

Executive Summary

Amendments to 25 Pa. Code Chapters 121, 129 and 130

Control of VOC Emissions from Flexible Packaging Printing Presses, Offset Lithographic Printing Presses and Letterpress Printing Presses; and Adhesives, Sealants, Primers and Solvents

The Department of Environmental Protection recommends proposed amendments to 25 Pa. Code Chapters 121, 129 and 130 (relating to general provisions; standards for sources; and standards for products) for consideration by the Environmental Quality Board (Board).

Purpose of the Proposed Rulemaking

The proposed rulemaking would amend Chapters 121 and 129 to limit emissions of volatile organic compounds (VOCs) from inks, coatings, adhesives, fountain solutions and cleaning materials applied on and with flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses. VOCs are a precursor for ground-level ozone formation. The proposed rulemaking would establish the emission limits and other requirements of the United States Environmental Protection Agency's (EPA) 2006 Control Techniques Guidelines (CTGs) for flexible packaging printing and for offset lithographic printing and letterpress printing for these sources in this Commonwealth. The proposed rulemaking would also include clarifying amendments to the recently promulgated regulations for adhesives, sealants, primers and solvents in Chapters 129 and 130.

The VOC reduction measures proposed in this rulemaking are reasonably required to attain and maintain the 1997 and 2008 8-hour National Ambient Air Quality Standards for ozone. The final rulemaking, if published as final-form regulation in the *Pennsylvania Bulletin*, will be submitted to the EPA as a revision to the State Implementation Plan.

Summary of Proposal

The proposed amendments would add 17 new terms and definitions to § 121.1 (relating to definitions) and revise the definition of two existing terms to support proposed §§ 129.67a and 129.67b (relating to control of VOC emissions from flexible packaging printing presses; and control of VOC emissions from offset lithographic printing presses and letterpress printing presses).

The proposed rulemaking would amend § 129.51(a) (relating to general) to extend its coverage to the owner and operator of a flexible packaging printing press, offset lithographic printing press or letterpress printing press, or a combination of these press types, covered by this proposed rulemaking. Section 129.51(a) provides an alternative method for owners and operators of facilities to achieve compliance with air emission limits.

The proposed rulemaking would amend § 129.67 (relating to graphic arts systems) to provide for the proposed requirements that would apply to the owner and operator of a flexible packaging

printing press under § 129.67a. Section 129.67 applies to certain rotogravure and flexographic printing presses.

The proposed rulemaking would add § 129.67a to regulate VOC emissions from flexible packaging printing presses.

Proposed subsection (a) would establish the applicability criteria for § 129.67a.

Proposed subsection (b) would explain that the requirements of § 129.67a supersede the requirements of a reasonably available control technology (RACT) permit already issued to the owner or operator of a source subject to § 129.67a, except to the extent the RACT permit contains more stringent requirements.

Proposed subsection (c) would establish VOC emission limitation options beginning January 1, 2013.

Proposed subsection (d) would identify the compliance monitoring procedures to demonstrate compliance with § 129.67a.

Proposed subsection (e) would establish recordkeeping and reporting requirements beginning January 1, 2013; subsection (f) would specify sampling and testing methods; and subsection (g) would establish work practice requirements for cleaning-related activities beginning January 1, 2013.

The proposed rulemaking would add § 129.67b to regulate VOC emissions from offset lithographic printing presses and letterpress printing presses.

Proposed subsection (a) would establish the applicability criteria for § 129.67b.

Proposed subsection (b) would explain that the requirements of § 129.67b supersede the requirements of a RACT permit already issued to the owner or operator of a source subject to § 129.67b, except to the extent the RACT permit contains more stringent requirements.

Proposed subsection (c) would establish VOC emission limitations for all printing presses subject to this section beginning January 1, 2013.

Proposed subsection (d) would establish VOC emission limitations for heatset web offset lithographic printing presses and heatset web letterpress printing presses beginning January 1, 2013.

Proposed subsection (e) would specify compliance monitoring requirements to demonstrate compliance with the requirements of § 129.67b.

Proposed subsections (f) and (g) would establish recordkeeping and reporting requirements beginning January 1, 2013.

Proposed subsection (h) would specify sampling and testing methods.

Proposed subsection (i) would establish work practice requirements for cleaning-related activities.

Proposed subsections (j) and (k) would specify the test methods and an equation for calculating the vapor pressure of the cleaning materials.

The proposed rulemaking would amend §§ 129.77(k) and 130.703(a)(2) (relating to control of emissions from the use or application of adhesives, sealants, primers and solvents; and exemptions and exceptions) to clarify the applicability of the adhesive, sealant, primer and solvent requirements to the adhesives used or applied on or with the printing presses proposed for regulation under this rulemaking.

Affected Parties

The Graphic Arts Association (GAA) identified approximately 1800 printing facilities in this Commonwealth as potentially subject to this proposed rulemaking, including 114 flexographic and gravure and 1758 lithographic printing and letterpress printing facilities. However, these numbers may be an overestimation because they double count facilities that offer multiple types of printing services; these numbers also do not take into account facilities that would not be subject to the proposed rulemaking because VOC emissions from the facility do not meet the applicability thresholds. The Department used these numbers and certain assumptions presented in the CTGs for these source categories to conservatively calculate the number of facilities that may be subject to the rulemaking and the associated emission reductions and costs. The anticipated emission reductions that would be achieved from the flexible packaging printing press portion of the proposed rulemaking are estimated to be approximately 69 tons per year (tpy) to 84 tpy. The anticipated emission reductions that would be achieved from the offset lithographic printing press and letterpress printing press portion of the proposed rulemaking are estimated to be approximately 306 tpy to 323 tpy.

Advisory Groups

The proposed rulemaking was discussed with the Air Quality Technical Advisory Committee (AQTAC) at its December 16, 2010, meeting. During the AQTAC's consideration of the proposed rulemaking, flexibility and compliance assistance for recordkeeping and reporting requirements for small businesses were discussed. The Department agreed to consider these during development of the rulemaking. There was also discussion of the number and extent of potentially affected facilities and questions pertaining to the definition of flexible packaging and a compliance monitoring equation. The Department has considered these items in developing this proposed rulemaking. Following the discussion, AQTAC voted 9-0-2 to concur with the Department's recommendation to present the draft proposed rulemaking, with consideration of the issues discussed by the Committee, to the Board for consideration for publication as a proposed rulemaking.

The Department consulted with the Small Business Compliance Advisory Committee (SBCAC) on January 26, 2011. The SBCAC encouraged the Department to reach out to the potentially affected small businesses with information about the proposed rulemaking. The SBCAC concurred with the Department's recommendation to forward the proposed rulemaking to the Board for consideration as a proposed rulemaking. The Department also consulted with the Citizens Advisory Council (CAC) Air Committee on January 24, 2011. The CAC Air Committee reported on the proposed rulemaking to the CAC at its meeting of February 15, 2011. The CAC, on the recommendation of the Air Committee, concurred with presenting the proposed rulemaking to the Board.

The Department communicated with several industry associations during development of the proposed rulemaking, namely Printing Industries of America, the Graphic Arts Association and the National Federation of Independent Businesses. The Department will notify these groups, as well as other parties that have expressed interest, when the proposed rulemaking is available for public comment. Outreach by the associations to their members will also be useful.

Public Comments and Board Hearings

The Department recommends a 60-day public comment period on the proposed rulemaking and three public hearings in Norristown, Harrisburg and Pittsburgh.