners and operators, including

small businesses, could be as much as 12,499 tpy. The estimated average amount of potential VOC emission reductions per affected owner and operator could be approximately 22 tpy per affected facility (12,499 tpy/576 facilities).

Advisory Groups

The draft proposed Annex A was initially discussed with the advisory committees in 2014. After consideration of the comments and concerns discussed at the February 20, 2014, Air Quality Technical Advisory Committee (AQTAC) meeting and the April 23, 2014, Small Business Compliance Advisory Committee (SBCAC) meeting, and further research on the requirements of other states' regulations, DEP made revisions to the draft proposed Annex A and presented it to the advisory committees for a second time in 2016. Changes to the draft proposed Annex A language for § 129.63a were made to address AQTAC concerns about the emissions threshold for implementing the VOC emission control measures, exceptions and exemptions, daily recordkeeping, and clarity of language, as well as flexibility for small businesses requested by the SBCAC. The revised draft proposed Annex A also included minor clarifying changes to § 129.73 to correct a numbering error. No changes were made to emission limits or other substantive requirements in this section.

The revised draft proposed Annex A was discussed with the AQTAC on February 11, 2016, the Citizens Advisory Council (CAC) Policy and Regulatory Oversight (PRO) Committee on March 2, 2016, and the SBCAC on April 27, 2016. AQTAC voted 15-2-0 and the SBCAC voted unanimously to concur with DEP's recommendation to forward the proposed amendments to the Board. On the recommendation of the CAC PRO Committee, the CAC voted on March 15, 2016, to concur with DEP's recommendation to forward the proposed rulemaking to the Board.

DEP added language to § 129.63a(h) after the 2016 advisory committee meetings to clarify that composite vapor pressure as supplied or applied shall be determined in accordance with §§ 129.63a (i) and (j). Clarifying language was added to §§ 129.63a(i) and (j) to provide additional options to determine the vapor pressure of organic compounds. These revisions were made in response to a question asked by an AQTAC member at the February 11, 2016, meeting.

The proposed revisions to §§ 129.96, 129.97, 129.99, and 129.100 were added after the revised draft proposed Annex A was discussed with the advisory committees. These proposed revisions are minor clarifying amendments made in response to the promulgation of the RACT 2 regulations on April 23, 2016. No changes are made to emission limits or other substantive requirements in these sections.

Public Comments and Board Hearings

DEP recommends a 60-day public comment period on the proposed rulemaking and three public hearings at DEP regional offices in Norristown, Harrisburg, and Pittsburgh.