

Executive Summary

Amendments to 25 Pa. Code Chapters 121 and 129

Control of VOC Emissions from Flat Wood Paneling Surface Coating Operations

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

Purpose of the Proposed Rulemaking

The purpose of this proposed rulemaking is to amend Chapter 129 to limit emissions of volatile organic compounds (VOCs) from the use and application of inks, coatings, adhesives and cleaning materials in flat wood paneling surface coating processes. The proposal would add § 129.52c (relating to control of VOC emissions from flat wood paneling surface coating processes) and amend §§ 121.1 and 129.51 (relating to definitions; and surface coating processes).

There are no Federal statutory or regulatory limits for VOC emissions from flat wood paneling surface coating operations. State regulations to control VOC emissions from these surface coating operations are required under Federal law, however, and will be reviewed by the U.S. Environmental Protection Agency (EPA) for whether they meet the “reasonably available control technology” (RACT) requirements of the Clean Air Act (CAA) and its implementing regulations. *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).

Section 172(c)(1) of the CAA provides that State Implementation Plans (SIP) for nonattainment areas must include “reasonably available control measures,” including RACT, for sources of emissions. 42 U.S.C. § 7502(c)(1). 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 emission covered by a Control Techniques Guidelines (CTG) document issued by the EPA prior to the area’s date of attainment. 42 U.S.C. § 7511a(b)(2). More importantly, section 184(b)(1)(B) of the CAA requires that states in the Ozone Transport Region, including Pennsylvania, submit a SIP revision requiring implementation of RACT for all sources of VOC emissions in the state covered by a specific CTG. 42 U.S.C. § 7511c(b)(1)(B).

The Department has reviewed the recommendations included in the 2006 CTG for flat wood paneling coatings for their applicability to the ozone reduction measures necessary for this Commonwealth. The Department has determined that the measures provided in this CTG are appropriate to be implemented in this Commonwealth as RACT for this category.

These proposed amendments may provide an estimated 23.48 tons per year (for interior flatwood paneling operations) to 33.3 tpy (for exterior flatwood paneling operations) of additional

VOC emission reductions in Pennsylvania, depending on the type of flat wood paneling surface coating process. These proposed control measures are reasonably necessary as part of the Commonwealth's efforts to attain and maintain the health- and welfare-based 1997 and 2008 8-hour National Ambient Air Quality Standards for ozone. The final-form regulation, if adopted by the Board, will be submitted to the EPA as a revision to the SIP.

Summary of Proposal

The proposed amendments would add 15 new terms and definitions to § 121.1 to support the proposed addition of § 129.52c.

The proposed rulemaking would amend § 129.51(a) to extend its coverage to flat wood paneling surface coating processes covered by this proposed rulemaking. Section 129.51(a) provides an alternative method for owners and operators of facilities to achieve compliance with air emission limits.

The proposed rulemaking would add § 129.52c to regulate VOC emissions from flat wood paneling surface coating processes.

Proposed subsection (a) establishes that § 129.52c applies if the total actual VOC emissions from all surface coating operations, including related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day, before consideration of controls.

Proposed subsection (a) further provides that § 129.52c does not apply to a field-applied coating process, a coating process regulated under §§ 129.101-129.107 (relating to wood furniture manufacturing operations) or a coating process regulated under §§ 129.52(f) and 129.52, Table I, Category 11 (relating to surface coating processes; and wood furniture manufacturing operations).

Proposed subsection (b) explains that the requirements of § 129.52c supersede the requirements of a RACT permit already issued to the owner or operator of a source subject to § 129.52c, except to the extent the RACT permit contains more stringent requirements.

Proposed subsection (c) establishes VOC emission limits beginning January 1, 2011.

Proposed subsection (d) identifies daily records that must be kept to demonstrate compliance with § 129.52c.

Proposed subsection (e) requires that the records be maintained for 2 years and submitted to the Department on request.

Proposed subsection (f) specifies coating application methods.

Proposed subsection (g) exempts certain types of coatings and coating operations from the proposed VOC content coating limits.

Proposed subsection (h) establishes work practice requirements that an owner or operator of a surface coating process subject to § 129.52c must comply with for coating-related activities.

Proposed subsection (i) establishes work practice requirements that an owner or operator of a surface coating process subject to § 129.52c must comply with for cleaning materials.

Proposed Table I (relating to emission limits of VOCs for flat wood paneling surface coatings) establishes emission limits for VOCs for five types of flat wood paneling surface coatings, expressed in weight of VOC per volume of coating solids (pounds per gallon or grams per liter), as applied.

Affected Parties

In Pennsylvania, 11 flat wood paneling surface coating facilities that emitted a total of 440.44 tons of VOC emissions in 2008 are potentially subject to the proposed rulemaking. The potentially noncomplying interior flat wood paneling coating operations of the largest emitter had total VOC emissions of 75.9 tons in 2008. Based on 2008 data, the estimated potential maximum annual additional VOC emission reductions from noncomplying interior flat wood paneling coating operations at this facility would be 15.18 tons (75.9 tons x 20%). The estimated maximum annual cost for the owners or operators of this facility for noncomplying interior flat wood paneling coating operations would be \$28,842 from this proposed rulemaking. No additional VOC emission reductions are expected from this facility for exterior siding coating operations. The remaining 10 potentially noncomplying facilities account for approximately 41.7 tons of VOC emissions emitted in 2008. The estimated total annual compliance costs for the owners and owners of the remaining facilities in this sector for noncomplying flat wood paneling coating operations range from approximately \$15,770 to \$86,000, depending on total actual VOCs for each facility. These costs are negligible compared to the improved health and environmental benefits that would be gained from this measure.

Advisory Groups

The concepts of the proposed rulemaking were discussed with the Air Quality Technical Advisory Committee (AQTAC) at its October 30 and December 11, 2008, meetings. The proposed rulemaking was discussed with the AQTAC on May 28, 2009. The AQTAC concurred with the Department's recommendation to present the proposed amendments to the Board for approval for publication as a proposed rulemaking. The Department also consulted with the Citizens Advisory Council on July 21, 2009, and with the Small Business Compliance Advisory Committee on October 22, 2008, and April 22 and July 22, 2009.

Public Comments and Board Hearings

The Department recommends a 60-day public comment period on the proposed rulemaking and three public hearings.