PROPOSED RULEMAKING

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 121, 129 AND 130]

Flexible Packaging Printing Presses, Offset Lithographic Printing Presses and Letterpress Printing Presses; Adhesives, Sealants, Primers and Solvents

The Environmental Quality Board (Board) proposes to amend Chapters 121, 129 and 130 (relating to general provisions; standards for sources; and standards for products) to read as set forth in Annex A. The proposed rulemaking would amend Chapter 121 to add terms and definitions in § 121.1 (relating to definitions) and Chapter 129 to limit emissions of volatile organic compounds (VOC) from inks, coatings, adhesives, fountain solutions and cleaning materials used or applied on or with flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses. The proposed rulemaking would also amend the recently promulgated adhesives, sealants, primers and solvents regulations under Chapters 129 and 130 published at 40 Pa.B. 7340 (December 25, 2010) to clarify the applicability of the adhesive, sealant, adhesive primer and sealant primer requirements of §§ 129.77 and 130.703 (relating to control of emissions from the use or application of adhesives, sealants, primers and solvents; and exemptions and exceptions) to the adhesives used or applied on or with the printing presses proposed for regulation under this rulemaking.

The proposed rulemaking would amend §§ 129.51, 129.67, 129.67, 129.77 and 130.703 and add §§ 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).

This proposed rulemaking was adopted by the Board at its meeting on September 20, 2011.

A. Effective Date

This proposed rulemaking will be effective upon finalform publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information, contact Arleen J. Shulman, Chief, Division of Air Resource Management, P. O. Box 8468, Rachel Carson State Office Building, Harrisburg, PA 17105-8468, (717) 772-3436; or Kristen Furlan, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, 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 on the Department of Environmental Protection's (Department) web site at www.depweb.state.pa.us (DEP Search/Keyword: Public Participation).

C. Statutory Authority

This proposed rulemaking is authorized under section 5 of the Air Pollution Control Act (35 P. S. § 4005), which in

subsection (a)(1) grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth, and which in subsection (a)(8) grants the Board the authority to adopt rules and regulations designed to implement the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7671q).

D. Background and Purpose

The purpose of this proposed rulemaking is to reduce VOC emissions from inks, coatings, adhesives, fountain solutions and cleaning materials used or applied on or with flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses. VOCs are a precursor for ground-level ozone formation. Ground-level ozone is not emitted directly by inks, coatings and other materials to the atmosphere, but is formed by a photochemical reaction between VOCs and nitrogen oxides (NOx) in the presence of sunlight. In accordance with sections 172(c)(1), 182(b)(2)(A) and 184(b)(1)(B) of the CAA (42 U.S.C.A. §§ 7502(c)(1), 7511a(b)(2)(A) and 7511c(b)(1)(B)), the proposed rulemaking would establish the emission limits and other requirements of the United States Environmental Protection Agency's (EPA) 2006 Control Techniques Guidelines (CTG) for flexible packaging printing and for offset lithographic printing and letterpress printing for these sources in this Commonwealth. See Consumer and Commercial Products, Group II: Control Techniques Guidelines in Lieu of Regulations for Flexible Packaging Printing Materials, Lithographic Printing Materials, Letterpress Printing Materials, Industrial Cleaning Solvents, and Flat Wood Paneling Coatings, 71 FR 58745, 58747 (October 5, 2006).

The EPA is responsible for establishing National Ambient Air Quality Standards (NAAQS) for six criteria pollutants considered harmful to public health and the environment: ozone, particulate matter, NOx, carbon monoxide, sulfur dioxide and lead. The CAA established two types of NAAQS: primary standards, limits set to protect public health; and secondary standards, limits set to protect public welfare, including protection against visibility impairment and from damage to animals, crops, vegetation and buildings. The EPA established primary and secondary ozone NAAQS to protect public health and welfare.

When ground-level ozone is present in concentrations in excess of the Federal health-based 8-hour NAAQS for ozone, public health and welfare are adversely affected. Ozone exposure correlates to increased respiratory disease and higher mortality rates. Ozone can inflame and damage the lining of the lungs. Within a few days, the damaged cells are shed and replaced. Over a long time period, lung tissue may become permanently scarred, resulting in permanent loss of lung function and a lower quality of life. When ambient ozone levels are high, more people with asthma have attacks that require a doctor's attention or use of medication. Ozone also makes people more sensitive to allergens including pet dander, pollen and dust mites, all of which can trigger asthma attacks.

The EPA concluded that there is an association between high levels of ambient ozone and increased hospital admissions for respiratory ailments including asthma. 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 ozone while engaged in activities that involve physical exertion. High levels of ozone also affect animals in ways similar to humans. In addition to causing adverse human and animal health effects, the EPA concluded that ozone affects vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields by destroying chlorophyll; reduced growth and survivability of tree seedlings; and increased plant susceptibility to disease, pests and other environmental stresses, including harsh weather. In long-lived species, these effects may become evident only after several years or even decades and have the potential for long-term adverse impacts on forest ecosystems. Ozone damage to the foliage of trees and other plants can decrease the aesthetic value of ornamental species used in residential landscaping, as well as the natural beauty of parks and recreation areas. Through deposition, ground-level ozone also contributes to pollution in the Chesapeake Bay. The economic value of some welfare losses due to ozone can be calculated, such as crop yield loss from both reduced seed production and visible injury to some leaf crops, including lettuce, spinach and tobacco, as well as visible injury to ornamental plants, including grass, flowers and shrubs. Other types of welfare loss may not be quantifiable, such as the reduced aesthetic value of trees growing in heavily visited

High levels of ground-level ozone can also cause damage to buildings and synthetic fibers, including nylon, and reduced visibility on roadways and in natural areas. The implementation of additional measures to address ozone air quality nonattainment in this Commonwealth is necessary to protect the public health and welfare, animal and plant health and welfare and the environment.

In July 1997, the EPA promulgated primary and secondary ozone standards at a level of 0.08 part per million (ppm) averaged over 8 hours. See 62 FR 38855 (July 18, 1997). In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for the 1997 8-hour ozone NAAQS. As of October 2010, all areas in this Commonwealth are monitoring attainment of the 1997 standard. The Department must ensure that the 1997 ozone standard is attained and maintained by implementing permanent and enforceable control measures to ensure violations of the standard do not occur for the next decade.

Furthermore, in March 2008, the EPA lowered the standard to 0.075 ppm averaged over 8 hours to provide even greater protection for children, other at-risk populations and the environment against the array of ozoneinduced adverse health and welfare effects. See 73 FR 16436 (March 27, 2008). The EPA had begun a voluntary reconsideration of the 2008 ozone NAAQS in January 2010 to set a more protective 8-hour ozone standard (see 75 FR 2938 (January 19, 2010)), but withdrew that reconsideration at the request of the President of the United States on September 2, 2011, leaving the 2008 ozone standard in place. Once the EPA designates nonattainment areas under the 2008 standard, states will need to submit State Implementation Plan (SIP) revisions to demonstrate how they will bring the nonattainment areas into attainment of the standard. The Commonwealth's designation recommendations for the 2008 ozone standard were submitted under the CAA to the EPA in 2009 and identified 30 counties as being in nonattainment of the standard based on 2006-2008 monitoring data. The number of ozone nonattainment areas is expected to be lower if the EPA uses more current monitoring data (2008-2010) for its final designations. The Commonwealth must submit a SIP revision to demonstrate how it will bring the nonattainment areas into attainment and maintenance of the 2008 ozone standard.

There are not Federal statutory or regulatory limits for VOC emissions from flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses. State regulations to control VOC emissions from flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses are required under Federal law, however, and will be reviewed by the EPA to determine if the provisions meet the "reasonably available control technology" (RACT) requirements of the CAA and its implementing regulations. See Consumer and Commercial Products, Group II: Control Techniques Guidelines in Lieu of Regulations for Flexible Packaging Printing Materials, Lithographic Printing Materials, Letterpress Printing Materials, Industrial Cleaning Solvents, and Flat Wood Paneling Coatings, 71 FR 58745, 58747.

The EPA defines RACT as "the lowest emission 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 State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas—Supplement (on Control Techniques Guidelines), 44 FR 53761 (September 17, 1979).

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for the printing and publishing industry promulgated in May 1996 and codified at 40 CFR Part 63, Subpart KK (relating to National emission standards for the printing and publishing industry), apply to "major sources" of flexible package printing. For the purpose of regulating hazardous air pollutants (HAP), a "major source" is considered to be a stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit 10 tons per year (tpy) of any single listed HAP or 25 tpy of any combination of HAPs. See section 112(a)(1) of the CAA (42 U.S.C.A. § 7412(a)(1)); see also 61 FR 27133 (May 30, 1996). Many HAPs are VOCs, but not all VOCs are HAPs. The EPA took the 1996 NESHAP into account when developing its Flexible Packaging Printing CTG.

Section 172(c)(1) of the CAA provides that SIPs for nonattainment areas must include "reasonably available control measures," including RACT, for sources of emissions. Section 182(b)(2) of the CAA provides that for moderate ozone nonattainment areas, states must revise their SIPs to include RACT for sources of VOC emissions covered by a CTG document issued by the EPA prior to the area's date of attainment. More importantly, section 184(b)(1)(B) of the CAA requires that states in the Ozone Transport Region (OTR), including the Commonwealth, submit a SIP revision requiring implementation of RACT for all sources of VOC emissions in the state covered by a specific CTG.

Section 183(e) of the CAA (42 U.S.C.A. § 7511b(e)) directs the EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from consumer and commercial products in ozone nonattainment areas. Section 183(e)(3)(C) of the CAA further provides that the EPA may issue a CTG in place of a National regulation for a product category when the EPA determines that the CTG will be "substantially as effective as regulations" in reducing emissions of VOC in ozone nonattainment areas. In 1995, the EPA listed flexible packaging printing materials, lithographic

printing materials and letterpress printing materials on its Section 183(e) list and, in 2006, issued CTGs for flexible packaging printing materials and for offset lithographic printing and letterpress printing materials. See 60 FR 15264 (March 23, 1995) and 71 FR 58745.

In the 2006 notice, the EPA determined that the CTGs would be substantially as effective as a National regulation in reducing VOC emissions from these product categories in ozone nonattainment areas. See 71 FR 58745. The CTGs provide states with the EPA's recommendation of what constitutes RACT for the covered category. States can use the recommendations provided in the CTGs to inform their own determination as to what constitutes RACT for VOC emissions from the covered category. State air pollution control agencies are free to implement other technically sound approaches that are consistent with the CAA requirements and the EPA's implementing regulations or guidelines.

The Department reviewed the recommendations included in the 2006 CTGs for flexible packaging printing presses and for offset lithographic printing presses and letterpress printing presses for their applicability to the ozone reduction measures necessary for this Commonwealth. The Department determined that the measures provided in the CTGs are appropriate to be implemented in this Commonwealth as RACT for these source categories.

This proposed rulemaking would achieve VOC emission reductions locally and would also reduce the transport of VOC emissions and ground-level ozone to downwind states. Adoption of VOC emission requirements for flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses is part of the Commonwealth's strategy, in concert with other OTR jurisdictions, to further reduce transport of VOC ozone precursors and ground-level ozone throughout the OTR to attain and maintain the 8-hour ozone NAAQS. The proposed rulemaking is required under the CAA and is reasonably required to attain and maintain the healthbased 8-hour ozone NAAQS and to satisfy related CAA requirements in this Commonwealth. If published as a final-form regulation in the Pennsylvania Bulletin, this proposed rulemaking will be submitted to the EPA as a revision to the SIP.

The proposed rulemaking was discussed with the Air Quality Technical Advisory Committee (AQTAC) on December 16, 2010. During the AQTAC's consideration of the proposed rulemaking, flexibility and compliance assistance for the daily recordkeeping and reporting requirements for small businesses were discussed. An AQTAC member asked whether the Department through its Small Business Assistance Program could provide spreadsheets for the regulated community to use to make its calculations for compliance monitoring purposes. The member suggested that the spreadsheets would provide an additional benefit to the Department of standardizing the data format, making it easier for the Department to determine compliance. Other AQTAC members suggested the Department could also offer workshops or develop a computer program to help companies with the calculations. The Department agreed to consider these suggestions during the rulemaking process. During the AQTAC meeting, there was also discussion of the number and extent of potentially affected facilities and there were questions pertaining to the definition of flexible packaging and a compliance monitoring equation. The Department has considered these items in developing this proposed rulemaking. The Board will consider comments

received during the public comment period concerning the implementation of the compliance monitoring, recordkeeping and reporting requirements. Following its discussion on December 16, 2010, the AQTAC voted to concur with the Department's recommendation to present the proposed rulemaking, with consideration of the issues discussed by AQTAC and identified in the minutes, to the Board for approval 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 for publication 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 rule-making, namely Printing Industries of America, the Graphic Arts Association (GAA) and the National Federation of Independent Business. 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.

E. Summary of Regulatory Requirements

§ 121.1. Definitions

The proposed rulemaking would add definitions of the following terms to § 121.1 to support the addition of proposed §§ 129.67a and 129.67b: "alcohol," "alcohol substitute," "batch," "first installation date," "flexible packaging," "flexible packaging printing press," "fountain solution," "heatset dryer," "heatset ink," "letterpress printing," "lithographic plate," "lithographic printing," "offset lithographic printing," "printing press," "sheet-fed printing," "varnish" and "web printing." The proposed rulemaking would amend the definition of the term "rotogravure printing" to insert a missing word. The proposed rulemaking would also amend the definition of the term "paper, film or foil coating or paper, film or foil surface coating" to clarify that a coating applied to a flexible packaging substrate is considered surface coating and not printing, if the coating is not applied on or in-line with a flexible packaging printing press. These coating processes would be regulated under § 129.52b (relating to control of VOC emissions from paper, film and foil surface coating processes).

Several AQTAC members questioned the scope of the definition of "flexible packaging" at their December 16, 2010, meeting and questioned the need to list certain items that are excluded from the definition. In response, the Department has simplified the definition. The proposed rulemaking defines the term as:

(i) A package or part of a package, such as a bag, pouch, liner or wrap, the shape of which can be readily changed. Flexible packaging may be made of paper, plastic, film, aluminum foil, metalized or coated paper, metalized or coated film, or other material.

- (ii) The term also includes a shrink-wrap label or wrapper printed on or in-line with a flexible packaging printing press.
- (iii) The term does not include folding cartons or other rigid packaging or self-adhesive labels.

Rigid packaging printing operations are often located at the same facility as a flexible packaging printing operation, but rigid packaging is not included in the definition of "flexible packaging." Folding cartons, some labels and wrappers, gift wraps, wall coverings, vinyl products, decorative laminates, floor coverings, tissue products and miscellaneous specialty products are not considered flexible packaging. Printing of self-adhesive labels would also not be considered flexible packaging. Adhesives used on or applied to self-adhesive labels would be regulated under the paper, film or foil surface coating process category "pressure sensitive tapes and labels" found in § 129.52b. Other nonpackaging materials sometimes manufactured at a facility with a flexible packaging printing press (due to the capability of flexible packaging manufacturers to apply coatings), such as gift wraps and hot stamp foils, are not included in the definition of the

§ 129.51. General

The proposed rulemaking would amend § 129.51(a) (relating to general) to extend its applicability to the owners and operators of flexible packaging printing presses, offset lithographic printing presses and letter-press printing presses covered by this proposed rulemaking. Section 129.51(a) provides an alternative method for the owner and operator of an affected facility to achieve compliance with air emission limits.

§ 129.67. Graphic arts systems

The proposed rulemaking would amend § 129.67 (relating to graphic arts systems) to account for the proposed requirements that would apply to the owners and operators of flexible packaging printing presses under § 129.67a. Section 129.67 applies more broadly than proposed § 129.67a would, in two ways. Firstly, § 129.67 applies to rotogravure and flexographic printing presses beyond those used for flexible packaging printing. Secondly, § 129.67 requires VOC emissions from surface coating operations to count toward the total VOC emissions that trigger applicability of the section to the owner and operator of a facility that has emissions from a rotogravure or flexographic printing press. The VOC emission applicability threshold is higher, however, than under proposed § 129.67a.

The proposed amendments to § 129.67 would clarify that an owner or operator of a flexible packaging printing press, who was required to install a control device under § 129.67 prior to the effective date of this proposed rulemaking and who is also subject to the recordkeeping, reporting and work practice requirements of proposed § 129.67a by virtue of meeting the 15 pounds per day (lb/day) or 2.7 tons per 12-month rolling period, or both, VOC emission threshold in proposed § 129.67a(a)(1)(ii), would be subject both to the existing control device requirement of § 129.67 and the new recordkeeping, reporting and work practice requirements of § 129.67a.

The proposed amendments to § 129.67 also clarify, however, that an owner or operator of a flexible packaging printing press who is subject to the control requirements of proposed § 129.67a by virtue of meeting the threshold of 25 tpy of potential emissions of VOC, before consideration of add-on controls, for an individual flexible packaging printing press dryer under proposed

- § 129.67a(a)(1)(i) would not be subject to § 129.67 because they will be subject to more stringent control requirements under § 129.67a. This owner and operator would also be subject to the recordkeeping, reporting, work practice and other requirements of § 129.67a.
- § 129.67a. Control of VOC emissions from flexible packaging printing presses

The proposed rulemaking would add § 129.67a to regulate VOC emissions from flexible packaging printing presses. As explained in proposed subsection (b), § 129.67a would supersede the requirements of a RACT permit for VOC emissions from a flexible packaging printing press 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.

The applicability of proposed \S 129.67a is described in subsection (a), which establishes a threshold with broad applicability in subsection (a)(1)(ii) and a threshold for control requirements on higher VOC-emitting presses in subsection (a)(1)(i).

The broadly applicable threshold in subsection (a)(1)(ii) is as follows: 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per 12-month rolling period of actual VOC emissions, before consideration of add-on controls, from all flexible packaging printing operations, and all emissions from related cleaning activities, at the facility. An owner and operator of a facility that meets or exceeds this threshold shall comply with the recordkeeping, reporting and work practice requirements of subsections (e) and (g) and the sampling and testing requirements in subsection (f).

The threshold for control requirements on higher VOC-emitting presses in subsection (a)(1)(i) is 25 tpy potential emissions from the dryer of an individual flexible packaging printing press of VOC from inks, coatings and adhesives combined, before consideration of add-on controls. An owner and operator of a press that meets or exceeds this threshold shall comply with the emission limits in subsection (c) and the compliance monitoring requirements in subsection (d), as well as the sampling and testing requirements in subsection (f) and the recordkeeping, reporting and work practice requirements of subsections (e) and (g).

The applicability of proposed § 129.67a is further described in subsection (a)(2), which establishes that an owner or operator of a flexographic or rotogravure printing press subject to subsection (a)(1)(ii) and § 129.67 that prints flexible packaging materials, who was required to install a control device under § 129.67 prior to the effective date of this section shall continue the operation of that control device and also meet the requirements of this section.

Proposed subsection (a)(3) clarifies that VOCs from adhesives used at the facility that are not used or applied on or with the flexible packaging printing press are not subject to § 129.67a and may be regulated under § 129.52b, § 129.77 or Chapter 130, Subchapter D (relating to adhesives, sealants, primers and solvents).

Proposed subsection (c) would establish VOC emission limits for a person subject to § 129.67a by virtue of meeting or exceeding the 25 tpy threshold in subsection (a)(1)(i). Beginning January 1, 2013, a person subject to subsection (a)(1)(i) may not cause or permit the emission into the outdoor atmosphere of VOCs from a flexible packaging printing press, unless one or more of the VOC content limits for inks, coatings and adhesives in subsection (c) is met; one or more of the VOC vapor recovery, incineration or other control system requirements in

subsection (c) is met; or the Department has issued a plan approval, operating permit or Title V permit to the owner or operator prior to January 1, 2013, establishing a Federally-enforceable limitation to limit potential emissions of VOC from the flexible packaging printing press below 25 tpy. The dates in subsection (c)(3), Table I reflect the date of the proposed 1996 NESHAP for the printing and publishing industry, namely March 14, 1995, and the compliance date of this proposed rulemaking, namely January 1, 2013. The EPA used these events for suggested cut-off dates, in the CTG.

Proposed subsection (d) describes compliance monitoring requirements for a person subject to § 129.67a by virtue of meeting or exceeding the 25 tpy threshold in subsection (a)(1)(i). Subsection (d)(1) describes how the VOC content of the as applied ink, coating or adhesive, expressed in units of weight of VOC per weight of solids, would be calculated for purposes of subsection (c)(1). Subsection (d)(2) describes the minimum overall efficiency that would be required for a control system for a single flexible packaging printing press that uses a combination of a control system and a noncomplying ink, coating or adhesive or a combination of noncomplying and complying inks, coatings or adhesives for purposes of subsection (c)(4) or a combination of subsection (c)(3) and (4). Subsection (d)(3) describes monitoring equipment and operational records supporting the compliance monitoring system used, that would be required of an owner or operator of a printing press using an add-on air pollution control device under subsection (c)(3).

Proposed subsection (e) identifies daily records that would be required to demonstrate compliance for persons subject to § 129.67a, beginning January 1, 2013. Subsection (e)(1) requires records of specified parameters of each VOC-containing material, including of each ink, coating, adhesive, thinner, component or cleaning solvent, as supplied. Subsection (e)(2) and (3) requires that daily records be kept of the VOC content and volume used of each ink, coating, adhesive, thinner, component and cleaning solvent as applied. Subsection (e)(4) requires that records be maintained for 2 years unless a longer period is required under § 127.511(b)(2) (relating to monitoring and related recordkeeping and reporting requirements). The records shall be submitted to the Department upon receipt of a written request.

Proposed subsection (f), applicable to persons subject to § 129.67a, would require that sampling and testing be done in accordance with the procedures and test methods specified in Chapter 139 (relating to sampling and testing), unless the Department approves another test method in writing in advance.

Proposed subsection (g) establishes work practice requirements for cleaning materials applicable to persons subject to § 129.67a. Subsection (g)(1) establishes work practices for cleaning materials, with which an owner or operator of a flexible packaging printing press shall comply, beginning January 1, 2013. Subsection (g)(2) and (3) specifies the cleaning-relating activities to which the work practices would apply. Consistent with a one-page internal EPA memorandum clarifying this aspect of the CTG, the proposed rulemaking does not specify work practices for cleaning activities addressed by the EPA's 2006 Industrial Cleaning Solvents CTG. See Reasonably Available Control Technology (RACT) for Cleaning in Flexible Package Printing, Peter Tsirigotis, Director, Sector Policies and Programs Division (D205-01), EPA, February 9, 2009. Subsection (g) is more stringent than what is recommended in the CTG for flexible packaging printing presses. The CTG recommends that the work practices for cleaning materials apply to parts washers or cold cleaners used for cleaning press parts. The use of parts washers and cold cleaners is regulated under § 129.63 (relating to degreasing operations). The requirements of § 129.63 are more stringent than the recommendation in the CTG, but must be maintained to satisfy the antibacksliding provisions of sections 110 and 193 of the CAA (42 U.S.C.A. §§ 7410 and 7515).

§ 129.67b. Control of VOC emissions from offset lithographic printing presses and letterpress printing presses

The proposed rulemaking would add § 129.67b to regulate VOC emissions from offset lithographic printing presses and letterpress printing presses. As explained in proposed subsection (b), § 129.67b would supersede the requirements of a RACT permit for VOC emissions from an offset lithographic printing press or a letterpress printing press, or both, 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.

The applicability of proposed § 129.67b is described in subsection (a), which establishes a threshold with broad applicability in subsection (a)(1)(ii) and (iii), and a threshold for control requirements on higher VOC-emitting heatset presses in subsection (a)(1)(i).

The broadly applicable thresholds for letterpress and offset lithographic printing presses are the same. Subsection (a)(1)(ii) explains that § 129.67b would apply to the owner and operator of a letterpress printing press if the total actual VOC emissions from all letterpress printing presses and all emissions from related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per 12-month rolling period, before consideration of add-on controls. Similarly, subsection (a)(1)(iii) explains that the section would apply to the owner and operator of an offset lithographic printing press, if the total actual VOC emissions from all offset lithographic printing presses, and all emissions from related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per 12-month rolling period, before consideration of add-on controls. The owner and operator of a facility that meets or exceeds the broadly applicable 15 lb/day or 2.7 tons per 12-month rolling period threshold shall comply with the emission limits of subsection (c), the compliance and monitoring requirements of subsection (e)(2) and (3), the recordkeeping, reporting and work practice requirements of subsections (f), (g)(1) and (i), and the requirements pertaining to vapor pressure of cleaning materials in subsections (j) and (k).

Proposed subsection (a)(1)(i) establishes the threshold for control requirements on higher VOC-emitting heatset presses. Subsection (a)(1)(i) explains that the owner and operator of a single heatset web offset lithographic printing press or a single heatset web letterpress printing press that has potential emissions from the dryer, before consideration of add-on controls, of at least 25 tpy of VOC from heatset inks would be subject to § 129.67b. The owner and operator of a heatset press that meets or exceeds this 25 tpy threshold shall comply with the control requirements in subsection (d), compliance and monitoring requirements in subsection (e)(1), reporting requirement relating to control efficiency in subsection (g)(2) and the sampling and testing requirements in subsection (h), as well as the broadly applicable emission

limits, recordkeeping, reporting and work practice requirements of subsections (c), (e)(2) and (3), (f), (g)(1), (i), (j) and (k).

Proposed subsection (a)(2) clarifies that VOCs from adhesives used at the facility that are not used or applied on or with an offset lithographic printing press or a letterpress printing press are not subject to § 129.67b and may be regulated under § 129.77 or Chapter 130, Subchapter D.

Proposed subsection (c) would establish emission limits for all printing presses subject to this section, beginning January 1, 2013. Subsection (c)(1) would prohibit VOC emissions into the outdoor atmosphere from cleaning materials used in an offset lithographic printing press or a letterpress printing press, unless specified conditions are met. This paragraph would require a VOC content less than 30% by weight for cleaning materials, consistent with the EPA's 1994 Alternative Control Techniques Document for offset lithographic printing and the Department's Air Quality General Permits 7 and 10; and would allow a total gallon exemption for up to 55 gallons of noncomplying cleaning materials, consistent with the Department's Air Quality General Permits 7 and 10. The Department's Air Quality General Permits 7 and 10 for Sheet-fed Offset Lithographic Printing Presses and Non-Heatset Web Offset Lithographic Printing Presses, respectively, require a composite partial vapor pressure less than or equal to 10 mm Hg or a VOC content less than or equal to 30% by weight for cleaning materials and allow a total gallon exemption of up to 55 gallons for noncomplying cleaning materials. These two provisions in the proposed rulemaking are more stringent than the recommendation in the CTG. The Department is specifically seeking comment on these two provisions. Subsection (c)(2) would prohibit VOC emissions into the outdoor atmosphere from fountain solution used in an offset lithographic printing press, unless the fountain solution meets a specified VOC limit. Subsection (c)(3) provides two exemptions from subsection (c)(2).

Proposed subsection (d) applies to a person subject to § 129.67b by virtue of meeting or exceeding the 25 tpy threshold for a heatset press in subsection (a)(1)(i). Beginning January 1, 2013, proposed subsection (d) would prohibit the emission into the outdoor atmosphere of VOCs from a single heatset web offset lithographic printing press or a single heatset web letterpress printing press, unless the overall weight of VOCs emitted to the atmosphere from the heatset press dryer is reduced through the use of vapor recovery or incineration, or another method that is authorized under § 129.51(a). Proposed subsection (d) addresses dryer pressure and overall efficiency of an add-on air pollution control device for a heatset press dryer. Proposed subsection (d) also lists exceptions to the requirement for an add-on air pollution control device, and would not apply if the Department has issued a plan approval, operating permit or Title V permit prior to January 1, 2013, to the owner or operator establishing a Federally enforceable limitation to limit potential emissions below 25 tpy before consideration of add-on controls.

Proposed subsection (e) describes compliance and monitoring requirements. Subsection (e)(1) sets forth compliance and monitoring requirements applicable to the owner or operator of a printing press using an add-on air pollution control device as a result of meeting or exceeding the 25 tpy threshold for a heatset press in subsection (a)(1)(i). Subsection (e)(2) indicates how an owner or operator of an offset lithographic printing press, who is

subject to the fountain solution VOC limits of subsection (c)(2), may demonstrate compliance. Subsection (e)(3) indicates the acceptable methods by which the owner or operator of an offset lithographic printing press or letterpress printing press may demonstrate compliance with the VOC content limit or VOC composite partial vapor pressure limit for cleaning materials specified in subsection (c)(1).

Proposed subsection (f) identifies daily records required to demonstrate compliance for persons subject to § 129.67b, beginning January 1, 2013. Subsection (f)(1) requires records of specified parameters for each ink, varnish, coating, adhesive, thinner or component, as supplied. Subsection (f)(2) and (3) requires that daily records be kept of the VOC content and volume used of each ink, varnish, coating or adhesive as applied. Subsection (f)(4)—(6) applies to cleaning materials. Subsection (f)(4) requires records of specified parameters for each blanket, roller or other concentrated cleaning material used, as supplied. Subsection (f)(5) requires records of the VOC content or VOC composite partial vapor pressure of each cleaning material, as applied. Subsection (f)(6) requires records of the volume used of each cleaning material, as applied. The remainder of subsection (f) applies to fountain solution. Subsection (f)(7) requires records of specified parameters for each concentrated component or additive, as supplied, used to prepare the press-ready (as applied) fountain solution batch. Subsection (f)(8) requires records of the VOC content of each batch of the press-ready (as applied) fountain solution and subsection (f)(9) requires records of the volume used of each press-ready (as applied) fountain solution.

Proposed subsection (g) applies to persons subject to $\S 129.67b$. Subsection (g)(1) requires that records be maintained for 2 years unless a longer period is required under $\S 127.511(b)(2)$. The records shall be submitted to the Department upon receipt of a written request. Subsection (g)(2) also specifies that the owner or operator of an offset lithographic printing press required to demonstrate control efficiency in subsection (d) shall submit reports to the Department in accordance with Chapter 139.

Proposed subsection (h), applicable to a person subject to \S 129.67b by virtue of meeting or exceeding the 25 tpy threshold for a heatset press in subsection (a)(1)(i), would require that sampling and testing be done in accordance with the procedures and test methods specified in Chapter 139 or in accordance with one of the methods and procedures listed in subsection (h), or both. Subsection (h)(1) lists methods and procedures for determining overall efficiency of the add-on air pollution control device. Subsection (h)(2) explains how constant negative pressure into the dryer, as required in subsection (d), must be demonstrated.

Proposed subsection (i), applicable to persons subject to § 129.67b, would establish work practice requirements for cleaning materials. Subsection (i)(1) sets forth work practices with which an owner or operator of an offset lithographic printing press or letterpress printing press shall comply for cleaning materials, beginning January 1, 2013. Subsection (i)(2) and (3) specifies the cleaning-related activities to which the work practices would apply.

Subsection (i) of the proposed rulemaking is more stringent than what is required in the CTG for offset lithographic printing presses and letterpress printing presses. The CTG recommends that the work practices for cleaning materials apply to parts washers or cold cleaners

used for cleaning press parts. The use of parts washers and cold cleaners is regulated under § 129.63. The requirements of § 129.63 are more stringent than the requirements recommended by the CTG, but must be maintained to satisfy the anti-backsliding provisions of sections 110 and 193 of the CAA.

Proposed subsection (j), applicable to persons subject to § 129.67b, would set forth the procedure for determining the composite partial vapor pressure of organic compounds in cleaning materials. Subsection (j)(1) addresses quantifying the amount of each compound in the blend using gas chromatographic analysis. Subsection (j)(2) provides the equation for calculating composite partial vapor pressure.

Proposed subsection (k), applicable to persons subject to § 129.67b, would list acceptable methods for determining vapor pressure of each single component compound in cleaning materials.

§ 129.77(k)(2). Control of emissions from the use or application of adhesives, sealants, primers and solvents

The proposed rulemaking would amend § 129.77(k)(2) to clarify that § 129.77 does not apply to the use or application of adhesives, sealants, adhesive primers and sealant primers that are subject to other regulations in Chapter 129 or 130.

§ 130.703(a)(2). Exemptions and exceptions

The proposed rulemaking would amend § 130.703(a)(2) to clarify that Chapter 130, Subchapter D does not apply to the use, application, sale, supply, offer for sale or manufacture for sale for use in this Commonwealth of adhesives, sealants, adhesive primers and sealant primers that are subject to other regulations in Chapter 129 or 130.

F. Benefits, Costs and Compliance

Benefits

Implementation of the proposed control measures would benefit the health and welfare of the approximately 12 million residents and the numerous animals, crops, vegetation and natural areas of this Commonwealth by reducing emissions of VOCs, which are precursors to the formation of ground-level ozone air pollution. Although the proposed rulemaking is designed primarily to improve air quality by reducing VOC emissions, the reformulation or substitution of printing materials to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat.

The proposed rulemaking provides as one compliance option that inks, coatings and adhesives used or applied on or with flexible packaging printing presses and inks, coatings, adhesives and cleaning materials used or applied on or with offset lithographic printing presses and letterpress printing presses in this Commonwealth meet specified limits for VOC content, usually through substitution of low VOC-content solvents or water for the high VOC-content solvents. The reduced levels of high VOCcontent solvents would also benefit water quality through reduced loading on water treatment plants and in reduced quantities of high VOC-content solvents leaching into the ground. Products that are technologically and economically feasible for use in meeting the VOC content limits in the proposed rulemaking are available in this region, as similar requirements in other OTR states have helped create a market. The owner and operator of an affected flexible packaging printing press, offset lithographic printing press or letterpress printing press may also reduce VOC emissions with add-on controls, or a combination of complying inks, coatings, adhesives, cleaning materials and add-on controls.

The VOC emission reductions from the flexible packaging printing portion of the proposed rulemaking are estimated to be approximately 69 tpy to 84 tpy. A search of the Department's Air Information Management System (AIMS) database generated a list of 17 flexible packaging printing facilities, with 2009 VOC emissions totaling 139 tons, that could potentially be subject to the proposed rulemaking based on the type of printing activity. AIMS does not provide an exhaustive list of all printing facilities in this Commonwealth but contains the largest emitters. The AIMS database is a record of permitted and some previously inspected facilities for which permits are not required.

By proportioning the known emissions of these 17 facilities to the unknown emissions of the potentially affected 52 facilities in this Commonwealth estimated using information provided by the GAA and the CTG for this source category, the Department estimates that the emissions from the 52 facilities would be 425 tpy (139 tons / 17 facilities = X tons / 52 facilities). Calculating further using the assumption in the CTG that 25% of affected facilities have potential VOC emissions equal to or greater than 25 tpy from a single press, before consideration of add-on controls, 106 tons of VOC emissions could require add-on control meeting 65%-80% efficiency (425 tpy \times 25% = 106 tons possibly requiring add-on control). The estimated maximum amount of VOC emission reduction from add-on control to flexible packaging printing presses with potential VOC emissions equal to or greater than 25 tpy from a single press, before consideration of add-on controls, could be 69 tpy to 84 tpy $(106 \times 65\% = 69\text{-ton reduction}; 106 \times 80\% = 84\text{-ton})$ reduction).

The emission reductions 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. A search of the Department's AIMS database generated a list of 60 offset lithographic printing press and letterpress printing press facilities, with 2009 VOC emissions totaling 527 tons, that could potentially be subject to the proposed rulemaking based on type of printing activity.

By proportioning the known emissions of these 60 facilities to the unknown emissions of the potentially affected 387 facilities in this Commonwealth estimated using information provided by the GAA and the CTG for these source categories, the Department estimates that the emissions from the 387 facilities could be 3,400 tpy (527 tons / 60 facilities = X tons / 387 facilities). Calculating further using the assumption in the CTG that 10% of the affected facilities have potential VOC emissions equal to or greater than 25 tpy from a single press, before consideration of add-on controls, 340 tons could require add-on control meeting 90%—95% efficiency $(3,400 \text{ tpy} \times 10\% = 340 \text{ tons possibly requiring add-on})$ control). The estimated maximum amount of VOC emission reductions from add-on controls for heatset offset lithographic printing presses and heatset letterpress printing presses with potential VOC emissions equal to or greater than 25 tpy from a single press, before consideration of add-on controls could be 306 tpy to 323 tpy (340 × 90% = 306-ton reduction; $340 \times 95\% = 323$ -ton reduction).

Compliance Costs

The cost of complying with the proposed rulemaking includes the cost of using low VOC-content or VOC-free

inks, coatings, adhesives and cleaning materials; add-on control systems; or a combination of these two approaches.

Based on information provided by the EPA in the CTG, the cost effectiveness of reducing VOC emissions from flexible packaging printing press operations is dependent on the flow rate, hourly solvent usage and operating hours. Using \$5,700 per ton of VOC reduced from a catalytic oxidizer (in 2005 dollars), because the emission reductions of that scenario fit the scale of current emission estimates, the total maximum anticipated annual costs to the regulated industry could range from \$393,300 to \$478,800 (69 tons VOC emissions reduced x \$5,700/ton reduced; 84 tons VOC emissions reduced x \$5,700/ton reduced). See Flexible Package Printing CTG, September 2006, p. 21, Table 2, Scenario 1.

Based on information provided by the EPA in the CTG, the cost effectiveness of reducing VOC emissions from heatset offset lithographic printing press and heatset letterpress printing press operations is estimated to range from \$855 to \$2,010 per ton of VOC reduced for control of VOC emissions from cleaning materials and heatset inks, respectively. Using the \$2,010 per ton of VOC removed for heatset inks, the total maximum anticipated annual costs to the regulated industry could range from \$615,060 to \$649,230 (306 tons VOC emissions reduced x \$2,010/ton reduced; 323 tons VOC emissions reduced x \$2,010/ton reduced). See Offset Lithographic Printing and Letterpress Printing CTG, September 2006, p. 18, Table 1.

The implementation of the work practices for the use and application of cleaning materials is expected to result in a net cost savings. The recommended work practices should reduce the amounts of cleaning materials used by reducing the amounts that are lost to evaporation, spillage and waste.

Compliance Assistance Plan

As described elsewhere in this preamble, the Department has already begun communications with several industry associations concerning development of this proposed rulemaking. Through ongoing communications with these groups and through the review of comments received during the public comment period, the Department expects to broaden its understanding of the needs of the regulated community. The Department plans to educate and assist the public and regulated community in understanding the new requirements and how to comply with them after a final-form rulemaking is adopted. This will be accomplished through the Department's ongoing compliance assistance program.

Paperwork Requirements

The owner and operator of an affected flexible packaging printing press, offset lithographic printing press or letterpress printing press would be required to keep daily operational records of information for inks, varnishes, coatings, adhesives, thinners, fountain solutions, cleaning solvents and cleaning materials sufficient to demonstrate compliance, including identification of materials, VOC content and volumes used. The records must be maintained for 2 years and submitted to the Department upon request. However, the owner or operator of a "Title V facility" as defined in § 121.1 shall maintain the records for at least 5 years. Persons claiming the small quantity exemption would be required to keep records demonstrating the validity of the exemption. Persons seeking to comply through the use of add-on controls would be required to meet the applicable reporting requirements specified in Chapter 139.

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. This proposed rulemaking incorporates the following pollution prevention incentives.

The proposed rulemaking will assure that the citizens and the environment of this Commonwealth experience the benefits of reduced emissions of VOCs and HAPs from flexible packaging printing presses, offset lithographic printing presses and letterpress printing presses. Although the proposed rulemaking is designed primarily to improve air quality through reduced emissions of VOCs, the reformulation or substitution of inks, coatings, adhesives, cleaning materials and other products to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat. The proposed rulemaking provides as one compliance option that inks, coatings and adhesives used or applied on or with flexible packaging printing presses and inks, coatings, adhesives and cleaning materials used or applied on or with offset lithographic printing presses and letterpress printing presses in this Commonwealth meet specified limits for VOC content, usually through substitution of low VOC-content solvents or water for the high VOC-content solvents. The reduced levels of high VOC- and HAP-content solvents would also benefit water quality through reduced loading on water treatment plants and in reduced quantities of high VOC- and HAP-content solvents leaching into the ground.

H. Sunset Review

These regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations 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 January 31, 2012, 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

Written comments—Interested persons are invited to submit comments, suggestions or objections regarding the

proposed rulemaking to the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board on or before April 16, 2012. 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 on or before April 16, 2012. The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final-form regulation will be considered.

Electronic comments—Comments may be submitted electronically to the Board at RegComments@pa.gov and must also be received by the Board on or before April 16, 2012. A subject heading of the proposed rulemaking and a return name and address must be included in each transmission. If an acknowledgement of electronic comments is not received by the sender within 2 working days, the comments should be retransmitted to the Board to ensure receipt.

K. Public Hearings

The Board will hold three public hearings for the purpose of accepting comments on this proposed rule-making. The hearings will be held as follows:

March 14, 2012 Department of Environmental 1:00 p.m. Protection Southwest Regional Office Upper Allegheny Conference Room 400 Waterfront Drive Pittsburgh, PA 15222-4745 March 15, 2012 Department of Environmental 1:00 p.m. Protection Southeast Regional Office Delaware Conference Room 2 East Main Street Norristown, PA 19401 Department of Environmental March 16, 2012 1:00 p.m. Protection Rachel Carson State Office Building

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.

Conference Room 105 400 Market Street Harrisburg, PA 17105

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.

 $\begin{array}{c} \text{MICHAEL L. KRANCER,} \\ Chairperson \end{array}$

Fiscal Note: 7-469. 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:

Alcohol—A chemical compound consisting of the hydroxyl (OH) group attached to an alkyl radical and having the general formula $C_nH_{2n}+1OH$, such as ethanol, n-propanol and isopropyl alcohol.

Alcohol substitute—Nonalcohol additives that contain VOCs and are used in the fountain solution including ethylene glycol and glycol ethers. Some additives are used to reduce the surface tension of water and others are added to prevent piling (ink build up).

* * * * *

Batch—

- (i) For purposes of § 129.67b (relating to control of VOC emissions from offset lithographic printing presses and letterpress printing presses), a supply of fountain solution that is prepared and used without alteration until completely used or removed from the printing process.
 - (ii) The term applies to either of the following:
- (A) A supply of fountain solution prepared in a discrete amount.
- (B) A supply of fountain solution that is continuously blended with an auto mix unit.

* * * * *

First installation date—For purposes of § 129.67a (relating to control of VOC emissions from flexible packaging printing presses) and § 129.67b, the first date of operation for a source or a control device. This date will not change if the source or control device is moved to a new location or when the control device is later used to control a new source.

Flexible packaging—

- (i) A package or part of a package, such as a bag, pouch, liner or wrap, the shape of which can be readily changed. Flexible packaging may be made of paper, plastic, film, aluminum foil, metalized or coated paper, metalized or coated film, or other material.
- (ii) The term includes a shrink-wrap label or wrapper printed on or in-line with a flexible packaging printing press.
- (iii) The term does not include folding cartons or other rigid packaging or self-adhesive labels.

Flexible packaging printing press—A printing press used for the production of printed flexible packaging materials using flexographic printing or rotogravure printing, or both.

* * * * *

Fountain solution—A mixture of water, volatile and nonvolatile chemicals and one or more additives that reduce the surface tension of the water so that the mixture spreads easily across the printing surface of a lithographic plate. The mixture wets the nonimage area so that the printing ink is maintained within the image area.

- (i) Alcohols, specifically isopropyl alcohol, and alcohol substitutes, including ethylene glycol and glycol ethers, are the most common VOC additives used.
- (ii) Nonvolatile additives include mineral salts and hydrophilic gums.

* * * * *

Heatset dryer—A device used in a printing process to heat the printed substrate and promote the evaporation of ink oils.

Heatset ink—Printing ink that is set and dried with the use of heat.

* * * * *

Letterpress printing—A printing process in which the image area of the plate is raised relative to the nonimage area and the paste ink is transferred to the substrate directly from the image surface. The substrate can be fed to the press as either an individual sheet or a rolled web.

* * * * *

Lithographic plate—The thin metal plate used in lithographic or offset lithographic printing which has chemically differentiated image and nonimage areas so that the printing ink adheres to the image areas.

Lithographic printing—A printing process in which the image and nonimage areas are in the same plane on the surface of a thin metal lithographic plate. The image and nonimage areas are chemically differentiated; the image area is oil receptive and the nonimage area is water receptive. The substrate can be fed to the press as either an individual sheet or a rolled web.

* * * * *

Offset lithographic printing—A printing process in which the image and nonimage areas are in the same plane on the surface of a thin metal lithographic plate and the image and nonimage areas are chemically differentiated. The ink film is transferred from the lithographic plate to an intermediary surface, typically a rubber-covered cylinder called a blanket, which in turn transfers the ink film to the substrate. The substrate can be fed to the press as either an individual sheet or a rolled web

* * * * *

Paper, film or foil coating or paper, film or foil surface coating—Coatings applied in a continuous, uniform layer to paper, film or foil surfaces, and pressure-sensitive tapes, regardless of substrate. The coatings are applied to provide a covering, finish or functional or protective layer

to the substrate, saturate a substrate for lamination or provide adhesion between two substrates for lamination.

(i) The term includes coatings used in web coating processes on the following **substrates**:

* * * * *

- (E) Flexible packaging, including coating of non-woven polymer substrates for use in flexible packaging, if the coating is not applied on or in-line with a flexible packaging printing press.
- (F) [Miscellaneous] Those used in miscellaneous coating operations, including the following:

* * * * *

Printing press—The equipment used to apply words, pictures or designs to a sheet or continuous substrate of paper, plastic or other material. The equipment must include at least one printing work station. The following equipment, if present, is also considered part of the term:

- (i) One or multiple unwind or feed sections.
- (ii) A series of individual work stations, which may include inboard and outboard work stations. A work station that employs another technology, including surface coating, is considered part of the printing press if the station is capable of printing or coating on the same substrate and if the work station is physically connected as part of the printing press.
 - (iii) A dryer associated with a work station.
 - (iv) A rewind, stack or collection section.

* * * * *

Rotogravure printing—The application of words, designs and pictures to a substrate by means of a roll printing technique which involves an intaglio or recessed image area in the form of cells.

* * * * *

Sheet-fed printing—A printing process in which individual sheets of substrate are fed sequentially to the printing press.

* * * * *

Varnish—For purposes of § 129.67b, an unpigmented offset lithographic ink which is used or applied on an offset lithographic printing press in the same manner as an offset lithographic ink. The term includes a heatset varnish, sheet-fed varnish and coldset varnish.

* * * * *

Web printing—A printing process in which continuous rolls of substrate material are fed to the printing press and rewound or cut to size after printing.

CHAPTER 129. STANDARDS FOR SOURCES SOURCES OF VOCs

§ 129.51. General.

(a) Equivalency. Compliance with §§ 129.52, 129.52a, 129.52b, 129.52c, **[and 129.54—129.73] 129.54—129.69, 129.71—129.73** and 129.77 may be achieved by alternative methods if the following exist:

* * * * *

(3) Compliance by a method other than the use of a low VOC coating, adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvent or ink which meets the applicable emission limitation in §§ 129.52, 129.52a, 129.52b, 129.52c, 129.67a, 129.67b, 129.73 and 129.77 shall be determined on the basis of equal volumes of solids.

* * * * *

(6) The alternative compliance method is incorporated into a plan approval or operating permit, or both, reviewed by the EPA, including the use of an air cleaning device to comply with § 129.52, § 129.52a, § 129.52b, § 129.52c, § 129.67, § 129.67a, § 129.67b, § 129.68(b)(2) and (c)(2), § 129.73 or § 129.77.

* * * * *

(c) Demonstration of compliance. [Test] Unless otherwise set forth in this chapter, test methods and procedures used to monitor compliance with the emission requirements of this section are those specified in Chapter 139 (relating to sampling and testing).

* * * * *

§ 129.67. Graphic arts systems.

- (a) This section applies [to facilities] as follows:
- (1) This section applies to the owner and operator of a facility whose rotogravure and flexographic printing presses by themselves or in combination with a surface coating operation subject to § 129.52 [(relating to surface coating processes)], § 129.52a, § 129.52b or § 129.52c or in combination with a flexible packaging printing press subject to § 129.67a (relating to control of VOC emissions from flexible packaging printing presses) have the potential to emit or have emitted VOCs into the outdoor atmosphere in quantities greater than 1,000 pounds (460 kilograms) per day or 100 tons (90,900 kilograms) per year during any calendar year since January 1, 1987.
- (2) This section applies to the owner and operator of a flexographic or rotogravure printing press that prints flexible packaging materials subject to § 129.67a(a)(1)(ii) if the owner or operator was required to install a control device under this section prior to ______ (Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking.).
- (3) This section does not apply to the owner or operator of a flexible packaging printing press subject to § 129.67a(a)(1)(i).

* * * * *

(Editor's Note: Sections 129.67a and 129.67b are new and printed in regular type to enhance readability.)

- § 129.67a. Control of VOC emissions from flexible packaging printing presses.
 - (a) Applicability.
- (1) Except as specified in paragraphs (3) and (4), this section applies to the owner and operator of a flexible packaging printing press if one or both of the following apply:
- (i) An individual flexible packaging printing press has potential emissions from the dryer, before consideration of add-on controls, of at least 25 tpy of VOCs from inks, coatings and adhesives combined. This section supersedes § 129.67 (relating to graphic arts systems).

- (ii) The total actual VOC emissions from all inks, coatings and adhesives combined from all flexible packaging printing presses and all emissions from related cleaning activities at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per 12-month rolling period, before consideration of add-on controls.
- (2) The owner or operator of a flexographic or rotogravure printing press subject to paragraph (1)(ii) and § 129.67, who was required to install a control device under § 129.67 prior to _______, (Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking.) shall continue the operation of that control device and also meet the requirements of this section.
- (3) VOCs from adhesives used at a facility that are not used or applied on or with a flexible packaging printing press are not subject to this section and may be regulated under § 129.52b, § 129.77 or Chapter 130, Subchapter D (relating to control of VOC emissions from paper, film and foil surface coating processes; control of emissions from the use or application of adhesives, sealants, primers and solvents; and adhesives, sealants, primers and solvents).
- (4) This section does not apply to surface coating of flexible packaging substrates that is not done with a flexible packaging printing press. Surface coating of flexible packaging substrates is regulated under § 129.52b.
- (b) Existing RACT permit. This section supersedes the requirements of a RACT permit issued to the owner or operator of a source subject to this section prior to January 1, 2013, under §§ 129.91—129.95 (relating to stationary sources of NOx and VOCs) to control, reduce or minimize VOCs from a flexible packaging printing press, except to the extent the RACT permit contains more stringent requirements.
- (c) *Emission limits*. Beginning January 1, 2013, a person subject to subsection (a)(1)(i) may not cause or permit the emission into the outdoor atmosphere of VOCs from a flexible packaging printing press, unless one or more of the following limitations is met:
- (1) The VOC content of each as applied ink, coating or adhesive used on a single flexible packaging printing press is equal to or less than one or both of the following limits:
 - (i) 0.16 lb VOC per lb material as applied.
 - (ii) 0.8 lb VOC per lb material solids as applied.
- (2) The daily weighted-average VOC content of all inks, coatings and adhesives combined used on a single flexible packaging printing press meets one or both of the VOC content limits in paragraph (1). The use of averaging to meet the VOC content limits may not be used across multiple printing presses.
- (3) The overall weight of VOCs emitted to the atmosphere from all inks, coatings and adhesives combined used on a single flexible packaging printing press is reduced through the use of vapor recovery or incineration or another method that is acceptable under § 129.51(a) (relating to general). The overall efficiency of a control system, as determined by the test methods and procedures specified in Chapter 139 (relating to sampling and testing), may not be less than that listed in Table 1.

Table 1

Overall Efficiency Requirement of a Control System on a Single Flexible Packaging Printing Press with Potential Emissions ≥ 25 tpy of VOC Before Control

Control System	Printing Press First Installation Date		Air Pollution Control Device First Installation Date	
Overall Efficiency				
Requirement	Prior to	$On\ or\ after$	$Prior\ to$	$On \ or \ after$
	March 14, 1995*	March 14, 1995	January 1, 2013**	January 1, 2013
$\geq 65\%$	X		X	
$\geq 70\%$	X			X
$\geq 75\%$		X	X	
≥ 80%		X		X

- * March 14, 1995, is the date of the proposed 1996 NESHAP for the printing and publishing industry.
- ** January 1, 2013, is the proposed compliance date of the flexible packaging printing press regulation.
- (4) The overall weight of VOCs emitted to the atmosphere from a single flexible packaging printing press that uses a noncomplying ink, coating or adhesive, or a combination of noncomplying and complying inks, coatings or adhesives, is reduced through the use of vapor recovery or incineration or another method that is authorized under § 129.51(a).
- (5) The Department has issued a plan approval, operating permit or Title V permit to the owner or operator prior to January 1, 2013, establishing a Federally-enforceable limitation to limit the potential emissions of VOC from the flexible packaging printing press below 25 tpy before consideration of add-on controls.
 - (d) Compliance monitoring requirements.
- (1) The VOC content of the as applied ink, coating or adhesive, expressed in units of weight of VOC per weight of solids, shall be calculated as follows:

$$VOC_B = (W_0)/(W_n)$$

Where:

 $\rm VOC_B$ = VOC content in lb VOC/lb of solids as applied or kg VOC/kg of solids as applied

 $W_o = Weight percent of VOC (W_v-W_w-W_{ex})$

 $W_{\rm v}$ = Weight percent of total volatiles (100%-weight percent solids)

 $W_{\rm w}$ = Weight percent of water

W_{ex} = Weight percent of exempt solvents

 \boldsymbol{W}_{n} = Weight percent of solids of the as applied ink, coating or adhesive

(2) The overall efficiency of a control system for a single flexible packaging printing press that uses a combination of controls and noncomplying and complying inks, coatings and adhesives, as determined by the test methods and procedures specified in Chapter 139, must be no less than 80% or the equivalent overall efficiency as calculated by the following equation, whichever is less stringent:

$$O = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/lb material or in lb VOC/lb material solids.

E = The emission limit from subsection (c)(1): either 0.16 lb VOC/lb material or 0.8 lb VOC/lb material solids.

O = The overall required control efficiency.

- (3) The owner or operator of a printing press subject to this section using an add-on air pollution control device in accordance with subsection (c)(3) shall comply with the following requirements:
- (i) The add-on air pollution control device must be equipped with the applicable monitoring equipment and the monitoring equipment shall be installed, calibrated, operated and maintained according to manufacturer's specifications at all times the add-on air pollution control device is in use.
- (A) The combustion temperature must be continuously monitored and recorded daily if a thermal incinerator is operated.
- (B) Inlet and exhaust gas temperatures must be continuously monitored and recorded daily if a catalytic incinerator is operated.
- (ii) Operational records sufficient to demonstrate compliance with the requirements of this subsection shall be maintained in accordance with subsection (e), including the following:
- (A) Daily records of the hours of operation of the add-on air pollution control device.
- (B) Records of the maintenance performed on the add-on air pollution control device, including the date and type of maintenance.
- (C) Records of the maintenance performed on the air pollution control device monitoring equipment, including the date and type of maintenance.
- (iii) The air pollution control device must be in operation at all times that the source is operating.
- (iv) The air pollution control device is approved, in writing, by the Department in an operating permit prior to use.
- (e) Recordkeeping and reporting requirements. Beginning January 1, 2013, the owner or operator of a flexible packaging printing press subject to this section shall maintain records sufficient to demonstrate compliance with the requirements of this section. At a minimum, the owner or operator shall maintain daily records of the following information:
- (1) The following parameters for each VOC-containing material, including ink, coating, adhesive, thinner, component or cleaning solvent, as supplied:
- (i) The name and identification number of the ink, coating, adhesive, thinner, component or cleaning solvent.
 - (ii) The amount used.

- (iii) The density or specific gravity.
- (iv) The VOC content (weight % or pounds/gallon).
- (2) The VOC content of each ink, coating, adhesive, thinner, component or cleaning solvent as applied.
- (3) The volume used of each ink, coating, adhesive, thinner, component or cleaning solvent as applied.
- (4) The records required under paragraphs (1)—(3) shall be maintained for 2 years, unless a longer period is required under § 127.511(b)(2) (relating to monitoring and related recordkeeping and reporting requirements). The records shall be submitted to the Department upon receipt of a written request.
 - (f) Sampling and testing.
- (1) Sampling and testing shall be done in accordance with the procedures and test methods specified in Chapter 139.
- (2) Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with this section may be used if prior approval is obtained in writing from the Department and the EPA.
 - (g) Work practice requirements for cleaning materials.
- (1) Beginning January 1, 2013, the owner or operator of a flexible packaging printing press subject to this section shall comply with the following work practices for cleaning activities at the facility:
- (i) Store all VOC-containing cleaning materials, waste cleaning materials and used shop towels in closed containers.
- (ii) Ensure that mixing vessels and storage containers used for VOC-containing cleaning materials and waste cleaning materials are kept closed at all times, except when depositing or removing these materials.
- (iii) Minimize spills of VOC-containing cleaning materials and waste cleaning materials and clean up spills immediately.
- (iv) Convey VOC-containing cleaning materials and waste cleaning materials from one location to another in closed containers or pipes.
- (2) The requirements in paragraph (1) apply to the following activities:
 - (i) Cleaning of ink, coating or adhesive from a press.
- (ii) Cleaning of ink, coating or adhesive from press parts, including press parts that have been removed from the press for cleaning.
- (iii) Cleaning of ink, coating or adhesive from areas around a press.
- (3) The requirements in paragraph (1) do not apply to the following activities:
 - (i) Cleaning electronic components of a press.
- (ii) Cleaning in pre-press (that is, platemaking) operations.
 - (iii) Cleaning in post-press (that is, binding) operations.
- (iv) Using janitorial supplies (for example, detergents or floor cleaners) for general cleaning around a press.
- (v) The use of parts washers or cold cleaners at a flexible packaging printing facility. The use of parts washers and cold cleaners is regulated under § 129.63 (relating to degreasing operations).

- § 129.67b. Control of VOC emissions from offset lithographic printing presses and letterpress printing presses.
 - (a) Applicability.
- (1) Except as specified in paragraph (2), this section applies to the owner and operator of an offset lithographic printing press or a letterpress printing press, or both, if the press meets one or a combination of the following:
- (i) A single heatset web offset lithographic printing press or heatset web letterpress printing press that has potential emissions from the dryer, before consideration of add-on controls, of at least 25 tpy of VOCs from all heatset inks, coatings and adhesives combined.
- (ii) A letterpress printing press if the total actual VOC emissions from all inks, coatings and adhesives combined from all letterpress printing presses and all emissions from related cleaning activities at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per 12-month rolling period, before consideration of add-on controls.
- (iii) An offset lithographic printing press if the total actual VOC emissions from all inks, coatings and adhesives combined from all offset lithographic printing presses and all emissions from related cleaning activities at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per 12-month rolling period, before consideration of add-on controls.
- (2) VOCs from adhesives used at a facility that are not used or applied on or with an offset lithographic printing press or a letterpress printing press are not subject to this section and may be regulated under § 129.77 or Chapter 130, Subchapter D (relating to control of emissions from the use or application of adhesives, sealants, primers and solvents; and adhesives, sealants, primers and solvents).
- (b) Existing RACT permit. This section supersedes the requirements of a RACT permit issued to the owner or operator of a source subject to subsection (a) prior to January 1, 2013, under §§ 129.91—129.95 (relating to stationary sources of $\mathrm{NO_x}$ and VOCs) to control, reduce or minimize VOCs from an offset lithographic printing press or a letterpress printing press, or both, except to the extent the RACT permit contains more stringent requirements.
- (c) Emission limits for printing presses subject to this section.
- (1) Beginning January 1, 2013, a person subject to this section may not cause or permit the emission into the outdoor atmosphere of VOCs from cleaning materials used in an offset lithographic printing press or a letterpress printing press unless the following conditions are met:
- (i) The cleaning materials used shall meet one or both of the following VOC limits:
- (A) A VOC composite partial vapor pressure less than 10 millimeters of mercury at 68°F (20°C).
 - (B) A VOC content less than 30% by weight.
- (ii) The use of one or more cleaning materials with a higher VOC composite partial vapor pressure or higher VOC content, or both, than is listed in subparagraph (i), is limited to 55 gallons per year, combined, of all cleaning materials that exceed the limits in subparagraph (i).

- (2) Beginning January 1, 2013, a person subject to subsection (a)(1)(i) or (iii) may not cause or permit the emission into the outdoor atmosphere of VOCs from a fountain solution used in an offset lithographic printing press unless the fountain solution meets one or more of the following VOC limits. This paragraph does not apply to an owner or operator subject to paragraph (3).
- (i) For heatset web offset lithographic printing, pressready (as applied) fountain solution shall contain 1.6% or less alcohol by weight or equivalent. This limit may be met by one or more of the following methods:
- (A) Reducing the press-ready (as applied) fountain solution alcohol content to 1.6% or less by weight.
- (B) Using press-ready (as applied) fountain solution with alcohol content of 3% or less by weight if the fountain solution is refrigerated at or below 60°F (15.5°C).
- (C) Using press-ready (as applied) fountain solution with alcohol substitute content of 5% or less by weight and no alcohol in the fountain solution.
- (D) Using another method that achieves a level of control of VOC emissions from the press-ready (as applied) fountain solution equal to or better than the methods listed in clauses (A)—(C).
- (ii) For sheet-fed offset lithographic printing, pressready (as applied) fountain solution shall contain 5% or less alcohol by weight or equivalent. This limit may be met by one or more of the following methods:
- (A) Reducing the press-ready (as applied) fountain solution alcohol content to 5% or less by weight.
- (B) Using press-ready (as applied) fountain solution with alcohol content of 8.5% or less by weight if the fountain solution is refrigerated at or below 60°F (15.5°C).
- (C) Using press-ready (as applied) fountain solution with alcohol substitute content of 5% or less by weight and no alcohol in the fountain solution.
- (D) Using another method that achieves a level of control of VOC emissions from the press-ready (as applied) fountain solution equal to or better than the methods listed in clauses (A)—(C).
- (iii) For coldset web offset lithographic printing, pressready (as applied) fountain solution shall contain alcohol substitute of 5% or less by weight and no alcohol in the fountain solution.
- (3) The control requirements under paragraph (2) for a fountain solution do not apply to the owner or operator of either of the following:
- (i) A sheet-fed offset lithographic printing press with maximum sheet size 11×17 inches or smaller.
- (ii) An offset lithographic printing press with total fountain solution reservoir of less than 1 gallon.
- (d) Emission limits for heatset web offset lithographic printing presses and heatset web letterpress printing presses.
- (1) This subsection only applies if a single heatset web offset lithographic printing press or heatset web letterpress printing press has potential emissions from the dryer, before consideration of add-on controls, of at least 25 tpy of VOCs from all heatset inks, coatings and adhesives combined.
- (2) This subsection does not apply for one or a combination of the following circumstances:
 - (i) The press is used for book printing.

- (ii) The press has a maximum web width of 22 inches or less.
- (iii) When the press is operated with one or a combination of the following inks, coatings or varnishes:
 - (A) Waterborne coatings.
- (B) Ultra-violet light or electron beam radiation-cured materials.
 - (C) Sheet-fed or coldset web inks.
 - (D) Sheet-fed or coldset web varnishes.
- (3) This subsection does not apply to the owner or operator of the press if the Department has issued a plan approval, operating permit or Title V permit to the owner or operator prior to January 1, 2013, establishing a Federally-enforceable limitation to limit the potential emissions of VOC from the offset lithographic printing press or the letterpress printing press below 25 tpy, before consideration of add-on controls.
- (4) Beginning January 1, 2013, a person subject to subsection (a)(1)(i) may not cause or permit the emission into the outdoor atmosphere of VOCs from a heatset web offset lithographic printing press or a heatset web letterpress printing press, or both, unless the overall weight of VOCs emitted to the atmosphere from the heatset dryer is reduced through the use of vapor recovery or incineration or another method that is authorized under § 129.51(a) (relating to general). The dryer pressure must be maintained lower than the press room area pressure so that air flows into the dryer at all times when the press is operating.
- (i) The overall efficiency of an add-on air pollution control device for a heatset dryer, determined in accordance with this subsection, shall meet either of the following:
- (A) At least 90% for an add-on air pollution control device whose first installation date was prior to January 1, 2013.
- (B) At least 95% for an add-on air pollution control device whose first installation date is on or after January 1, 2013.
- (ii) If the inlet VOC concentration to the control device is so low that compliance with the 90% or 95% overall efficiency in subparagraph (i) is not achievable, the owner or operator of the printing press may request approval for an alternative demonstration that meets the following requirements:
- (A) The request is submitted to the Department in writing.
- (B) The request demonstrates the inlet VOC concentration to the control device is so low that compliance with the 90% or 95% overall efficiency in subparagraph (i) is not achievable.
- (C) The request is for an outlet VOC concentration less than or equal to 20 ppm as hexane on a dry basis.
 - (D) The Department approves the request in writing.
 - (e) Compliance and monitoring requirements.
- (1) The owner or operator of a heatset web offset lithographic printing press or heatset web letterpress printing press subject to this section using an add-on air pollution control device in accordance with subsection (d) shall comply with the following requirements:
- (i) The add-on air pollution control device shall be equipped with the applicable monitoring equipment and

the monitoring equipment is installed, calibrated, operated and maintained according to manufacturer's specifications at all times the add-on air pollution control device is in use.

- (A) The combustion temperature must be continuously monitored and recorded daily if a thermal incinerator is operated.
- (B) Inlet and exhaust gas temperatures must be continuously monitored and recorded daily if a catalytic incinerator is operated.
- (ii) Operational records sufficient to demonstrate compliance with this subsection shall be maintained in accordance with subsection (e), including the following:
- (A) Daily records of the hours of operation of the add-on air pollution control device.
- (B) Records of the maintenance performed on the add-on air pollution control device, including the date and type of maintenance.
- (C) Records of the maintenance performed on the air pollution control device monitoring equipment, including the date and type of maintenance.
- (iii) The air pollution control device must be in operation at all times that the source is operating.
- (iv) The air pollution control device shall be approved, in writing, by the Department in a plan approval, operating permit or Title V permit.
- (2) The owner or operator of an offset lithographic printing press subject to this section that is required to meet one of the fountain solution VOC limits of subsection (c)(2) shall demonstrate compliance by using one or more of the following methods:
- (i) Analysis of a sample of the press-ready (as applied) fountain solution for VOC content using EPA Reference Method 24, Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight solids of Surface Coatings, found in 40 CFR Part 60, Appendix A, including updates and revisions.
- (ii) Maintenance onsite of MSDS, CPDS or other data provided by the manufacturer of the fountain solution that indicates the VOC content of the press-ready (as applied) fountain solution.
- (iii) Calculation of the VOC content of the press-ready (as applied) fountain solution that combines the EPA Reference Method 24 analytical VOC content data for each of the concentrated materials used to prepare the press-ready fountain solution.
- (A) The VOC content data of the concentrated materials shall be combined in the proportions in which the concentrated materials are mixed to make the batch of press-ready (as applied) fountain solution.
- (B) The VOC content shall be calculated once for each batch of press-ready (as applied) fountain solution and recorded in the form of a batch log.
- (C) The EPA Reference Method 24 analysis of the concentrated materials used to prepare the press-ready (as applied) fountain solution may be performed by the supplier of the materials and these results provided to the owner or operator of the affected press.
- (iv) Measurement of the recirculating reservoir temperature of a refrigerated press-ready (as applied) fountain solution with a thermometer or other temperature detection device capable of reading to 0.5°F (0.28°C) to

- ensure that the temperature of the refrigerated fountain solution containing alcohol is maintained at or below 60°F (15.5°C) at all times.
- (A) A temperature monitor shall be installed on the fountain solution recirculating reservoir, calibrated, maintained and continuously operated.
- (B) The temperature on the temperature monitor shall be recorded at least once per operating day to verify that the refrigeration system is operating properly.
- (v) Monitoring of the press-ready (as applied) fountain solution shall be performed with one or more of the following instruments:
- (A) A refractometer shall be used to monitor the fountain solution alcohol concentration. The refractometer
- (I) Be corrected for temperature at least once for each 8-hour shift or once per batch, whichever is longer.
- (II) Have a visual, analog or digital readout with an accuracy of 0.5%.
- (III) Be calibrated with a standard solution for the type of alcohol used in the fountain solution.
- (B) A hydrometer shall be used to monitor the fountain solution alcohol concentration. The hydrometer must:
- (I) Be corrected for temperature at least once for each 8-hour shift or once per batch, whichever is longer.
- (II) Have a visual, analog or digital readout with an accuracy of 0.5%.
- (III) Be calibrated with a standard solution for the type of alcohol used in the fountain solution.
- (C) A conductivity meter shall be used to determine the fountain solution VOC content. The conductivity meter:
- (I) May only be used if the Department has determined, in writing, that a refractometer or hydrometer cannot be used for monitoring the alcohol concentration of the fountain solution. Requests for the use of a conductivity meter must be submitted to the Department in writing.
- (II) Reading for the fountain solution must be referenced to the conductivity of the incoming water.
- (vi) Another method may be used to determine compliance with the VOC content limits for fountain solutions in subsection (c)(2) if the written request submitted to the Department for approval meets the following requirements:
- (A) The request demonstrates that the method provides results that accurately determine the fountain solution VOC content.
- (B) The Department provides prior written approval of the alternative method.
- (3) The owner or operator of an offset lithographic printing press or a letterpress printing press subject to this section shall demonstrate compliance with the VOC content limit or VOC composite partial vapor pressure limit for cleaning materials in subsection (c)(1) by one or more of the following methods:
- (i) Analysis of a sample of press-ready (as applied) cleaning material for VOC content using EPA Reference Method 24.
- (ii) Use of the equation in subsection (j) to calculate the composite partial vapor pressure of the press-ready (as applied) cleaning material.

- (iii) Use of the methods in subsection (k) to determine the partial vapor pressure of a single component of the cleaning material.
- (iv) Maintenance onsite of MSDS, CPDS or other data provided by the manufacturer of the cleaning material that indicates the VOC content or the VOC composite partial vapor pressure, or both, of the press-ready (as applied) cleaning material.
- (v) Calculation of the VOC content of the press-ready (as applied) cleaning material that combines the EPA Reference Method 24 analytical VOC content data or analytical VOC partial vapor pressure data for each of the concentrated materials used to prepare the press-ready (as applied) cleaning material.
- (A) The VOC content data or VOC composite partial vapor pressure data for each of the concentrated materials shall be combined in the proportions in which the concentrated materials are mixed to make the batch of press-ready (as applied) cleaning material.
- (B) The VOC content or VOC composite partial vapor pressure calculation shall be calculated once for each press-ready (as applied) cleaning material and kept in the form of a batch log.
- (C) The EPA Reference Method 24 analysis of the concentrated cleaning material may be performed or the VOC composite partial vapor pressure data may be determined by the supplier of the materials and these results provided to the owner or operator of the affected press.
- (vi) Another method may be used to determine compliance with the VOC content limits for cleaning materials in subsection (c)(1) if the written request submitted to the Department for approval meets the following requirements:
- (A) The request demonstrates that the method provides results that accurately determine the cleaning material VOC content or VOC composite partial vapor pressure.
- (B) The Department provides prior written approval of the alternative method.
- (f) Recordkeeping requirements. Beginning January 1, 2013, the owner or operator of a printing press subject to this section shall maintain records sufficient to demonstrate compliance with this section. At a minimum, the owner or operator shall maintain daily records as follows:
- (1) The following parameters for each ink, varnish, coating, adhesive, thinner or component, as supplied:
- (i) The name and identification number of the ink, varnish, coating, adhesive, thinner or component.
 - (ii) The amount used.
 - (iii) The density or specific gravity.
 - (iv) The VOC content (weight % or pounds/gallon).
- (2) The VOC content of each ink, varnish, coating or adhesive as applied.
- (3) The volume used of each ink, varnish, coating or adhesive as applied.
- (4) The following parameters for each blanket, roller or other concentrated cleaning material used, as supplied:
- (i) The name and identification number for the blanket, roller or other concentrated cleaning material.
 - (ii) The amount used.
- (iii) The weight percent of total volatiles, water and exempt solvents.

- (iv) The density or specific gravity.
- (v) One of the following:
- (A) VOC content (weight %).
- (B) Composite partial vapor pressure.
- (5) The VOC content or VOC composite partial vapor pressure of each cleaning material as applied.
- (6) The volume used of each cleaning material as applied.
- (7) The following parameters for each concentrated component or additive, as supplied, used to prepare the press-ready (as applied) fountain solution batch:
- (i) The name and identification number of the component or additive.
 - (ii) The amount used.
 - (iii) The density or specific gravity.
- (iv) The weight percent of total volatiles, water and exempt solvents of each concentrated component material or additive.
- (v) The VOC content of each concentrated component or additive material (weight %).
- (8) The VOC content (weight %) of each batch of the press-ready (as applied) fountain solution.
- (9) The volume used of each press-ready (as applied) fountain solution.
- (g) Reporting requirements. Beginning January 1, 2013, the owner or operator of an offset lithographic printing press or a letterpress printing press subject to this section shall meet the following reporting requirements:
- (1) The records required under subsection (f) shall be maintained for 2 years unless a longer period is required under § 127.511(b)(2) (relating to monitoring and related recordkeeping and reporting requirements). The records shall be submitted to the Department upon receipt of a written request.
- (2) The owner or operator of an offset lithographic printing press required to demonstrate control efficiency in subsection (d) shall submit reports to the Department in accordance with Chapter 139 (relating to sampling and testing).
- (h) Sampling and testing. Sampling and testing shall be done in accordance with the procedures and test methods specified in Chapter 139 or with the following methods, or both:
- (1) The overall efficiency of the add-on air pollution control device shall be determined by the following test methods and procedures:
- (i) The capture efficiency shall be determined in accordance with 40 CFR Part 51, Appendix M, Methods 204—204F, including updates and revisions.
- (ii) The control efficiency shall be determined in accordance with one of the following, subject to prior written approval by the Department:
- (A) EPA Reference Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, found in 40 CFR Part 60, Appendix A, including updates and revisions.
- (B) EPA Reference Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, found in 40 CFR Part 60, Appendix A, including updates and revisions.

- (C) EPA Reference Method 25B, Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer, found in 40 CFR Part 60, Appendix A, including updates and revisions.
- (iii) The capture efficiency or control efficiency, or both, may be determined using an alternate method approved by the Department in writing, prior to testing. A request for the use of an alternative method must be submitted to the Department in writing.
- (2) The constant negative pressure into the dryer, as required under subsection (d), must be demonstrated using an air flow direction measuring device or indicator, such as a smoke stick or aluminum ribbons.
 - (i) Work practice requirements for cleaning materials.
- (1) Beginning January 1, 2013, the owner or operator of an offset lithographic printing press or a letterpress printing press subject to this section shall comply with the following work practices for cleaning activities at the facility:
- (i) Store all VOC-containing cleaning materials, waste cleaning materials and used shop towels in closed containers.
- (ii) Ensure that mixing vessels and storage containers used for VOC-containing cleaning materials and waste cleaning materials are kept closed at all times, except when depositing or removing these materials.
- (iii) Minimize spills of VOC-containing cleaning materials and waste cleaning materials and clean up spills immediately.
- (iv) Convey VOC-containing cleaning materials and waste cleaning materials from one location to another in closed containers or pipes.
- (2) The requirements in paragraph (1) apply to the following activities:
- (i) Cleaning of a press, including blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners and rubber rejuvenators.
- (ii) Cleaning of press parts, including press parts that have been removed from the press for cleaning.
- (iii) Cleaning of ink, coating or adhesive from areas around a press.
- (3) The requirements in paragraph (1) do not apply to the following activities:
 - (i) Cleaning electronic components of a press.
- (ii) Cleaning in pre-press (that is, platemaking) operations.
 - (iii) Cleaning in post-press (that is, binding) operations.
- (iv) Using janitorial supplies (for example, detergents or floor cleaners) for general cleaning around a press.
- (v) The use of parts washers or cold cleaners at an offset lithographic printing or a letterpress printing facility. The use of parts washers and cold cleaners is regulated under § 129.63 (relating to degreasing operations).
- (j) Composite partial vapor pressure. The composite partial vapor pressure of organic compounds in cleaning materials shall be determined by the following procedure:
- (1) Quantifying the amount of each compound in the blend using gas chromatographic analysis, using the following methods:

- (i) ASTM E260, Standard Practice for Packed Column Gas Chromatography, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 for organic content, including updates and revisions.
- (ii) ASTM D3792, Standard Test Method for Water Content of Coatings by Direct Injection Into a Gas Chromatograph, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 for water content, including updates and revisions.
- (2) Calculating the composite partial vapor pressure using the following equation:

$$\sum_{i=1}^{\infty} (W_i) (VP_i) / MW_i$$

$$i=1$$

$$PP_{c} = \frac{k}{W_{w}/MW_{w} + \sum W_{e}/MW_{e} + \sum W_{i}/MW_{i}}$$

$$e=1 \qquad i=1$$

Where:

 $PP_{c}=\mathrm{VOC}$ composite partial vapor pressure at 20°C, in mm mercury.

 W_i = Weight of the "i"th VOC compound, in grams, as determined by ASTM E260.

 W_w = Weight of water, in grams, as determined by ASTM D3792.

 W_e = Weight of the "e"th exempt compound, in grams, as determined by ASTM E260.

 MW_i = Molecular weight of the "i"th VOC compound, in grams per g-mole, as given in chemical reference literature.

 MW_w = Molecular weight of water, in g/g-mole (18 grams per g-mole).

 $MW_e={
m Molecular}$ weight of the "e"th exempt compound, in grams per g-mole, as given in chemical reference literature.

 VP_i = Vapor pressure of the "i"th VOC compound at 20°C, in mm mercury, as determined by subsection (k).

- (k) Determination of vapor pressure of single organic compounds in cleaning materials. The vapor pressure of each single component compound shall be determined from one or more of the following:
- (1) ASTM D2879, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959, including updates and revisions.
- (2) The most recent edition of one or more of the following sources:
- (i) Vapour Pressures of Pure Substances, Boublik, Elsevier Scientific Publishing Company, New York.
- (ii) Perry's Chemical Engineers' Handbook, Green and Perry, McGraw-Hill Book Company.
- (iii) CRC Handbook of Chemistry and Physics, CRC Press.
- (iv) Lange's Handbook of Chemistry, McGraw-Hill Book Company.
 - (v) Additional sources approved by the Department.

§ 129.77. Control of emissions from the use or application of adhesives, sealants, primers and solvents.

* * * * *

(k) This section does not apply to the use or application of the following compounds or products:

* * * * *

(2) Adhesives, sealants, adhesive primers or sealant primers that are subject to [§ 129.73 (relating to aerospace manufacturing and rework) or Chapter 130, Subchapter B or C (relating to consumer products; and architectural and industrial maintenance coatings)] other sections in this chapter or Chapter 130 (relating to standards for products).

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CHAPTER 130. STANDARDS FOR PRODUCTS Subchapter D. ADHESIVES, SEALANTS, PRIMERS AND SOLVENTS

GENERAL PROVISIONS

§ 130.703. Exemptions and exceptions.

(a) This subchapter does not apply to the use, application, sale, supply, offer for sale or manufacture for sale for use in this Commonwealth of the following compounds or products:

* * * * *

(2) Adhesives, sealants, adhesive primers or sealant primers that are subject to [§ 129.73 (relating to aerospace manufacturing and rework) or Chapter 130, Subchapter B or C (relating to consumer products; and architectural and industrial maintenance coatings)] other sections in this chapter or Chapter 129 (relating to standards for sources).

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PENNSYLVANIA PUBLIC UTILITY COMMISSION

[52 PA. CODE CH. 54]

[L-2010-2160942]

Code of Conduct

The Pennsylvania Public Utility Commission (Commission), on August 25, 2011, adopted a proposed rulemaking order which amends the Commission's existing regulations regarding competitive safeguards to be consistent with 66 Pa.C.S. Chapter 28 (relating to Electricity Generation Customer Choice and Competition Act).

Executive Summary

On March 18, 2010, the Public Utility Commission (PUC) issued an Advance Notice of Proposed Rulemaking (ANOPR) seeking input from the regulated community, statutory advocates, and interested parties on revisions to the Code of Conduct regulations applicable to electric distribution companies and electric generation suppliers engaged in the retail electricity market within the Com-

monwealth of Pennsylvania. Numerous parties provided comments in response to the ANOPR.

Pursuant to a second Motion adopted at the Public Meeting of February 24, 2011, the PUC identified additional safeguards for a properly functioning competitive market to be included in this rulemaking. The additional safeguards, along with the received comments pursuant to the ANOPR, were taken into consideration in developing and drafting the regulation. The PUC issued the proposed regulation on August 25, 2011.

The proposed revisions to the regulation are designed to foster the continued development of Pennsylvania's retail electricity competitive market. Specifically, the regulation accomplishes this goal by providing safeguards against cross subsidization between electric distribution companies and their affiliated electric generation suppliers, minimizing customer confusion resulting from the use of similar names, symbols, and marks, and adding additional transparency to shared corporate services between the electric distribution companies and their affiliated electric generation suppliers.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on January 27, 2012, the Commission submitted a copy of this proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Committees. In addition to submitting the proposed rulemaking, the Commission provided IRRC and will provide the Committees with a copy of a detailed Regulatory Analysis Form. 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.

Public Meeting held August 25, 2011

Commissioners Present: Robert F. Powelson, Chairperson; John F. Coleman, Jr., Vice Chairperson; Wayne E. Gardner; James H. Cawley; Pamela A. Witmer

Revisions to Code of Conduct at 52 Pa. Code § 54.122; Doc. No. L-2010-2160942

Proposed Rulemaking Order

The Commission is responsible for implementing and enforcing the provisions of the Electricity Generation Customer Choice and Competition Act (the "Act"), 66 Pa.C.S. § 2801, et seq. The Commission has adopted customer choice regulations necessary to the performance of its duties under the Act. 52 Pa. Code § 54.1, et seq. Pursuant to a Motion adopted at the Public Meeting of February 25, 2010, the Commission announced it would be reviewing the Competitive Safeguards subchapter of its customer choice rules. 52 Pa. Code §§ 54.121-123. Subsequently, the Commission issued an Advance Notice of Proposed Rulemaking Order ("ANOPR") identifying the scope of the proceeding and soliciting initial comments. Pursuant to a second Motion adopted at the Public Meeting of February 24, 2011, the Commission identified additional safeguards for a properly functioning competitive market to be included in this rulemaking. The Commission now proposes the attached revisions to the Competitive Safeguards subchapter for public comment. After receipt and review of public comments, the Commission will issue a final rulemaking for approval consistent with the regulatory review process.

Background

The Act, which became effective January 1, 1997, provides retail electric customers subject to the Commission's jurisdiction with the option to obtain their generation service from an electric generation supplier ("EGS"), as opposed to the incumbent electric distribution company ("EDC"). EGSs must be licensed by the Commission before offering service. EDCs must provide EGSs with direct access, which means that EGSs can use the EDC's transmission and distribution system on a nondiscriminatory basis at rates, terms and conditions of service comparable to the EDC's own use of the system. 66 Pa.C.S. § 2804(2); definition of "direct access", 66 Pa.C.S. § 2803.

The emphasis on direct access was a deliberate choice by the General Assembly. There was a genuine concern on the part of Pennsylvania and other states adopting retail choice laws that incumbent utilities would directly or indirectly favor affiliated EGSs, to the detriment of robust retail electric competition. Such anti-competitive practices might take form in the sharing of customer information, the linking of regulated services to non-competitive services, financial subsidy of an affiliate through the use of EDC staff and facilities, etc. Accordingly, Pennsylvania and other jurisdictions with retail choice laws typically included provisions prohibiting such conduct. Public utility commissions in nearly all retail choice jurisdictions have adopted rules intended to safeguard the competitive marketplace.

The Pennsylvania Public Utility Commission adopted competitive safeguards, which became effective on July 8, 2000. The rules have not been subject to amendment. For the reasons identified in the ANOPR, the Commission concluded that it would be appropriate to consider revisions to reflect changes in the markets, technology and law subsequent to the passage of the Competition Act.

The following parties provided comments in response to the ANOPR: the Pennsylvania Office of Consumer Advocate ("OCA"), the Energy Association of Pennsylvania ("EAP"), the National Energy Marketers Association ("NEM"), the Pennsylvania Energy Marketers Coalition ("PEMC"), West Penn Power Company ("West Penn"), and the joint comments of the Metropolitan Edison Company, Pennsylvania Electric Company, and the Pennsylvania Power Company ("FirstEnergy Companies").

Discussion

A. Summary of the Comments

The previously-referenced parties offered a number of comments. Generally, these parties felt that the existing code of conduct was effective. However, the following specific revisions to the existing Code of Conduct were suggested:

- Both OCA and the FirstEnergy Companies recommended that the Commission revise Section 54.122(9) to incorporate use of the Commission's website and electronic mail as a means to share current lists of suppliers.
- FirstEnergy recommended adding a provision that EGSs may not represent themselves as being an employee of an EDC through attire or actions.

- NEM recommended the addition of prohibitions against EDCs financially subsidizing affiliated EGSs, or from transferring the regulated assets or property of an EDC to an affiliated EGS at less than market value.
- The Energy Association proposed two changes. First, that the Code should prohibit EDCs and EGSs from using company logos in a deceptive manner. Second, that EGSs should enter into licensing agreements with EDCs before using any of their intellectual property.
- PEMC, like the Energy Association, commented on the proper use of logos. It recommended that EGS representatives involved in door-to-door sales be required to have identification, which correctly identifies the name and logo of the company.

B. Review of Other Retail Choice States

Nearly every state that adopted retail choice models has regulations governing the relationships between EDCs and affiliated EGSs. Commission staff has undertaken a review of each jurisdiction's code for elements that should be adopted in Pennsylvania. In particular, the Commission considered the rules adopted by the states of Texas, Illinois and New Jersey in crafting this proposed rulemaking. These jurisdictions have very comprehensive regulations on this subject. Some of the comments we received included the adoption of elements present in the codes of conduct in effect in these states.

C. Proposed Revisions

The Commission proposes to realign the regulation according to subject matter for a more convenient use. We propose to divide the regulation into the following six subject matter categories: (a) non-discrimination requirements; (b) customer requests for information; (c) prohibited transactions and activities; (d) accounting and training requirements; (e) dispute resolution procedures; and (f) penalties. As a result of this streamlining, we had to renumber most subsections of the regulation. The following summary provides information on each subsection. 54.122.(1)(i)

This is subsection (1) of the current regulation. It has been renumbered but not revised substantively.

54.122.(1)(ii)

This is subsection (2) of the current regulation. It has been renumbered but not revised substantively.

54.122.(1)(iii)

This is subsection (5) of the current regulation. It has been renumbered but not revised substantively.

54.122.(1)(iv)

This is subsection (6) of the current regulation. It has been renumbered but not revised substantively.

54.122.(1)(v)

This is subsection (7) of the current regulation. It has been renumbered but not revised substantively.

54.122.(2)(i)

This is subsection (9) of the current regulation. It has been modified consistent with some of the received comments. EDC representatives are now required to refer customers to the Commission's retail choice website and offer to provide customers with a list of the current suppliers. EDC representatives may not rank or recommend particular suppliers regardless of their affiliate status.

54.122.(2)(ii)

This is subsection (10) of the current regulation. It has been modified to exclude references to affiliate EGSs using the EDC's name and logo as part of the EGS's trade name or corporate appearance for marketing and communication purposes. The limitations on the EDC's name, logo, and other identifying elements by all EGSs are now addressed in 54.122.(3)(iv).

54.122.(3)(i)

At NEM's suggestion, a new subsection has been added making express the prohibition against an EDC financially subsidizing an affiliated EGS. No costs associated with an affiliated EGS should be recovered in the EDC's regulated rates.

54.122. (3)(ii)

Also at NEM's suggestion, this subsection is being proposed to bar the transfer of any regulated EDC assets to its affiliated EGS at less than market value.

54.122.(3)(iii)

This subsection is proposed pursuant to the Commission's Motion aimed at preventing direct or indirect cross-subsidies, like the use of the affiliate EDC for credit support for affiliated EGS sales.

54.122.(3)(iv)

This subsection is proposed to address comments offered by the Energy Association. It requires an EGS to enter into a licensing agreement with an EDC before using the EDC's service-mark or trademark and to feature a prominent disclaimer. The disclaimer will state that the EGS is not the same company as the EDC and that a customer need not buy the EGS's services or products in order to continue receiving services from the EDC. By requiring a disclaimer, the Commission attempts to minimize customer confusion and eliminate any deceptive practices that may occur when an EGS uses the EDC's service-mark or trademark.

54.122.(3)(v)

This new subsection was added pursuant to the Commission's Motion to examine whether EDC-affiliated EGSs should change their names so as to be dissimilar from both the EDC affiliate and the corporate parent. We have found that this requirement varies in different jurisdictions. We propose that both the affiliated and non-affiliated EGSs be required to change their names to be dissimilar to the EDC.

54.122.(3)(vi)

This new subsection is proposed to address comments of the Energy Association and PEMC. It prohibits the EGS representatives from falsely claiming to represent the EDC of the service territory.¹

54.122.(3)(vii)

This new subsection was added pursuant to the Commission's Motion to prohibit joint marketing, sales, and promotional activities by EDCs and affiliate EGSs. This prohibition is common in many retail choice jurisdictions.

54.122.(3)(viii)

This is subsection (3) of the current regulation. It has been renumbered but not revised substantively.

54.122.(3)(ix)

This new subsection requires that EGSs and EDCs do not share office space and instead occupy different buildings. This limitation is common in other jurisdictions. 54.122.(4)(i)

This new subsection requires an EDC and affiliated EGS to maintain separate accounting records. This is a feature of codes of conduct in other jurisdictions, such as Illinois, and we propose to adopt it in Pennsylvania.

54.122.(4)(ii)

Several jurisdictions, such as Maryland and Ohio, require EDCs to maintain, in a single document, a description of the relationship between it and any affiliated EGSs. This document has been described as a "cost allocation manual" in these two states. It allows the appropriate regulatory body to efficiently verify and audit the utility's compliance with the code of conduct. We will require the same in Pennsylvania. If part of the final rule, the Commission will establish a docket at which EDCs shall file their cost allocation manuals. The cost allocation manual will be reviewed as part of the audit and management efficiency investigation provisions in § 516 of the Public Utility Code.

54.122.(4)(iii)

This is subsection (11) of the current regulation. It has been revised to provide additional clarification on the functional separation requirements for employees of the EDC and affiliated EGSs. It states that EDCs and affiliated EGSs shall not share employees or services, except for corporate support services, emergency services, or tariff services.

54.122.(4)(iv)

This is subsection (8) of the current regulation. It has been renumbered but not revised substantively.

54.122.(5)(i)

This is subsection (4) of the current regulation. It has been renumbered but not revised substantively.

54.122.(6)(i)

Most jurisdictions have provisions for civil penalties for non-compliance. Here we have provided a reference to 66 Pa.C.S. § 3301, which allows the Commission to assess a civil penalty of up to \$1,000 a day for non-compliance with a regulation.

Conclusion

Accordingly, under 66 Pa. C.S. § 501, 2807(e), Section 2804(2) of the Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. § 2804(2), the Commonwealth Documents Law, 45 P.S. §§ 1201 et seq., and the regulations promulgated hereunder at 1 Pa. Code §§ 7.1, 7.2, and 7.5, the Commission proposes revisions to its regulations pertaining to the electricity generation customer choice, and its provisions for competitive safeguards, as noted and set forth in Annex A; *Therefore*,

It Is Ordered That:

- 1. The proposed rulemaking at Docket L-2010-2160942 will consider the regulations set forth in Annex A.
- 2. The Secretary shall submit this order and Annex A to the Office of Attorney General for approval as to legality.
- 3. The Secretary shall submit this order and Annex A to the Governor's Budget Office for review of fiscal impact.

 $^{^{\}rm 1}$ The subsection refers to the proposed \S 111.8 of the Marketing and Sales Practices for the Retail Residential Energy Market regulations and interim guidelines about marketing and sales practices for the retail residential energy market that address this issue at length.

- 4. The Secretary shall submit this order and Annex A for review by the designated standing committees of both houses of the General Assembly, and for review by the Independent Regulatory Review Commission.
- 5. The Secretary shall deposit this order and Annex A with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.
- 6. An original and 15 copies of any written comments referencing the docket number of the proposed rule-making shall be submitted within 45 days of publication in the *Pennsylvania Bulletin* to the Pennsylvania Public Utility Commission, Attn.: Secretary, P. O. Box 3265, Harrisburg, PA 17105-3265.
- 7. The contact person for legal issues related to this proposed rulemaking is Aspassia Staevska, Assistant Counsel, Law Bureau, (717) 425-7403, astaevska@pa.gov. Alternate formats of this document are available to persons with disabilities and may be obtained by contacting Sherri Delbiondo, Regulatory Coordinator, Law Bureau, (717) 772-4597.

ROSEMARY CHIAVETTA,

Secretary

Fiscal Note: 57-287. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 52. PUBLIC UTILITIES PART I. PUBLIC UTILITY COMMISSION Subpart C. FIXED SERVICE UTILITIES CHAPTER 54. ELECTRICITY GENERATION CUSTOMER CHOICE

Subchapter E. COMPETITIVE SAFEGUARDS § 54.122. Code of conduct.

Electric generation suppliers and electric distribution companies shall comply with the following requirements:

- [(1) An electric distribution company may not give an electric generation supplier, including without limitation, its affiliate or division, any preference or advantage over any other electric generation supplier in processing a request by a distribution company customer for retail generation supply service.
- (2) Subject to customer privacy or confidentiality constraints, an electric distribution company may not give an electric generation supplier, including without limitation its affiliate or division, any preference or advantage in the dissemination or disclosure of customer information and any dissemination or disclosure shall occur at the same time and in an equal and nondiscriminatory manner. "Customer information" means all information pertaining to retail electric customer identity and current and future retail electric customer usage patterns, including appliance usage patterns, service requirements or service facilities.
- (3) An electric distribution company or electric generation supplier may not engage in false or deceptive advertising to customers with respect to the retail supply of electricity in this Commonwealth.
- (4) Each electric distribution company shall adopt the following dispute resolution procedures to address alleged violations of this section:

- (i) Regarding any dispute between an electric distribution company or a related supplier, or both, and an electric generation supplier (each individually referred to as "party" and collectively referred to as "parties"), alleging a violation of any of the provisions of this section, the electric generation supplier shall provide the electric distribution company or related supplier, or both, as applicable, a written notice of dispute which includes the names of the parties and customers, if any involved and a brief description of the matters in dispute.
- (ii) Within 5 days of receipt of the notice by the electric distribution company or related supplier, or both, a designated senior representative of each of the parties shall attempt to resolve the dispute on an informal basis.
- (iii) If the designated representatives are unable to resolve the dispute by mutual agreement within 30 days of the referral, the dispute shall be referred for mediation through the Commission's Office of Administrative Law Judge. A party may request mediation prior to that time if it appears that informal resolution is not productive.
- (iv) If mediation is not successful, the matter shall be converted to a formal proceeding before a Commission administrative law judge, and the prosecuting parties shall be directed to file a formal pleading in the nature of a complaint, petition or other appropriate pleading with the Commission within 30 days or the matter will be dismissed for lack of prosecution. Any party may file a complaint, petition or other appropriate pleading concerning the dispute under any relevant provision of 66 Pa.C.S. (relating to the Public Utility Code).
- (5) An electric distribution company may not illegally tie the provision of any electric distribution service within the jurisdiction of the Commission to one of the following:
- (i) The purchase, lease or use of any other goods or services offered by the electric distribution company or its affiliates.
- (ii) A direct or indirect commitment not to deal with any competing electric generation supplier.
- (6) An electric distribution company may not provide any preference or advantage to any electric generation supplier in the disclosure of information about operational status and availability of the distribution system.
- (7) An electric distribution company shall supply all regulated services and apply tariffs to nonaffiliated electric generation suppliers in the same manner as it does for itself and its affiliated or division electric generation supplier, and shall uniformly supply all regulated services and apply its tariff provisions in a nondiscriminatory manner.
- (8) Every electric distribution company and its affiliated or divisional electric generation supplier shall formally adopt and implement these provisions as company policy and shall take appropriate steps to train and instruct its employes in their content and application.
- (9) If an electric distribution company customer requests information about electric generation suppliers, the electric distribution company shall provide the latest list as compiled by the Commission to the customer over the telephone, or in written

form or by other equal and nondiscriminatory means. In addition, an electric distribution company may provide the address and telephone number of an electric generation supplier if specifically requested by the customer by name. To enable electric distribution companies to fulfill this obligation, the Commission will maintain a written list of licensed electric generation suppliers. The Commission will regularly update this list and provide the updates to electric distribution companies as soon as reasonably practicable. The Commission will compile the list in a manner that is fair to all electric generation suppliers and that is not designed to provide any particular electric generation supplier with a competitive advantage.

- (10) An electric distribution company or its affiliate or division may not state or imply that any delivery services provided to an affiliate or division or customer of either are inherently superior, solely on the basis of their affiliation with the electric distribution company, to those provided to any other electric generation supplier or customer or that the electric distribution company's delivery services are enhanced should supply services be procured from its affiliate or division. When an electric distribution company's affiliated or divisional supplier markets or communicates to the public using the electric distribution company's name or logo, it shall include a disclaimer stating that the affiliated or divisional supplier is not the same company as the electric distribution company, that the prices of the affiliated or divisional supplier are not regulated by the Commission and that a customer is not required to buy electricity or other products from the affiliated or divisional supplier to receive the same quality service from the electric distribution company. When an affiliated or divisional supplier advertises or communicates through radio, television or other electronic medium to the public using the electric distribution company's name or logo, the affiliated or divisional supplier shall include at the conclusion of any communication a disclaimer that includes all of the disclaimers listed in this paragraph.
- (11) An electric distribution company which is related as an affiliate or division of an electric generation supplier or transmission supplier (meaning any public utility that owns, operates, or controls facilities used for the transmission of electric energy) which serves any portion of this Commonwealth; and any electric generation supplier which is related as an affiliate or division of any electric distribution company or transmission supplier which serves any portion of this Commonwealth, shall insure that its employes function independently of other related companies.
 - (1) Nondiscrimination requirements.
- (i) An electric distribution company may not give an electric generation supplier, including without limitation its affiliate or division, a preference or advantage over another electric generation supplier in processing a request by a distribution company customer for retail generation supply service.
- (ii) Subject to customer privacy or confidentiality constraints, an electric distribution company may not give an electric generation supplier, including without limitation its affiliate or division, a prefer-

- ence or advantage in the dissemination or disclosure of customer information and dissemination or disclosure shall occur at the same time and in an equal and nondiscriminatory manner. The term "customer information" means information pertaining to retail electric customer identity and current and future retail electric customer usage patterns, including appliance usage patterns, service requirements or service facilities.
- (iii) An electric distribution company may not illegally tie the provision of an electric distribution service within the jurisdiction of the Commission to one of the following:
- (A) The purchase, lease or use of other goods or services offered by the electric distribution company or its affiliates.
- (B) A direct or indirect commitment not to deal with a competing electric generation supplier.
- (iv) An electric distribution company may not provide a preference or advantage to any electric generation supplier in the disclosure of information about operational status and availability of the distribution system.
- (v) An electric distribution company shall supply regulated services and apply tariffs to nonaffiliated electric generation suppliers in the same manner as it does for itself and its affiliated or division electric generation supplier and uniformly supply regulated services and apply its tariff provisions in a nondiscriminatory manner.
 - (2) Customer requests for information.
- (i) If an electric distribution company customer requests information about electric generation suppliers, the electric distribution company shall provide the address of the Commission's retail choice web site and offer to send the most current list of suppliers for that service territory, as compiled by the Commission, by regular mail, electronic mail, facsimile, telephonically or by other equal and nondiscriminatory means, according to the customer's preference. The electric distribution company may not recommend or offer an opinion on the relative merits of particular suppliers. In addition, an electric distribution company may provide the mailing address, web site address and telephone number of an electric generation supplier if specifically requested by the customer by name. To enable electric distribution companies to fulfill this obligation, the Commission will maintain a written list of licensed electric generation suppliers. The Commission will regularly update this list and provide the updates to electric distribution companies as soon as reasonably practicable. The Commission will compile the list in a manner that is fair to electric generation suppliers and that is not designed to provide a particular electric generation supplier with a competitive advantage.
- (ii) An electric distribution company or its affiliate or division may not state or imply that delivery services provided to an affiliate or division or customer of either are inherently superior, solely on the basis of the affiliation with the electric distribution company, to those provided to another electric generation supplier or customer or that the electric distribution company's delivery services are enhanced should supply services be procured from its affiliate or division.

- (3) Prohibited transactions and activities.
- (i) An electric distribution company may not subsidize an affiliated electric generation supplier. Costs or overhead related to competitive, nonregulated activities of an affiliated electric generation supplier may not be included in the rates of an electric distribution company.
- (ii) An electric distribution company may not sell, release or otherwise transfer to an affiliate electric generation supplier, at less than market value, assets, services or commodities that have been included in regulated rates.
- (iii) An electric distribution company may not allow an affiliate electric generation supplier to secure credit through the pledge of assets in the rate base of the electric distribution company or the pledge of money necessary for utility operations.
- (iv) An electric generation supplier may not use a word, term, name, symbol, device, registered or unregistered mark or a combination thereof (collectively and singularly referred to as "EDC identifier") that identifies or is owned by an electric distribution company, in connection with the sale, offering for sale, distribution or advertising of goods or services, unless the electric generation supplier includes a disclaimer and enters into an appropriate licensing agreement specifying the rights.
- (A) The disclaimer shall state that the electric generation supplier is not the same company as the electric distribution company whose EDC identifier is featured and that a customer does not need to buy the electric generation supplier's products or services to continue receiving services from the electric distribution company.
- (B) In print and Internet communications, the disclaimer shall be placed immediately adjacent to the EDC identifier and be in equal prominence to the main body of the text. In radio or television communications, the disclaimer shall be clearly spoken.
- (v) An electric generation supplier may not have the same or substantially similar name or fictitious name as the electric distribution company or its corporate parent. An electric generation supplier shall change its name by _____ (Editor's Note: The blank refers to 6 months after the effective date of adoption of this proposed rulemaking.).
- (vi) An electric generation supplier may not allow an employee or agent to represent himself as an employee of the electric distribution company through his attire or actions. An electric generation supplier shall comply with § 54.43 (relating to standards of conduct and disclosure for licensees), regarding agent identification and misrepresentation.
- (vii) An electric distribution company and an affiliated electric generation supplier may not engage in joint marketing, sales or promotional activities unless the joint marketing, sales or promotional activities are offered to electric generation suppliers in the same manner under similar terms and conditions.
- (viii) An electric distribution company or electric generation supplier may not engage in false or

- deceptive advertising to customers with respect to the retail supply of electricity in this Commonwealth.
- (ix) An electric distribution company and affiliated electric generation supplier may not share office space and shall be physically separated by occupying different buildings.
 - (4) Accounting and training requirements.
- (i) An electric distribution company and an affiliated electric generation supplier shall maintain separate accounting records for their business activities.
- (ii) An electric distribution company that has an affiliated electric generation supplier shall document the business relationship through a cost allocation manual.
- (A) The cost allocation manual must include an organizational chart, identify contractual agreements between the two entities, include job positions and job descriptions of shared or temporarily assigned employees and a log of business transactions between the electric distribution company and electric generation supplier.
- (B) The cost allocation manual shall be filed with the Commission by _____ (Editor's Note: The blank refers to 6 months after the effective date of adoption of this proposed rulemaking.). Substantial revisions to the cost allocation manual shall be filed when necessary. The cost allocation manual shall be posted by the electric distribution company on its web site within 48 hours of filing with the Commission.
- (C) The cost allocation manual shall be reviewed as part of the audits and management efficiency investigations under section 516 of the code (relating to audits of certain utilities).
- (iii) An electric distribution company and affiliated electric generation supplier or transmission supplier may not share employees or services, except for corporate support services, emergency support services or tariff services offered to electric generation suppliers on a nondiscriminatory basis. Temporary assignments of employees from an electric distribution company to an affiliated electric generation supplier or transmission supplier, for less than 1 year, shall be considered the same as sharing employees.
- (A) Corporate support services do not include purchasing of electric transmission facilities, service and wholesale market products, hedging and arbitrage, transmission and distribution service operations, system operations, engineering, billing, collection, customer service, information systems, electronic data interchange, strategic management and planning, account management, regulatory services, legal services, lobbying, marketing or sales.
- (B) Emergency support services are temporary services necessary to protect consumer safety or prevent interruption of service.
- (C) The electric distribution company shall report to the Commission by January 31 of each year the work history of each shared, temporarily assigned or permanently transferred employee to the affiliated electric generation supplier during the

previous calendar year and the employee's new position with the affiliate.

- (iv) An electric distribution company and its affiliated or divisional electric generation supplier shall formally adopt and implement these provisions as company policy and shall take appropriate steps to train and instruct its employees in their content and application.
- (5) Dispute resolution procedures. An electric distribution company shall adopt the following dispute resolution procedures to address alleged violations of this section:
- (i) Regarding a dispute between an electric distribution company or a related supplier, or both, and an electric generation supplier (each individually referred to as "party" and collectively referred to as "parties") alleging a violation of this section, the electric generation supplier shall provide the electric distribution company or related supplier, or both, a written notice of dispute which includes the names of the parties and customers, if any involved, and a brief description of the matters in dispute.
- (ii) Within 5 days of receipt of the notice by the electric distribution company or related supplier,

- or both, a designated senior representative of each of the parties shall attempt to resolve the dispute on an informal basis.
- (iii) If the designated representatives are unable to resolve the dispute by mutual agreement within 30 days of the referral, the dispute shall be referred for mediation through the Commission's Office of Administrative Law Judge. A party may request mediation prior to that time if it appears that informal resolution is not productive.
- (iv) If mediation is not successful, the matter shall be converted to a formal proceeding before an administrative law judge and the prosecuting parties shall be directed to file a formal pleading in the nature of a complaint, petition or other appropriate pleading with the Commission within 30 days or the matter will be dismissed for lack of prosecution. A party may file a complaint, petition or other appropriate pleading concerning the dispute under any relevant provision of the code.
- (6) Penalties. An electric distribution company or electric generation supplier that does not comply with this subchapter shall be subject to penalties under section 3301 of the code (relating to civil penalties for violations).

[Pa.B. Doc. No. 12-230. Filed for public inspection February 10, 2012, 9:00 a.m.]