RULES AND REGULATIONS

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CHS. 121, 129 AND 139] Surface Coating Processes (RBI #4)

The Environmental Quality Board (Board), by this order amends Chapters 121, 129 and 139 (relating to general provisions; standards for sources; and sampling and testing) to read as set forth in Annex A.

These amendments provide procedures for determining compliance with the volatile organic compound (VOC) emission limits for surface coating processes in § 129.52 (relating to surface coating processes). These amendments include an averaging approach for evaluating VOC emissions; an exemption for small quantities of coatings; and revision of the existing Table I to express VOC content in volume-solids-based and weight-solids-based emission limits. The amendments also establish presumptive reasonably available control technology (RACT) requirements for wood furniture manufacturing operations in §§ 129.101—129.107. The presumptive RACT requirements, based on the Environmental Protection Agency's (EPA) Control Techniques Guidelines (CTG), apply Statewide to VOC-emitting wood furniture manufacturing facilities with actual or potential emissions of 25 tons per year or more of VOCs. These amendments will be submitted to the EPA as a revision to the State Implementation Plan (SIP).

This final-form rulemaking was adopted by the Board at its meetings of December 21, 1999, and March 21, 2000

A. Effective Date

These amendments will be effective immediately upon publication in the *Pennsylvania Bulletin* as final-form rulemaking.

B. Contact Persons

For further information, contact Terry Black, Chief, Regulation and Policy Development Section, Division of Air Resources Management, Bureau of Air Quality, Rachel Carson State Office Building, 12th Floor, P. O. Box 8468, Harrisburg, PA 17105-8468, (717) 787-4310; or Joyce E. Epps, Assistant Counsel, Bureau of Regulatory Counsel, Office of Chief Counsel, Rachel Carson State Office Building, 9th Floor, P. O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060.

Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This final-form rulemaking is available through the Department of Environmental Protection (Department) Web site (http://www.dep.state.pa.us).

C. Statutory Authority

This final-form rulemaking is being made under the authority of section 5(a)(1) of the Air Pollution Control Act (act) (35 P. S. § 4005(a)(1)), which grants to the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth.

D. Background and Purpose

These amendments include regulatory changes which implement the Bureau of Air Quality's Regulatory Basics Initiative (RBI) mandated under the "Directive on Review of Existing Regulations and Technical Guidance" issued by Secretary Seif on August 4, 1995, and Executive Order 1996-1 (Regulatory Review and Promulgation). The changes for the surface coating provisions in § 129.52 are the fourth in a series of amendments to the air resources regulations under the RBI. The revisions to § 129.52 delete existing regulatory language to adjust coatings to a standard solvent density of 7.36 pounds per gallon and to a solids basis. The amendments also require the owners and operators of affected facilities to calculate and express the VOC content of the as applied coatings in volume-solids-based and weight-solids-based units and add criteria to allow for emission averaging of VOCs in certain surface coating processes on a 30-day rolling average basis. An exemption for small quantities of coatings used for touch-up and repair is also included in this final-form rulemaking.

These amendments also establish presumptive RACT requirements for certain wood furniture manufacturing operations. Section 183(a) of the Clean Air Act (42 U.S.C.A. § 7511b(a)) requires the EPA to issue CTGs for 11 categories of stationary sources of VOCs. On May 20, 1996, the EPA published a CTG document for control of VOCs from wood furniture manufacturing operations including wood furniture finishing, cleaning and washoff operations (61 FR 25223 (May 20, 1996)). The wood furniture manufacturing operations CTG establishes a "presumptive norm" RACT for the control of affected stationary sources. The standards apply to wood furniture manufacturing facilities located in marginal, moderate, serious and severe ozone nonattainment areas or ozone transport regions that emit or have the potential to emit 25 tons per year or more of VOCs. The CTG and a model rule for wood furniture manufacturing operations were developed by the EPA after reaching consensus among representatives from the environmental community, the wood furniture industry and state permitting agencies.

On September 27, 1996, the EPA published an addendum to the CTG which specified dates for the adoption and implementation of the standards. The notice required states that had not adopted an EPA-approvable RACT rule for wood manufacturing facilities to submit a RACT rule to the EPA on or before May 20, 1997, as a revision to the SIP. State rules should have required affected sources to install and operate control devices or implement procedures to demonstrate compliance no later than May 20, 1998 (61 FR 50823 (September 27, 1996)).

The Department consulted with the Air Quality Technical Advisory Committee (AQTAC) during the development of this final-form rulemaking. On August 23, 1999, the AQTAC recommended that the final-form rulemaking be submitted to the Board for consideration. The Department also discussed the final-form regulations with the Small Business Compliance Advisory Committee. Following promulgation of the amendments to Chapters 121, 129 and 139, the provisions will be submitted to the EPA as a SIP revision.

E. Summary of Regulatory Requirements and Changes from Proposed to Final

These amendments implement the fourth series of changes under the Department's RBI for air resources

regulations and establish criteria to implement the presumptive RACT requirements for wood furniture manufacturing operations. The presumptive RACT requirements establish limitations on VOC emissions and the implementation of work practice standards. A summary of the final rulemaking follows:

Chapter 121. General Provisions

§ 121.1. Definitions.

The amendments to § 121.1 (relating to definitions) add the following definitions: "alternative method," "as applied," "as supplied," "basecoat," "CPDS—certified product data sheet," "coating," "coating solids or solids," "compliant coating," "continuous coater," "conventional air spray," "cosmetic specialty coatings," "enamel," "equivalent method," "MSDS—material safety data sheet," "nonpermanent final finish," "normally closed container," "pollution prevention," "sealer," "stain," "strippable spray booth coating," "thinner," "touch-up and repair," "washoff operations," "waterborne coating," "wood furniture," "wood furniture component" and "wood furniture manufacturing operations."

The final rulemaking deletes the following terms in § 121.1: "clear sealers," "opaque ground coats and enamels," "other coatings," "semitransparent spray stains" and "semitransparent wiping and glazing stains." The terms were deleted to eliminate inconsistencies between definitions for existing surface coating requirements in § 129.52 and the newly adopted presumptive RACT requirements for wood furniture manufacturing operations in §§ 129.101—129.107. The proposed definition for the term "operating parameter value" has been included in this final rulemaking even though it was recently codified in § 121.1 as part of the final-form regulations for aerospace manufacturing and rework facilities. See 29 Pa.B. 1879 (April 10, 1999).

In addition, the second paragraph in the "CPDS—certified product data sheet" definition has been deleted because it is not consistent with the EPA's CTG and model rule. Information pertaining to the emission of hazardous air pollutants can be obtained under the National Emission Standards for Hazardous Air Pollutants (NESHAP) for wood furniture manufacturing operations in 40 CFR Part 63, Subpart JJ (relating to National emission standards for wood furniture manufacturing operations). The "CPDS—certified product data sheet" definition applies solely to the wood furniture manufacturing requirements in §§ 129.101—129.107.

These amendments also include revisions to the following existing definitions:

"Miscellaneous metal parts and products"—The amendments delete the phrase "but not limited to" and expand the Standard Industrial Classification Codes from 3300 through 3900 to 3999.

"Process"—The revisions to the term "process" correct a grammatical error and include "operations" necessary for the completion and transformation of the materials to produce a physical or chemical change.

"Surface coating process"—The changes to the definition specify that the surface coating process is the application and solidification of a coating onto or into a substrate as the substrate proceeds through the equipment and activities of the manufacturing process.

"Topcoat"—The amendments delete the existing definition of "topcoat" and define the term "topcoat" as the last film-building coating applied, in one or more layers, to wood furniture or a wood furniture component substrate in a surface coating process. The term does not include nonpermanent final finishes.

"VOC—volatile organic compound"—The revision to the "VOC" definition adds 40 CFR 51.100 (relating to definitions), the Federal citation for VOCs determined by the Administrator of the EPA to have negligible photochemical reactivity.

"Washcoat"—The revisions delete "low solids" and include a solids content by weight of 12.0% or less in accordance with the "washcoat" definition in the CTG and model rule for wood furniture manufacturing operations.

In response to the suggestions of several commentators, clarifying changes were made to the following definitions:

"Coating"—Revisions to the "coating" definition specify that the term applies only to the requirements for wood furniture manufacturing operations in §§ 129.101—129.107. The term does not include adhesives.

"Coating solids or solids"—Changes to the "coating solids or solids" definition clarify that the definition only applies to the requirements in §§ 129.101—129.107. In addition, the term explicitly provides that when the EPA's Reference Method 24 is not used to determine solids content, the use of alternative methodology must be approved by the Administrator of the EPA.

"Continuous coater"—Amendments to the "continuous coater" definition delete the word "roll" and add "roller" for consistency with the "roller" coating definition in § 121.1.

"Dip coating"—The existing definition for "dip coating" has been revised to clarify that components or objects are immersed into the coating. Once dipped, the coating may be recycled to a reservoir.

"Enamel"—The "enamel" definition has been revised to clarify that a coating may be applied as a topcoat over the enamel.

"Stains"—Revisions to the "stain" definition clarify that term is defined for purposes of the wood furniture manufacturing operations provisions in §§ 129.101—129.107.

"Topcoat"—The "topcoat" definition has been revised to clarify that a topcoat can be applied in several layers.

"Adhesive"—A chemical substance that is applied for the purpose of bonding two surfaces together other than by chemical means. The term does not include coatings or finishing materials. This definition has been added because the revised coating definition explicitly states that the term "coating" does not include "adhesives."

"Cosmetic specialty coatings"—Materials, including padding stains, shading stains, sap stains, spatter stains, fillers, waxes and inks applied to enhance wood finishes. The definition replaces the ambiguous term "other coatings" used in the existing surface coating provisions in § 129.52. Several commentators indicated that the term "other coatings" is confusing and not consistent with certain definitions in the presumptive RACT requirements.

Chapter 129. Sources of VOCs

§ 129.52. Surface coating processes.

This final-form rulemaking includes the following amendments to this section:

- § 129.52(b)(1)—The amendments delete the existing regulatory language requiring adjustment to a standard solvent density and a solids basis. This adjustment is incorporated into revisions to Table I (relating to allowable content of VOCs in surface coatings by process).
- § 129.52(b)(1)(i)—The final changes add an equation for calculating the VOC content of the as applied coating on the basis of weight of VOC per volume of coating solids to be used in evaluating compliance for Table I, Categories 1-10. This clarification is in response to the RBI report on Regulations Which Lack Clarity. The existing equation in § 129.52(b)(2) is not expressed in a format to allow for easy calculation of compliance.
- § 129.52(b)(1)(ii)—This amendment adds an equation for calculating the VOC content of dip coatings on a 30-day rolling average basis. The methodology for calculating the VOC content includes the gallons of thinner added to the coating in the process over any consecutive 30-day period to replace evaporated solvent.
- § 129.52(b)(1)(iii)—This amendment adds a simple equation for calculating the VOC content on the basis of weight of VOC per weight of coating solids. This methodology is used to evaluate compliance with Table I, Category 11 and with Table IV in §§ 129.101—129.107.
- § 129.52(b)(1)(iv)—The equation proposed for dipcoating operations has been deleted because it would have established more stringent requirements than the CTG for wood furniture manufacturing operations. Subparagraph (v) was renumbered.
- § 129.52(b)(2)—The existing equation for calculating the percentage of emission reductions needed for compliance purposes when using control equipment is deleted. A new equation is added for calculating the overall efficiency of the control system based on the new units of measurement in Table I (weight of VOC per volume of solids and weight of VOC per weight of solids).
- § 129.52(c)—This amendment deletes the existing list of required records and adds recordkeeping requirements that are appropriate to the required analytical methods used to evaluate compliance as specified in the Source Testing Manual. This change also emphasizes the need for facilities to keep records of volume solids content for coatings used in Table I, Categories 1—10.
- \S 129.52(e)—Revisions to this subsection clarify that records pertaining to the volume percent of solids are required only for surface coating processes listed in Table I, Categories 1—10.
- § 129.52(f)—Amendments to this subsection add terms that are consistent with the "roller coating" and "cosmetic specialty coatings" definitions specified in § 121.1.
- \S 129.52(g)—This amendment moves the existing requirement for maintaining records for 2 years from the existing \S 129.52(c) to this subsection to emphasize and add clarity to the amendments.
- § 129.52(h)—This amendment adds an exemption from VOC emission limitations for small quantities of coatings used for determination of product quality and commercial acceptance, touch-up and repair and other small quantity coatings. Subsection (h) requires the facility owner or operator to submit a written request to the Department to exempt quantities of coating which do not exceed 50 gallons a year for a single coating and a total of 200 gallons each year for all coatings combined for the facility. The Department's written approval must be obtained prior to use of the exempted coatings.

Wood Furniture Manufacturing Operations

§ 129.101. General provisions and applicability.

The requirements in § 129.101 (relating to general provisions and applicability) state that §§ 129.101—129.107 apply to each wood furniture manufacturing facility located in a county included in the northeast ozone transport region or in a county classified as severe, serious, moderate or marginal nonattainment for ozone and which emits or has the potential to emit 25 tons or more per year of VOCs from wood furniture manufacturing operations. The most stringent VOC emission limitation will apply to a wood furniture manufacturing operation that meets the applicability threshold limits for both § 129.52 and §§ 129.101—129.107.

Subsection (b) requires the owners or operators of wood furniture manufacturing operations to comply with the requirements of §§ 129.101-129.107 by June 11, 2000, if the actual emissions or potential to emit (PTE) for VOCs are 25 tons per year or greater. The compliance deadline for the presumptive RACT requirements does not apply to wood furniture manufacturing operations that have obtained EPA-approved SIP revisions for case-by-case RACT prior to June 10, 2000. Major VOC-emitting wood furniture manufacturing operations will no longer be subject to the RACT requirements in §§ 129.91—129.95 (relating to stationary sources of NO_x and VOCs) because the EPA has now issued a CTG for the control of VOC emissions from wood furniture manufacturing operations (61 FR 25223 (May 20, 1996)). Therefore, the Department will withdraw any case-by-case RACT determination that has not been EPA-approved as a SIP revision by June 10, 2000.

Subsection (c) provides a compliance deadline for the owner or operator of an existing wood furniture manufacturing facility which increases its actual emissions or PTE to 25 tons per year or more of VOCs from wood furniture manufacturing operations after the effective date of these amendments. Within 1 year after increasing actual VOC emissions or the PTE to 25 tons per year or more, the owner or operator of the affected facility shall comply with §§ 129.101—129.107. The newly adopted presumptive RACT requirements for wood manufacturing operations do not apply to facilities with EPA-approved SIP revisions for case-by-case RACT prior to June 10, 2000.

Subsection (d) establishes a compliance date for existing facilities that install new sources. New sources installed at an existing facility shall meet the VOC emission standards upon installation of the sources.

Subsection (e) describes the interface between the existing surface coating requirements in § 129.52 and the newly adopted presumptive RACT requirements. If actual or potential VOC emissions would subject the facility to both § 129.52 and §§ 129.101—129.107, the owner or operator would only have to demonstrate compliance with the most stringent emissions limitation.

The general provisions also exempt from the VOC emission limits in § 129.102, Table IV, a small quantity of coatings used exclusively for determination of product quality and commercial acceptance, touch-up and repair and other small quantity coatings if the Department provides prior written approval for the use of the coatings. Subsection (f) requires the owner or operator to submit a written request to the Department for exempt quantities of coating which do not exceed 50 gallons per year for a single coating and a total of 200 gallons per

year for all coatings combined for the facility. The Department's written approval must be obtained prior to use of the coatings.

§ 129.102. Emission standards.

This section lists in Table IV (relating to emission limits of VOC for wood furniture manufacturing sealers. topcoats and strippable spray booth coatings, as applied) the emission limits of VOCs for wood furniture manufacturing sealers and topcoats that are actually used for coating the substrate and strippable spray booth coatings. The owner or operator of a facility may demonstrate compliance with the VOC emission standards by applying either waterborne topcoats or a combination of sealers, topcoats and strippable spray booth coatings with a VOC content equal to or less than the standards specified in Table IV. Facility owners or operators may demonstrate compliance with the VOC emission standards by using an emissions averaging approach which meets the requirements of § 129.107 (relating to emissions averaging) or by using a control system that will achieve a reduction in emissions equivalent to 0.8 lb VOC/lb solids for topcoats or 1.8 lb VOC/lb solids for topcoats and 1.9 lb VOC/lb solids for sealers. An allowable emissions limit equal to 2.3 lb VOC/lb solids, as applied, is provided for the use of acid-cured alkyd amino sealers. When using acid-cured alkyd amino conversion varnish topcoats, the VOC emissions limit is 2.0 lb VOC/lb solids, as applied. The emission limits for sealers and topcoats are equivalent to coatings with solids contents of approximately 32 to 35% by weight respectively.

§ 129.103. Work practice standards.

This section establishes work practice standards to reduce VOC emissions from wood furniture manufacturing operations. The work practice standards include the development of a work practice implementation plan and operator training program, leak inspection and maintenance plan, and a cleaning and washoff solvent accounting system. Subsection (a) requires the owner or operator of a facility subject to the requirements in §§ 129.101-129.107 to develop and maintain a work practice implementation plan no later than 60 days after the compliance date. The work practice implementation plan shall include an operator training program, leak inspection and maintenance plan, a cleaning and washoff solvent accounting system, spray booth cleaning requirements, storage requirements and application equipment requirements. The owner or operator of the facility shall comply with each provision of the work practice implementation plan. If the Department determines that the work practice implementation plan does not adequately address the criteria in § 129.103(b)—(j), the owner or operator shall revise the plan.

Subsection (b) describes the elements of the operator training program. A copy of the required operator training program shall be maintained with the work practice implementation plan. All new and existing personnel, including contract personnel, who are involved in coating, cleaning or washoff operations or implementation of the requirements in §§ 129.101—129.107 shall complete the operator training program. The amendments require any new personnel hired after June 10, 2000, to be trained upon hiring. The operator training program must be completed by existing employes by December 11, 2000. For facilities which increase VOC emissions to the applicability threshold limits, new employes shall be trained upon hiring and existing employes shall be trained no later than 6 months before the compliance date.

Subsection (c) contains the requirements for the leak inspection and maintenance plan. The plan must address the required monthly visual inspections of equipment used to transfer or apply coatings or solvents and procedures for documenting the date and results of each inspection and any repairs that were made. The plan shall also include procedures to address the detection and repair of leaks. At a minimum, an attempt to repair the leak shall begin no later than 5 working days after the leak is detected. Final repairs to the system must be made within 15 working days, unless new equipment is being installed to repair the system. When installing new equipment, repairs shall be completed no later than 3 months from the date a leak is detected.

Subsection (d) describes the requirements pertaining to the cleaning and washoff solvent accounting system. A solvent accounting form shall be developed for recording information pertaining to the solvents used in cleaning and washoff operations. The information recorded on the form shall include the following:

- (1) The total number of pieces washed off each month and the reason for the washoff.
- (2) The names and total quantity of each solvent used each month for cleaning and washoff activities.
- (3) The name and total quantity of each solvent evaporated to the atmosphere each month from cleaning and washoff activities.

The cleaning and washoff solvent accounting information should be maintained onsite. However, the Department may request information pertaining to the cleaning and washoff solvent accounting system for compliance or enforcement purposes.

Subsection (e) provides work practices for spray booth cleaning. The owners or operators may not use compounds containing more than 8.0% by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters unless the spray booth is being refurbished. When a spray booth is being refurbished, no more than 1 gallon of organic solvent may be used to prepare the booth prior to applying the new strippable booth coating. The strippable booth coating shall contain no more than 0.8 lb VOC/lb solids (0.8 kg VOC/kg solids), as applied.

Section 129.103 also includes work practice standards for the storage of coating, cleaning and washoff materials, application equipment requirements, line cleaning, spray gun cleaning and washoff operations. Subsection (g) describes the work practice standards for application equipment and limits the use of conventional air spray guns. The use of conventional air spray guns is prohibited if the conventional air spray guns are not used in accordance with the procedures in § 129.103(g)(1)—(6). Conventional air spray guns may be used: to apply coatings that have a VOC content less than or equal to 1.0 lb VOC/lb solids (1.0 kg VOC/kg solids), as applied; if the spray is automated; or if the emissions from the surface coating process are directed to a VOC control system. The use of conventional air spray guns for touch-up and repair coatings is allowed if the coatings are applied after completion of the wood furniture manufacturing operation. The coatings may also be applied after the stain and before any other type of coating is applied and the coatings are applied from a container that has a volume of no more than 2.0 gallons. These amendments also prohibit the use of conventional air spray guns if the cumulative total coating is more than 5.0% of the total gallons of coating used during a semiannual reporting

§ 129.104. Compliance procedures and monitoring requirements.

This section describes compliance procedures and monitoring requirements used to demonstrate compliance with the presumptive RACT regulations for wood furniture manufacturing operations. The owner or operator of a facility subject to the emission standards of § 129.102 must demonstrate compliance through the use of compliant coatings, use of add-on control devices, an emissions-averaging approach or a combination of these compliance methods. When a combination of compliance options is selected, the owner or operator shall demonstrate compliance with each applicable compliance technique. When compliant coatings are being used, the owner or operator shall maintain CPDSs for each coating. If a solvent or other VOC is added to the coating before application, the facility must account for the dilution and maintain documentation showing the VOC content of the coating as applied, in lb VOC/lb solids.

Initial Compliance

Subsection (a) describes the methods and procedures an owner or operator of the facility shall use to demonstrate compliance with the VOC emission standards in § 129.102. The owner or operator shall maintain a CPDS for each coating that is subject to the VOC emission limits and records which demonstrate that each coating as applied meets the applicable VOC emission limit. When a control system is used to meet the VOC emission limits, the overall control efficiency shall be calculated using the equations in § 129.104(a)(2).

Subsection (b) describes the requirements for initial compliance. The owners or operators of a facility demonstrating compliance through the use of compliant coatings shall submit an initial compliance status report in accordance with § 129.106(a). Subsection (b)(1) requires the initial compliance report to specify whether compliant sealers, topcoats and strippable spray booth coatings are being used by the facility.

Subsection (b)(2) explains the initial compliance requirements for facilities using a continuous coater to apply sealers, topcoats or both. To demonstrate initial compliance, the owners or operators are required to submit an initial compliance status report. The report must specify either that compliant sealers, topcoats or both, as determined by the VOC content of the coating in the reservoir and as calculated from records, are being used or that compliant sealers, topcoats or both, as determined by the VOC content of the coating in the reservoir are being used and the viscosity of the coating in the reservoir is being monitored. The data provided shall show a correlation between the viscosity and the VOC content of the coating in the reservoir.

Subsection (b)(3) requires users of control systems to include the operating parameter values to be monitored for the capture device and the results of the initial performance testing in the initial compliance report. The procedures and test methods shall meet the requirements specified in Chapter 139.

Continuous Compliance Demonstrations

The owners or operators of wood furniture manufacturing operations subject to the presumptive RACT requirements in this final-form rulemaking shall submit a compliance certification with the semiannual report required under § 129.106(b). Facilities using compliant coatings to demonstrate compliance shall maintain records that prove that the coatings used in their operations are compliant. The compliance certification must

also state that compliant sealers, topcoats or both and strippable spray booth coatings have been used each day in the semiannual reporting period.

Subsection (c)(2) explains the continuous compliance requirements for facilities using continuous coaters to apply sealers or topcoats. The compliance certification submitted to the Department shall include a statement that compliant sealers, topcoats or both have been used each day in the semiannual reporting period. If the facility has not been in continuous compliance, the certification shall include the days of noncompliance and the reasons for noncompliance.

Subsection (c)(3) specifies the requirements for facilities that demonstrate compliance by using a control system. Owners or operators of affected sources are required to install, calibrate, maintain and operate monitoring equipment that has been approved, in writing, by the Department. If the facility is using a control system that is not described in § 129.104, approval by the Department shall be obtained prior to using the control system. The request for approval of the control system includes the following: a description of the system, test data verifying the performance of the system, the appropriate operating parameter values that will be monitored and the monitoring device that will be used to demonstrate continuous compliance with the standard.

The compliance certification for the control system must specify that the control system has not been operated at a daily average value greater than or less than (as appropriate) the operating parameter value for each day in the semiannual reporting period. If the operating parameter value is not in compliance, the certification shall identify the days of noncompliance and the reasons for noncompliance.

Each owner or operator of a facility that is subject to the work practice standards of § 129.103 shall demonstrate continuous compliance by following the work practice implementation plan. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the periods of noncompliance with the work practice standards and the reasons for noncompliance.

Subsection (d) requires compliance certifications to be signed by a responsible official of the company. In addition to the certification requirements of this section, the certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

§ 129.105. Recordkeeping requirements.

This section establishes recordkeeping requirements for wood furniture manufacturing operations. The owners or operators of affected facilities shall keep records adequate to demonstrate compliance with §§ 129.101—129.107. The records shall be maintained for at least 5 years. This section also includes specific recordkeeping requirements for facilities using compliant coatings, continuous coaters, control systems or a combination of these methods. The recordkeeping requirements of subsections (a)—(c) include the following:

- (1) CPDS for each coating and strippable spray booth coating.
- (2) Records of the VOC content of the as applied coating, lb VOC/lb solids (kg VOC/kg solids), of each coating and strippable spray booth coating and copies of data sheets documenting how the as applied values were

determined. Owners or operators applying sealers, topcoats or both, using continuous coaters shall also keep records of solvent and coating additions to the continuous coater reservoir and viscosity measurements.

Subsection (d) prescribes additional recordkeeping requirements for control systems which include copies of the calculations to support the equivalency of using a control system and records of the daily average value of each continuously monitored parameter for each operating day. If all recorded values for a monitored parameter are within the range established during the initial performance test, the owner or operator may record that all values were within the range rather than calculating and recording an average for that day.

Subsection (e) specifies that a copy of the work practice implementation plan and all records associated with meeting the requirements of that plan shall be maintained onsite. The records kept for the work implementation plan shall also satisfy the recordkeeping requirements for applicable provisions of the work practice implementation plan including the operator training program, the leak inspection and maintenance plan, the cleaning and washoff solvent accounting system and restrictions on the use of conventional air spray guns.

This section establishes reporting requirements for wood furniture manufacturing operations subject to the presumptive RACT requirements of §§ 129.101—129.107. Subsection (a) requires owners or operators of affected facilities to submit an initial compliance report to the Department no later than 60 days after the compliance date. The report shall include the items required by § 129.104(b).

§ 129.106. Reporting requirements.

Subsection (b) requires the submittal of semiannual reports certifying compliance for the previous 6 months of wood furniture manufacturing operations. The first report shall be submitted to the Department within 30 calendar days after the end of the first 6-month period following the compliance date. Subsequent reports shall be submitted within 30 calendar days after the end of each 6-month period following the first report.

§ 129.107. Special provisions for facilities using an emissions averaging approach.

This section allows the owners or operators of manufacturing operations to comply with the VOC emission limitations by averaging emissions across wood furniture finishing lines. The wood furniture manufacturing operation may use stains, basecoats, washcoats, sealers and topcoats in any emissions averaging program that meets the equivalency requirements in § 129.51(a). The facility may use other coatings for its emissions averaging program if the averaging approach meets the equivalency requirements. The emissions averaging program submitted to the Department for approval prior to use must include a summary of the reasons why the facility would like to comply with the emission limitations through an equivalency determination using emissions averaging procedures. The program summary shall also include an explanation of how averaging can be used to meet the emission limitations and a description of the types of coatings that will be included in the facility's emissions averaging program. An additional 10% reduction in emissions is required under subsection (b) for affected facilities using the emissions averaging approach.

Subsection (c) requires the owner or operator of the facility to submit a written summary to the Department explaining why the emissions averaging program should

be used to demonstrate compliance. The written summary shall also explain how emissions averaging can be used to meet the emissions limitations.

Subsection (d) requires the owner or operator of the facility to describe the types of coatings that will be included in the emissions averaging program. Coatings used in an averaging program may include basecoats, sealers, stains, topcoats and washcoats. Coatings in the emissions averaging program cannot be applied using a continuous coater unless the amount of coating used is determined on a daily basis.

Subsection (e) specifies that the baseline for each coating included in the emissions averaging program shall be the lower of the actual or allowable emission rate as of June 10, 2000. The baseline emission rate for the facility cannot be higher than what was presumed in the 1990 emissions inventory for the facility unless the Department has accounted for the increase in emissions as growth.

Subsection (f) provides that the quantification procedures used in the emissions averaging program shall demonstrate that the facility's actual emissions are less than the allowable emissions.

Subsection (g) requires that the emissions averaging program submitted to the Department include monitoring, recordkeeping and reporting procedures that will allow Department inspectors or owners or operators of facilities using an averaging approach to determine the facility's compliance status on a daily basis. The monitoring, recordkeeping and reporting procedures shall also include methods for determining required data when monitoring, recordkeeping and reporting violations result in missing, inadequate or erroneous monitoring and recordkeeping.

Chapter 139. Sampling and Testing
Subchapter A. Sampling and Testing Methods and
Procedures

§ 139.4. References.

The revisions to this section reflect name changes for the Department and the Bureau of Air Quality.

§ 139.14. Emissions of VOCs.

The amendments to this section require that the test methods and procedures for the content of total volatiles, solids and exempt solvents be equivalent to those listed in § 139.4(1) and (5).

Changes from the Proposed Rulemaking

In addition to the definitional changes that were summarized earlier in this section, changes from the proposed rulemaking are summarized as follows:

§ 129.91. Control of major sources of NOx and VOCs.

Amendments to § 129.91 address questions raised by several commentators and the Independent Regulatory Review Commission (IRRC) regarding the relationship between existing case-by-case RACT requirements and the newly adopted presumptive RACT requirements for wood furniture manufacturing operations. The amendments to § 129.91(a) state that the section does not apply to the owner or operator of a major VOC emitting facility for which requirements have been established in § 129.52, Table I, Category 11 (relating to surface coating processes) and §§ 129.101—129.107. However, the newly adopted presumptive RACT requirements would not apply to a facility for which the EPA approves a case-by-case RACT determination as a SIP revision prior to June 10,

2000. In these instances, the wood furniture manufacturing operation would continue to be subject to § 129.52 and the existing RACT requirements in §§ 129.91—129.95. See 24 Pa.B. 467 (January 15, 1994).

§ 129.101(b) and (c).

The phrase, "in addition to the requirements in § 129.52 (relating to surface coating processes)" has been deleted because an owner or operator only has to demonstrate compliance with the most stringent provision when subject to § 129.52 and the presumptive RACT provisions in §§ 129.101—129.107.

§ 129.101(e).

Revisions to subsection (e) streamline the existing surface coating requirements in § 129.52 and the newly adopted presumptive RACT requirements. If a facility's actual or potential VOC emissions require compliance with both §§ 129.52 and 129.101—129.107, the owner or operator would only have to demonstrate compliance with the most stringent emissions limitation.

§ 129.101(f).

Changes to this section will require an owner or operator seeking an exemption for small quantities of coating to satisfy the requirements of subsection (f)(1) and (2). The proposed rulemaking erroneously allowed the owner or operator to qualify for the exemption by complying with either of the requirements specified in this subsection.

§ 129.102(1).

Revisions to this paragraph clarify that an owner or operator may either apply waterborne topcoats or a combination of sealers and topcoats and strippable spray booth coatings with VOC contents equal to or less than the standards specified in § 129.102, Table IV.

In addition, the word "vinyl" has been deleted from Table IV. This revision allows owners or operators to use lower VOC content solvents in acid-cured alkyd amino systems.

§ 129.102(3).

Several commentators pointed out that the proposed emission standards in § 129.102(3) were more stringent than the EPA's CTG and model rule. The 1.8 lb VOC/lb solids emission limit for topcoats was inadvertently omitted during the proposed rulemaking. Final changes to this paragraph provide that the control system shall achieve a reduction in emissions equivalent to either 0.8 lb VOC/lb solids for topcoats or 1.8 lb VOC/lb solids for topcoats and 1.9 lb VOC/lb solids for sealers.

§ 129.103(a).

The EPA's CTG and model rule for wood furniture manufacturing operations require affected sources to develop and maintain a work practice implementation plan within 60 days of the compliance date. Revisions to subsection (a) establish the same timeframe for wood furniture manufacturers to develop and maintain a work practice implementation plan.

§ 129.103(b)(1) and (2).

Final changes to subsection (b)(1) require new employes to be trained upon hiring. For wood furniture manufacturing operations that subsequently increase VOC emissions to the applicability thresholds specified in § 129.101(c), new employes shall also be trained upon hiring.

Revisions to subsection (b)(2) clarify that the training schedule for existing employes will vary for existing facilities currently subject to the final-form regulations and facilities that subsequently increase VOC emissions to the applicability thresholds. Owners or operators of wood furniture manufacturing operations meeting the requirements of § 129.101(b) shall train existing employes by December 11, 2000. If a facility increases its VOC emissions to the applicability thresholds, existing employes shall be trained at least 6 months before the compliance date.

§ 129.103(d).

Revisions to this section clarify that the purpose of the cleaning and washoff accounting system is to track the type and quantity of coatings used in wood furniture manufacturing operations. The owner or operator shall record the name and total quantity of each solvent evaporated to the atmosphere each month from cleaning and washoff activities. This information should remain onsite unless requested by the Department for compliance or enforcement purposes. In accordance with the confidentiality provision in section 13.2 of the act (35 P. S. § 4013.2), an owner or operator of the facility may show cause as to why this information should be treated as confidential information.

§ 129.103(g)(6).

The final amendments to this paragraph specify that the Department will provide written notice to an owner or operator concerning a claim of technical or economic infeasibility for spray technology other than a conventional air spray gun. When an owner or operator claims technical or economic infeasibility, the conventional air spray gun cannot be used until the Department notifies the applicant in writing of its determination.

§ 129.103(j)(1).

Final changes to subsection (j)(1) add the terms, "normally closed container" and "washoff operations," to be consistent with the terms defined in § 121.1.

§ 129.104.

Minor revisions to this section correct typographical errors. In addition, parameter "E" for the equation used to calculate the overall control efficiency for a control system has been revised to indicate that the applicable emission limit is specified in Table IV.

§ 129.105.

Minor changes to this section include corrections needed to address final-form rulemaking changes pertaining to the initial status report and compliance certifications required under § 129.106.

§ 129.106(a).

The proposed initial notification requirement in subsection (a) has been deleted. Information concerning facilities that are subject to the presumptive RACT requirements in §§ 129.101—129.107 can be obtained through the Department's plan approval and operating permit programs. Certain MACT-affected facilities have already provided the initial notification required under 40 CFR Part 63, Subpart JJ (relating to National emission standards for wood furniture manufacturing operations).

§ 129.107(d)(2) and (3).

Final changes to subsection (d)(2) specify that the owner or operator of the facility may choose the coatings

used in an emissions averaging program. A reference to the owner or operator of the facility has also been added in subsection (d)(3).

F. Summary of Comments and Responses on the Proposed Rulemaking

The Board held four public hearings on the proposed rulemaking published at 29 Pa.B. 1299 (March 6, 1999). The hearings were held at Department Regional Offices in the following areas of this Commonwealth: Pittsburgh on April 6, 1999; Harrisburg on April 7, 1999; Conshohocken on April 8, 1999; and Williamsport on April 9, 1999. Five interested persons provided testimony during the public hearings. The public comment period closed on May 10, 1999.

During the 66-day public comment period, written comments on the proposal were submitted to the Board by IRRC and 13 commentators including the EPA and wood furniture manufacturers. All comments submitted to the Board were considered and, when appropriate, the final-form rulemaking was revised to reflect the commentators' suggestions or objections on the proposal. Testimony and written comments received during the public comment period are summarized in the Comment and Response Document that is available electronically at www.dep.state.pa.us. A listing of significant comments concerning the proposal is as follows:

1. Four commentators expressed support for the proposed rulemaking.

Comment: In general, my company supports the proposed rulemaking. We support the use of the presumptive RACT requirements for wood furniture manufacturing operations in this Commonwealth.

Response: The Department appreciates industry support of the proposal published at 29 Pa.B. 1299.

2. Several commentators offered suggestions and objections to certain definitions proposed in § 121.1.

Comment: The definition for the term "CPDS—certified product data sheet" states that the CPDS should include the content of hazardous air pollutants (HAPs). This information should not be required on a data sheet used to determine compliance with a VOC rule.

Response: The "CPDS" definition has been revised to only require information pertaining to the VOC content. Information pertaining to HAPs will be obtained from the CPDS submitted under section 112 of the Clean Air Act (42 U.S.C.A. § 7412) and 40 CFR Part 63, Subpart JJ. The "CPDS—certified product data sheet" definition applies solely to the wood furniture manufacturing requirements in §§ 129.101—129.107.

Comment: It was suggested that the Department clearly indicate that adhesives are not included in the definition of "coatings." As currently written, this could be open to question.

Response: The "coating" definition has been revised to explicitly state that the term does not include adhesives and that the term "coating" applies only to the requirements for wood furniture manufacturing operations in §§ 129.101—129.107. Certain adhesives will continue to be regulated under § 129.52, Table I, for processes in Categories 1—10. However, adhesives are not regulated for VOC content under § 129.52, Table I, Category 11 and §§ 129.101—129.107.

Comment: The definition of the term "coating solids or solids" states that the "Solids content is determined using data from the EPA Reference Method 24 or an alternative

method." It is not clear if the EPA or the Department must approve the alternative method.

Response: The proposed definition of the term "alternative method" states that the EPA shall approve any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method. To address the commentator's concern, the revised definition indicates that EPA approval is required to use an alternative method. The term "coating solids or solids" applies solely to §§ 129.101—129.107.

Comment: The presumptive RACT standard contains no definition for the term "enamel." The proposed "enamel" definition was taken from the EPA's MACT standard. Retaining the definition of "enamel" from the MACT standard will only cause confusion in the field.

Response: The commentators are mistaken. The EPA's "Model Rule for Wood Furniture Finishing and Cleaning Operations" contains the same definition of "enamel" as is included in Pennsylvania's RBI #4 proposal. Therefore, the "enamel" definition in the proposed rule will be retained in the final rulemaking. See pages B-5 and 6, Section B.3 (relating to definitions and nomenclature) of the EPA's model rule.

Comment: The commentator suggested that the term "enamel" be included in the definition of "topcoat" for purposes of the presumptive RACT regulation.

Response: The suggested revisions are not consistent with the presumptive RACT requirements for state programs and will not be included in the final-form regulations. The EPA's model rule provides separate definitions for the terms "enamel" and "topcoat." As proposed, the definitions for the terms "enamel" and "topcoat" are consistent with the EPA's CTG and model rule.

Comment: The definition of the term "spent solvent" in § 129.103(d)(3) is not clear and should be modified. The existing definition would almost always yield a result of

Response: The proposed "spent solvent" provision is based on the EPA's model rule. Changes to spent solvent requirements in § 129.103(d)(3) clarify that the owner/operator of the facility shall document the quantity of each organic solvent evaporated to the atmosphere from cleaning and washoff activities.

Comment: The definition of "stain" conflicts with the definition of "other coatings" in \S 121.1. "Other coatings" includes some of the same coatings as "stain." This creates confusion.

Response: The term "other coatings" has been changed to "cosmetic specialty coating" in the final-form regulations. The "stain" definition now applies solely to the presumptive RACT requirements in §§ 129.101—129.107

3. One commentator indicated that this rulemaking deletes the requirement to adjust VOC content by using a standard solvent density of 7.36 pounds per gallon.

Comment: The deletion of the existing requirement to adjust the VOC content by using a standard solvent density of 7.36 pounds per gallon is a good idea since this concept never had good technical merit as to yield correct values or relationships for compliance.

Response: This rulemaking only deletes the expressed reference to the 7.36 pounds per gallon adjustment. This factor is reflected in the conversion of the VOC content limits in § 129.52, Table I from the gallons of coating less

water basis to the solids basis. The conversion was made using the 7.36 lb VOC/gal VOC standard solvent density factor.

4. The EPA indicated that the proposal did not contain a specific reference to transfer efficiencies.

Comment: The regulations make reference in § 129.52(b)(1) to the limits being "VOC content of each coating as applied is equal to or less than the standard specified in Table I." There is no reference to transfer efficiencies even though the provision infers that you must account for transfer efficiencies.

Response: The term "as applied" means "[t]he VOC and solids content of a coating that is actually used to coat the substrate. The term includes the contribution of materials used for in-house dilution of the coating." Under the "as applied" definition, the owner or operator shall account for the VOC and solids content of the coating after mixing but prior to actual application for compliance purposes. Therefore, the transfer efficiency is not taken into account for "as applied" coatings.

5. The EPA pointed out that the proposal does not state whether compliance is to be determined on an instantaneous or 30-day rolling average basis for processes covered under equations in § 129.52(b)(1)(i) and (iii).

Comment: Since § 129.52(b)(1)(i) and (iii) do not apply to dip coating processes, it is not clear whether the 30-day rolling average applies or if compliance is to be determined on an instantaneous basis.

Response: Evaluation of a coating for compliance with § 129.52(b)(1)(i) and (iii) shall be determined on an instantaneous basis. The VOC content is determined either by review of coating records or by sampling the as applied coating and analyzing the sample by the EPA Reference Method 24 and other methods listed in the Department's Source Testing Manual. If the company's reported VOC content and the Department's laboratory analysis for a particular coating differ, the Department's laboratory analysis controls if it shows that the coating exceeds the allowable VOC emissions limit.

6. Several commentators and IRRC raised questions concerning the impact that the presumptive RACT requirements for wood furniture manufacturing facilities would have on the existing case-by-case RACT provisions in §§ 129.91—129.95. A few of the comments and responses pertaining to case-by-case RACT determinations are as follows:

Comment: Neither the Preamble nor the regulations address the issue of the existence of state-only case-by-case RACT permits. These permits are being issued prior to case-by-case RACT plans being approved by the EPA as SIP revisions. The Preamble should address how these State-only case-by-case RACT permits can be rescinded. Otherwise it appears that a manufacturer could be subject to both presumptive RACT and case-by-case RACT. This is clearly not the intent of the Department or the EPA.

Response: Wood furniture manufacturers that currently do not have case-by-case RACT determinations approved by the EPA as SIP revisions shall continue to comply with the case-by-case RACT terms and conditions specified in Federally enforceable permits. If the Board adopts the presumptive RACT requirements prior to a company receiving SIP-approval of its case-by-case RACT determination, the facility would then be subject to the State's presumptive RACT requirements. The SIP submittal would be withdrawn and the permit revised to reflect the

newly adopted RACT requirements for wood furniture manufacturing operations. Following issuance of the revised permit, the case-by-case RACT requirements would no longer be applicable.

Comment: The proposed regulations are silent on how the Department's case-by-case RACT rules (§§ 129.91—129.95) will be affected by the adoption of presumptive RACT. Sections 129.91—129.95 should be amended to reflect the adoption of presumptive RACT, in place of case-by-case RACT, for those facilities subject to presumptive RACT.

Response: The final-form rulemaking adds language to § 129.91(a) to clarify that the existing RACT requirements do not apply to major VOC-emitting facilities for which requirements have been established in § 129.52 Table I, Category 11 and §§ 129.101—129.107. Consequently, the case-by-case RACT provisions would no longer apply to wood furniture manufacturing facilities subject to regulation under the presumptive RACT requirements in §§ 129.101—129.107 if their case-by-case determinations have not been SIP-approved.

Comment: Section 129.101 should be amended to reflect the adoption of presumptive RACT, in place of case-by-case RACT, for those facilities subject to presumptive RACT.

Response: The final-form rulemaking amends § 129.91 to address this concern. As proposed, in § 129.101(b) and (c) contain an exception for facilities that have RACT determinations approved by EPA as a SIP revision prior to June 10, 2000, for surface coating processes.

7. One commentator suggested that the amount of coatings exempted for determination of product quality and commercial acceptance is insufficient for large operations

Comment: The proposed exemption from VOC content limitations for small quantities of coatings used for determination of product quality and commercial acceptance is excellent in principle. However, the proposed exemptions of 50 gallons for one coating and 200 gallons for all coatings combined at the facility per year are not realistic numbers for large surface coating operations.

Response: The small quantity exemption amounts of 50 gallons for one coating and 200 gallons for all coatings combined will be retained in the final-form rulemaking to ensure that there will be no adverse air quality impacts from these activities.

8. The Board specifically requested comments concerning the need for owners or operators of wood furniture manufacturing facilities with actual emissions or the potential to emit 25 tons per year or more of VOCs to comply with both the surface coating requirements in § 129.52 and the proposed presumptive RACT requirements in §§ 129.101—129.107.

Comment: Relative to the first question posed by the Department in Section J (relating to public comments) of the Preamble, wood furniture manufacturers subject to the proposed §§ 129.101—129.107 should have to comply only with the proposed presumptive RACT requirements. Manufacturers should no longer be subject to the requirements in § 129.52.

Response: The existing wood cabinet and furniture finishing provisions in § 129.52 were adopted by the Board on May 7, 1988, and will continue to apply to all affected wood furniture manufacturing operations. Generally, facilities which are currently regulated under § 129.52 have demonstrated compliance with the applicable VOC con-

tent limits and should therefore have no trouble continuing to comply with the applicable requirements of § 129.52. A facility that is subject to both §§ 129.52 and 129.101—129.107 need only demonstrate compliance with the more stringent emissions limitation or other applicable requirement as specified in § 129.101(e).

Comment: To require wood furniture and cabinet manufacturers to adhere to two different and often conflicting sets of surface coating regulations is inconsistent with Executive Order 1996-1 and the Department's Regulatory Basics Initiative. Additionally, requiring compliance with both the presumptive RACT requirements and § 129.52 places extra restrictions on manufacturing processes (above the Federal CTG requirements), is difficult to understand, largely redundant and requires excessive recordkeeping and reporting.

Response: The surface coating processes proposed rule-making is consistent with the principles of Executive Order 1996-1 which provides, in relevant part, that "if Federal regulations exist, regulations of the Common-wealth may not exceed Federal standards unless justified by a compelling and articulable Pennsylvania interest or required by State law." The existing provisions in § 129.52 were adopted to "help reduce emissions of VOC which is necessary to meet the ambient air quality standards..." See 18 Pa.B. 2098 (May 7, 1988). The entire Commonwealth is included in the Ozone Transport Region established under section 184 of the Clean Air Act. See 42 U.S.C.A. § 7511c. Therefore, retention of § 129.52 is justified by a compelling Pennsylvania interest, achieving and maintaining the NAAQS for ozone.

In addition, retention of the wood cabinet and furniture finishing requirements of § 129.52 is not contrary to applicable requirements of the act. Section 4.2(f) of the act (35 P. S. § 4004.2(f)) provides that the Board may retain existing requirements in § 129.52 if the regulations were adopted prior to July 9, 1992. The existing wood cabinet and furniture finishing requirements in § 129.52 were adopted by the Board on May 7, 1988. These provisions are currently being met by most facilities. Whenever a surface coating process is subject to the presumptive RACT requirements and the requirements of § 129.52, the facility shall demonstrate compliance with the more stringent requirement.

If the requirements in § 129.52 were deleted for larger wood furniture manufacturing operations, facilities with actual VOC emissions greater than 2.7 tons per year, but potential emissions of VOCs less than 25 tons per year, would no longer be regulated. Consequently, those facilities could then legally use noncomplying materials and application equipment, increase VOC emissions and counteract the Department's efforts to comply with the Federal National Ambient Air Quality Standard (NAAQS) for ozone.

Comment: Every major component of § 129.52 is also included in §§ 129.101—129.107. They both have material VOC content limits, application equipment requirements and recordkeeping and reporting obligations. It is our position that at the time a facility reaches the potential to emit of VOCs of 25 tons per year or more, only the more stringent presumptive RACT requirements of §§ 129.101—129.107 should apply.

Response: The proposed language in § 129.101(e) stated that "when subject to § 129.52 and this section and §§ 129.102—129.107, the more stringent limitation applies to the wood furniture manufacturing operation." In the final rulemaking, subsection (e) has been revised to

indicate that facilities subject to § 129.52 and 129.101—129.107 need only demonstrate compliance with the most stringent requirement. Under section 184 of the Clean Air Act (42 U.S.C.A. § 7511(c)), this Commonwealth is included in the Ozone Transport Region established by operation of law. Therefore, retention of the existing requirements in § 129.52 is justified by a compelling Pennsylvania interest, achieving and maintaining the NAAQS for ozone.

In some circumstances, § 129.52 requirements will apply instead of the newly adopted presumptive RACT requirements. Whenever a facility's actual emissions exceed 2.7 tons per year and its potential VOC emissions reach 25 tons per year or more, the facility owner/ operator need only demonstrate compliance with the more stringent provision. Title V permits issued to major wood furniture manufacturing operations would contain streamlined permit conditions. The most stringent applicable requirement would be included in the permit. In these instances, the streamlined permit condition would assure compliance with the less stringent provision. Consequently, the permit would not contain duplicative permit conditions.

Comment: The commentator suggested that the term "vinyl" be deleted from the coating systems listed in § 129.102(1), Table IV, Category 3. Acid cured sealers and topcoats are primarily based on what is known as alkyd amino technology. Resins such as vinyl or nitrocellulose are sometimes added to the alkyd amino base to help dry the surface of these otherwise slow systems. Specifying the term "vinyl" severely limits the resin choices for modifying the alkyd amino base. The solvents needed to dissolve the vinyl in the coating system may be more active, higher VOC or HAPs containing solvents. Modifying resins other than vinyls can and are used to produce acid-cured alkyd amino systems at equal or lower pounds of VOC per pound of coating solids than are produced with vinyls.

Response: The Department concurs with this recommendation and has deleted the term "vinyl" from the acid-cured alkyd amino systems category specified in § 129.102(1), Table IV, Category 3.

Comment: In the discussion relating to § 129.103(d), it would be helpful to explain that the sensitive data generated by the cleaning and washoff solvent accounting system is not required to be submitted to the Department in any type of report. There is concern in the regulated community that this data could be made publicly available.

Response: The Department has revised the "cleaning and washoff solvent accounting system" requirements in the final-form rulemaking. Section 13.2 of the act (35 P. S. § 4013.2) authorizes the Department to treat certain information obtained by the Department as confidential information if a person shows cause as to why the records, report, data or information should be considered confidential by the Department. Under no circumstances, however, is emissions data kept confidential. Although data obtained from records for the cleaning and washoff solvent accounting system would not routinely be submitted to the Department, this data could be obtained during inspections or for enforcement purposes. If the "sensitive data" obtained by the Department is emissions data, it cannot be considered confidential information.

9. The Board specifically requested comments on whether the reporting requirements in 40 CFR 63.7—63.10 should be adopted. These general reporting provi-

sions specify time frames for reporting performance test results, monitoring parameter values and excess performance test results. Under the EPA's model rule for wood furniture manufacturing operations, the general MACT reporting requirements are an optional State presumptive RACT program component.

Comment: Relative to question two posed in paragraph J of the Preamble of the proposed rulemaking, the commentator endorsed the adoption of the MACT reporting requirements that were developed during the EPA Regulatory Negotiation.

Response: The adoption of the MACT reporting requirements for major wood furniture manufacturing operations reporting VOC emissions under the presumptive RACT rule would be duplicative if the facility is already subject to the MACT reporting requirements. When issuing Title V permits, applicable reporting requirements will be streamlined and the most stringent requirement included as a permit condition. For example, if the MACT reporting requirements are more stringent than other applicable reporting provisions, the permit will contain the MACT reporting requirements and explicitly state that the streamlined permit condition assures compliance with other applicable reporting requirements.

G. Benefits and Costs

Executive Order 1996-1 requires a cost/benefit analysis of the final-form regulations.

Benefits

Compliance with these amendments will reduce VOC emissions to the atmosphere. Implementation of the work practice standards will reduce VOC emissions from cleaning operations. The restrictions on the use of conventional air spray guns will result in less overspraying and will, therefore, reduce the amount of solid waste and VOC emissions generated from overspraying. Emission reductions resulting from these regulations are also expected to reduce worker exposure to VOC emissions and other pollutants.

Compliance Costs

These amendments will affect approximately 450 surface coating facilities, including 80 wood furniture manufacturing facilities that are currently subject to record-keeping and reporting requirements. Approximately 20 of the major wood furniture manufacturing operations that could be subject to these regulations have submitted case-by-case RACT determinations to the EPA for approval as SIP revisions.

The amendments to § 129.52 will result in estimated savings of \$5.625 million for approximately 450 affected facilities. These cost savings are based on a reduction of .25 full time equivalent per facility per year in recordkeeping and reporting efforts, at an average salary of \$50,000, for a total of \$5.625 million for the current fiscal year.

Compliance Assistance Plan

Compliance assistance will be provided to affected facilities that are engaged in surface coating processes or the manufacture of wood furniture or wood furniture components. The Department will utilize the Pennsylvania Small Business Assistance Program and its ongoing regional compliance assistance program to assist small businesses in understanding and complying with Chapter 129

Pollution Prevention

The work practice standards adopted for the wood furniture manufacturing industry will reduce VOC emissions from affected sources. The restrictions on the use of conventional air spray guns imposed by these final-form regulations will also reduce the amount of VOCs emitted and the amount of solid waste generated from wood finishing operations. In addition, the implementation of operator training programs will reduce emissions and prevent pollution from wood finishing, clean-up and washoff operations.

Paperwork Requirements

These amendments contain recordkeeping and reporting provisions needed to demonstrate compliance with the requirements for surface coating processes and wood furniture manufacturing requirements. The owner or operator of an affected facility that complies with the wood furniture manufacturing provisions in §§ 129.101-129.107 shall prepare and maintain a work practice implementation plan including work practices for operator training, leak inspection and maintenance planning, and cleaning and washoff solvent accounting. The owners or operators of affected facilities shall also prepare and maintain records of work practice plan activities, use of compliant coatings or an alternative methodology. The owners or operators shall also validate and verify information used to demonstrate compliance and prepare and maintain compliance certification records.

Any wood furniture manufacturing facility complying with the case-by-case RACT determinations or the National Emission Standards for Hazardous Air Pollutants (NESHAP) will have the same work practice standards and application equipment requirements. The Board expects that the majority of the remaining 60 wood furniture manufacturing facilities will be subject to the NESHAP for wood furniture manufacturing operations in 40 CFR Part 63, Subpart JJ. These facilities will already have developed and implemented the paperwork requirements associated with the work practice standards such as operator training, inspection and maintenance planning, cleaning and washoff solvent accounting prior to June 10, 2000.

H. Sunset Review

These final-form regulations will be reviewed in accordance with the sunset review schedule published by the Board 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 February 17, 1999, the Board submitted a copy of the proposed rulemaking, published at 29 Pa.B. 1299, to IRRC and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees for review and comment.

In compliance with section 5(c) of the Regulatory Review Act, the Board also provided IRRC and the Committees with copies of the comments as well as other documentation. In preparing the final-form regulations, the Board has considered the comments received from IRRC and the public. The Committees did not provide comments on the proposed rulemaking.

Under section 5.1(d) of Regulatory Review Act (71 P. S. § 745.5a(d)), these final-form regulations were deemed approved by the House and Senate Committees on April 17, 2000. Under section 5.1(e) of the Regulatory Review Act, IRRC met on April 27, 2000, and approved the final-form regulations.

J. Findings

3006

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period and public hearings were provided as required by law and all comments were considered.
- (3) These final-form regulations do not enlarge the purpose of the proposal published at 29 Pa.B. 1299.
- (4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing act identified in Section C of this Preamble.
- (5) These final-form regulations are necessary to satisfy related Clean Air Act requirements as they specifically relate to this Commonwealth and are reasonably necessary to achieve and maintain the NAAQS.

K. Order

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department, 25 Pa. Code Chapters 121, 129 and 139, are amended by amending §§ 121.1, 129. 52, 129.91, 139.4 and 139.14 and by adding §§ 129.101—129.107 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Senate and House Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau as required by law.
- (e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JAMES M. SEIF, Chairperson

(*Editor's Note:* For the text of the order of the Independent Regulatory Review Commission, relating to this document, see 30 Pa.B. 2430 (May 13, 2000).)

Fiscal Note: 7-339. 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:

Adhesive—A chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. The term does not include coatings or finishing materials.

* * * * *

Alternative method—A method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but has been demonstrated to the satisfaction of the Administrator of the EPA to, in specific cases, produce results adequate for a determination of compliance.

* * * * * *

As applied—The VOC and solids content of a coating that is actually used to coat the substrate. The term includes the contribution of materials used for in-house dilution of the coating.

As supplied—The VOC and solids content of a coating as sold and delivered to the end user.

* * * * *

Basecoat—A coat of colored material, usually opaque, that is ordinarily applied before graining inks, glazing coats or other opaque coatings and is usually covered with an application of topcoat for protection.

* * * * *

CPDS—Certified Product Data Sheet—For purposes of wood furniture manufacturing operations under §§ 129.101—129.107 (relating to wood furniture manufacturing operations), documentation furnished by a coating supplier or an outside laboratory for a coating, strippable spray booth coating or solvent that provides the VOC content as pounds of VOC per pound of coating solids calculated from data measured using the EPA Reference Method 24 or an equivalent or alternative method. Batch formulation data may be used if it is demonstrated to the satisfaction of the Administrator of the EPA that the coating does not release additional VOC as reaction byproducts during the cure. The VOC content stated should represent the maximum VOC emission potential of the coating, strippable spray booth coating or solvent.

Clear coat—A coating which lacks opacity or which is transparent and uses the undercoat as a reflectant base or undertone color, except for extreme performance coat-

Closed charging—The introduction of coal into a coke oven without exposing or opening the receiving coke oven to the atmosphere during charging.

* * * * *

Coating—For purposes of wood furniture manufacturing operations under §§ 129.101—129.107, a protective, decorative or functional material applied in a thin layer to a surface.

- (i) The term includes paints, topcoats, clear coats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings.
 - (ii) The term does not include adhesives.

Coating solids or solids—For purposes of wood furniture manufacturing under §§ 129.101—129.107, the part of the coating which remains after the coating is dried or cured. Solids content is determined using data from the EPA Reference Method 24 or an alternative method approved by the Administrator of the EPA.

* * * * *

Compliant coating—A coating that meets the applicable emission limits specified in Chapter 129 (relating to standards for sources).

* * * * *

Continuous coater—A surface coating process that continuously applies coatings onto parts moving along a conveyor. Coatings that are not transferred to the part are recycled to a reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roller coating, dip coating and flow coating.

* * * * *

Conventional air spray—A spray coating application method in which the coating is atomized by mixing it with compressed air and applied at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. The term does not include:

- (i) Airless and air assisted airless spray technologies.
- (ii) Electrostatic spray technology.

* * * * *

Cosmetic specialty coatings—Materials including padding stains, shading stains, sap stains, spatter stains, fillers, waxes and inks applied to enhance wood finishes.

* * * * *

Dip coating—The application of a coating by immersing an object into the coating.

* * * * *

Enamel—A coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer or previously applied enamel coat. Another coating may be applied as a topcoat over the enamel.

* * * * *

Equivalent method—A method of sampling and analyzing for an air pollutant that has been demonstrated to the satisfaction of the Administrator of the EPA to have a consistent and quantitatively known relationship to the reference method under specific conditions.

* * * * *

Final repair coat—Liquids applied to correct imperfections or damage to the topcoat.

* * * * *

MSDS—Material Safety Data Sheet—The documentation required for hazardous chemicals by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard—29 CFR Part 1910 (relating to occupational safety and health standards)—for a solvent, cleaning material, coating or other material that identifies select reportable hazardous ingredients of the material, safety and health considerations and handling procedures.

* * * * *

Miscellaneous metal parts and products—Items made of ferrous or nonferrous metals, including large farm machinery, small farm machinery, small appliances, commercial and industrial machinery, fabricated metal products and items listed under the Standard Industrial Classification Codes 3300—3999. The term does not include cans, coils, automobiles, light-duty trucks, metal furniture, magnet wire, large appliances, aerospace vehicles or components and automobile refinishing and customized top coating of automobiles and trucks, if production since January 1, 1987, has not exceeded 34 vehicles per day.

Nonpermanent final finish—A material such as a wax, polish, nonoxidizing oil or similar substance that must be periodically reapplied to a substrate over its lifetime to maintain or restore the material's effect.

* * * * *

Normally closed container—A container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

* * * * *

Opacity—The degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Open burning—A fire, the air contaminants from which are emitted directly into the outdoor atmosphere and not directed thereto through a flue.

* * * * *

Open top vapor degreaser—A batch-loaded device used to clean metal parts through the condensation or organic solvent on colder metal parts.

Operating parameter value—A minimum or maximum value established for a control equipment process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines whether an owner or operator has complied with an applicable emission limitation.

Optical antireflection coating—A coating, applied to aerospace vehicles or components, with a low reflectance in the infrared and visible wavelength ranges that is used for antireflection on or near optical and laser hardware.

Organic liquid cargo vessel—A tanker, freighter, barge, vessel, ship or boat used for the bulk transport of organic liquid cargo.

Outer zone of the southeast Pennsylvania air basin— The political subdivisions in the southeast Pennsylvania air basin which are not in the inner zone of the southeast Pennsylvania air basin.

* * * * *

Pollution prevention—Source reduction and other practices that reduce or eliminate the creation of pollutants through changes within the production process, including process modifications, feedstock substitutions, improvements in feedstock purity, shipping and packing modifications, housekeeping and management practices, increases in the efficiency of machinery and recycling within a process. The term does not include out-of-process recycling, treatment and safe disposal.

* * * * *

Process—A method, reaction or operation in which materials are handled or whereby materials undergo physical change—that is, the size, shape, appearance, temperature, state or other physical property of the material is altered—or chemical change—that is, a substance with different chemical composition or properties is formed or created. The term includes all of the equipment, operations and facilities necessary for the completion of the transformation of the materials to produce a physical or chemical change. There may be several processes in series or parallel necessary to the manufacture of a product.

* * * * *

Sealer—A coating used to seal the pores of a wood substrate before additional coatings are applied.

* * * * *

Semiaqueous cleaning solvent—A solution in which water is a primary ingredient (>60% by weight of the solvent solution as applied is water).

Serious ozone nonattainment area—A region with an ozone design value greater than or equal to 0.160 but less than 0.180 ppm as designated by the Administrator of the EPA. A designation is based on data from the 3-year period of 1987—1989 and may not be changed until the region demonstrates attainment of the NAAQS except in accordance with section 181 of the Clean Air Act.

* * * * *

Stain—For purposes of wood furniture manufacturing operations under §§ 129.101—129.107, a color coat having a solids content by weight of no more than 8.0% that is applied in single or multiple coats directly to the substrate. The term includes nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains and toners.

* * * * *

Strippable spray booth coating—A coating that meets the following requirements:

- (i) Is applied to a spray booth wall to provide a protective film to receive overspray during a surface coating process including wood furniture manufacturing operations.
 - (ii) Is subsequently peeled off and disposed.
- (iii) Reduces or eliminates the need to use solvents to clean spray booth walls by meeting the conditions of subparagraphs (i) and (ii).

* * * * *

Substrate—The surface onto which a coating is applied or into which a coating is impregnated.

* * * * *

Surface coating process—The application and solidification of a coating onto or into a substrate as the substrate proceeds through the equipment and activities of the manufacturing process.

* * * * *

Thinner—A volatile liquid that is used to dilute coatings (to reduce viscosity, color strength or solids content or to modify drying conditions). The term includes diluent, makeup solvent or reducer.

* * * * * *

Topcoat—The last film-building coating that is applied, in one or more layers, to wood furniture or a wood furniture component substrate in a surface coating process. The term does not include nonpermanent final finishes.

* * * * *

Touch-up and repair—The application of coatings to cover minor finishing imperfections.

* * * * *

VOC—volatile organic compound—An organic compound which participates in atmospheric photochemical reactions; that is, an organic compound other than those which the Administrator of the EPA designates in 40 CFR 51.100 (relating to definitions) as having negligible photochemical reactivity.

* * * * *

Washcoat—Clear liquids having a solids content by weight of 12% or less, applied over stains and toners to protect the color coats and to set the fibers for subsequent sanding or to separate spray stains from wiping stains to enhance color depth.

* * * * *

Washoff operations—Operations in which solvent is used to remove coating from a substrate.

* * * * *

Waterborne coating—A coating that contains more than 5% water by weight in its volatile fraction.

* * * * *

Wood furniture—A product made of wood, a wood product such as rattan or wicker or an engineered wood product such as particleboard that is manufactured under the following Standard Industrial Classification Codes. 2434 (Wood kitchen cabinets), 2511 (Wood household furniture, except upholstered), 2512 (Wood household furniture, upholstered), 2517 (Wood television, radio, phonograph, and sewing machine cabinets), 2519 (Household furniture, not elsewhere classified), 2521 (Wood office furniture), 2531 (Public building and related furniture), 2541 (Wood office and store fixtures, partitions, shelving, and lockers), 2599 (Furniture and fixtures, not elsewhere classified) or 5712 (Furniture stores).

Wood furniture component—A part that is used in the manufacture of wood furniture. The term includes drawer sides, cabinet doors, seat cushions and laminated tops.

Wood furniture manufacturing operations—The coating, cleaning and washoff operations associated with the production of wood furniture or wood furniture components.

CHAPTER 129. STANDARDS FOR SOURCES

SOURCES OF VOCs

§ 129.52. Surface coating processes.

- (a) This section applies to a surface coating process category, regardless of the size of the facility, which emits or has emitted VOCs into the outdoor atmosphere in quantities greater than 3 pounds (1.4 kilograms) per hour, 15 pounds (7 kilograms) per day or 2.7 tons (2,455 kilograms) per year during any calendar year since January 1, 1987.
- (b) A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a surface coating process category listed in Table I, unless one of the following limitations is met:
- (1) The VOC content of each as applied coating is equal to or less than the standard specified in Table I.
- (i) The VOC content of the as applied coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated as follows:

$$VOC = (W_o)(D_c)/V_n$$

Where:

VOC = VOC content in lb VOC/gal of coating solids

 W_0 = Weight percent of VOC $(W_v - W_w - W_{ex})$

 W_{ν} = Weight percent of total volatiles (100%-weight percent solids)

W_w = Weight percent of water

 W_{ex} = Weight percent of exempt solvent(s)

 D_c = Density of coating, lb/gal, at 25°C

 V_n = Volume percent of solids of the as applied coating

(ii) The VOC content of a dip coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated on a 30-day rolling average basis using the following equation:

$$VOC_{A} = \frac{\Sigma_{i}(W_{oi} \times D_{ci} \times Q_{i}) + \Sigma_{J} (W_{oJ} \times D_{dJ} \times Q_{J})}{\Sigma_{i} (V_{ni} \times Q_{i})}$$

Where:

VOC_A = VOC content in lb VOC/gal of coating solids for a dip coating, calculated on a 30-day rolling average basis

 W_{oi} = Percent VOC by weight of each as supplied coating (i) added to the dip coating process, expressed as a decimal fraction (that is 55% = 0.55)

 $D_{\rm ci} = Density \ of \ each \ as \ supplied \ coating \ (i) \ added \ to \ the \ dip \ coating \ process, \ in \ pounds \ per \ gallon$

 $\mathbf{Q}_{i} = \mathbf{Q} \mathbf{u} \mathbf{a} \mathbf{n} \mathbf{t} \mathbf{t} \mathbf{y}$ of each as supplied coating (i) added to the dip coating process, in gallons

 $V_{\rm ni}\!=\!$ Percent solids by volume of each as supplied coating (i) added to the dip coating process, expressed as a decimal fraction

 $W_{o,J}$ = Percent VOC by weight of each thinner (J) added to the dip coating process, expressed as a decimal fraction

 $D_{\rm dJ}$ = Density of each thinner (J) added to the dip coating process, in pounds per gallon

 $Q_{\boldsymbol{J}} = \boldsymbol{Q} uantity$ of each thinner (J) added to the dip coating process, in gallons

(iii) The VOC content of the as applied coating, expressed in units of weight of VOC per weight of coating solids, shall be calculated as follows:

$$VOC_B = (W_o)/(W_n)$$

Where:

VOC_B = VOC content in lb VOC/lb of coating solids

 W_0 = Weight percent of VOC $(W_v - W_w - W_{ex})$

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

 W_w = Weight percent of water

W_{ex} = Weight percent of exempt solvents

W_n = Weight percent of solids of the as applied coating

(iv) Sampling and testing shall be done in accordance with the procedures and test methods specified in Chapter 139 (relating to sampling and testing).

(2) The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which 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 shall be no less than the equivalent overall efficiency calculated by the following equation:

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

Where:

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

E = Table I limit in lb VOC/gal of coating solids or lb VOC/lb of coating solids.

O = Overall control efficiency.

- (c) A facility, regardless of the facility's annual emission rate, which contains surface coating processes shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:
- (1) The following parameters for each coating, thinner and other component as supplied:
- (i) The coating, thinner or component name and identification number.
 - (ii) The volume used.
 - (iii) The mix ratio.
 - (iv) The density of specific gravity.
- (v) The weight percent of total volatiles, water, solids and exempt solvents.
- (vi) The volume percent of solids for Table I surface coating process categories 1—10.
- (2) The VOC content of each coating, thinner and other component as supplied.
 - (3) The VOC content of each as applied coating.

* * * * *

- (f) A person may not cause or permit the emission into the outdoor atmosphere of VOCs from the application of wood furniture coatings unless the coatings are applied using electrostatic, airless, curtain coating, roller coating, hand roller, hand brush, flow coating, dip coating or high volume-low pressure application equipment. Air atomized sprays may be used to apply cosmetic specialty coatings if the volume of the cosmetic specialty coatings is less than 5% by volume of the total coating used at the facility or to apply final repair coatings.
- (g) The records shall be maintained for 2 years and shall be submitted to the Department on a schedule reasonably prescribed by the Department.
- (h) The VOC standards in Table I do not apply to a coating used exclusively for determining product quality and commercial acceptance, touch-up and repair and other small quantity coatings if the coating meets the following criteria:
- (1) The quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility.
- (2) The owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.

Table I

Emission Limits of VOCs in Surface Coatings by Process Category

Weight of VOC per Volume of Coating Solids

Surface Coating Process Category		kg VOC per liter coating solids
1. Can coating		
(a) sheet basecoat	4.62	0.55
(b) can exterior	4.62	0.55
(c) interior body spray	10.05	1.20

Surface Coating Process Category	lbs VOC per gal coating solids	coating
(d) two piece can end exterior	10.05	1.20
(e) side-seam spray	21.92	
(f) end sealing compound	7.32	
2. Coil coating	4.02	
3. Fabric coating	4.84	0.58
4. Vinyl coating	7.69	0.92
5. Paper coating	4.84	0.58
6. Automobile and light duty truck coating		
(a) prime coat	2.60	0.31
(b) top coat	4.62	0.55
(c) repair	14.14	1.69
7. Metal furniture coating	5.06	0.61
8. Magnet wire coating	2.16	0.26
9. Large appliance coating	4.62	0.55
Categories 1—9 were adopted on April 17, 1979		
10. Miscellaneous metal parts &		
products		
(a) top coats for locomotives and heavy-duty trucks	6.67	0.80
(b) hopper car and tank car interiors	6.67	0.80
(c) pail and drum interiors	10.34	1.24
(d) clear coatings	10.34	1.24
(e) air-dried coatings	6.67	0.80
(f) extreme performance coatings	6.67	0.80
(g) all other coatings	5.06	0.61
Category 10 was adopted on April 21,	1981	

Weight of VOC per Weight of Coating Solids

	per lb coating	kg VOC per kg coating solids
11. Wood furniture manufacturing		
operations		
(a) Topcoats and enamels	3.0	3.0
(b) Washcoat	14.3	14.3
(c) Final repair coat	3.3	3.3
(d) Basecoats	2.2	2.2
(e) Cosmetic specialty coatings	14.3	14.3
(f) Sealers	3.9	3.9
Category 11 was adopted on May 7,	1988	

\S 129.91. Control of major sources of $\mathrm{NO}_{\mathbf{x}}$ and VOCs.

(a) This section applies to both the owner and the operator of a major $\mathrm{NO_x}$ emitting facility or major VOC emitting facility for which no RACT requirement has been established in §§ 129.51, 129.52, 129.54—129.72, 129.81 and 129.82. This section does not apply to the owner and operator of a major VOC emitting facility for which requirements have been established in § 129.52, Table I (11) (relating to surface coating processes) and §§ 129.101—129.107 (relating to wood furniture manufacturing operations).

* * * * *

WOOD FURNITURE MANUFACTURING OPERATIONS

§ 129.101. General provisions and applicability.

- (a) Beginning June 10, 2000, this section and \$\\$ 129.102—129.107 apply to each wood furniture manufacturing facility located in a county included in the northeast ozone transport region or in a county designated as severe, serious, moderate or marginal ozone nonattainment that emits or has the potential to emit 25 tons or more per year of VOCs from wood furniture manufacturing operations.
- (b) The owner or operator of an existing wood furniture manufacturing facility subject to subsection (a) shall comply with this section and §§ 129.102—129.107 by June 11, 2001, except for those facilities which have RACT determinations approved by the EPA as revisions to the SIP prior to June 10, 2000.
- (c) An existing wood furniture manufacturing facility that increases its actual emissions or potential to emit to 25 tons per year or more of VOCs from wood furniture manufacturing operations shall comply with this section and §§ 129.102—129.107 within 1 year after becoming subject to subsection (a), except for those facilities which have RACT determinations approved by the EPA as revisions to the SIP prior to June 10, 2000.
- (d) At a minimum, a new source installed at an existing facility that is subject to the requirements of subsection (a) shall comply with the emission standards of § 129.102 (relating to emission standards) upon installation of the new source.
- (e) The owner or operator of a wood furniture manufacturing facility subject to this section, $\S\S$ 129.52 and 129.102—129.107 shall comply with the more stringent emissions limitation or applicable requirement for wood furniture manufacturing operations in \S 129.52 or this section and $\S\S$ 129.102—129.107.
- (f) The VOC standards in § 129.102 Table IV do not apply to a coating used exclusively for determining product quality and commercial acceptance, touch-up and repair and other small quantity coatings if the coating meets the following criteria:
- (1) The quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility.
- (2) The owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.

§ 129.102. Emission standards.

An owner or operator of a facility subject to this section, §§ 129.101 and 129.103—129.107 shall limit VOC emissions from wood furniture manufacturing operations by:

(1) Applying either waterborne topcoats or a combination of sealers and topcoats and strippable spray booth coatings with a VOC content equal to or less than the standards specified in Table IV:

Table IV

Emission Limits of VOC for Wood Furniture Manufacturing Sealers, Topcoats and Strippable Spray Booth Coatings As Applied, in Pounds of VOC Per Pound of Coating Solids (kg VOC/kg of Coating Solids), by Category

(1) Waterborne Topcoats	0.8
(2) High solids coating systems	
Sealer	1.9
Topcoat	1.8
(3) Acid-cured alkyd amino systems	
(i) Acid-cured alkyd amino sealer	2.3
Acid-cured alkyd amino conversion varnish	2.0
topcoat	
(ii) Other sealer	1.9
Acid-cured alkyd amino conversion varnish	2.0
topcoat	
(iii) Acid-cured alkyd amino sealer	2.3
Other topcoat	1.8
(4) Waterborne strippable spray booth coating	0 8

- (2) Using an emissions averaging program which meets the requirements in § 129.107 (relating to special provisions for facilities using an emissions averaging approach).
- (3) Using a control system that will achieve a reduction in emissions equivalent to 0.8 lb VOC/lb solids for topcoats or 1.8 lbs VOC/lb solids for topcoats and 1.9 lbs VOC/lb solids for sealers.
- (4) Using a combination of the methods specified in paragraphs (1)—(3).

§ 129.103. Work practice standards.

- (a) Work practice implementation plan. Within 60 days after the compliance date specified in § 129.101(b) or (c) (relating to general provisions and applicability), an owner or operator of a facility subject to the requirements in this section and §§ 129.101, 129.102 and 129.104—129.107 shall:
- (1) Prepare and maintain a written work practice implementation plan that defines work practices for each wood furniture manufacturing operation and addresses the provisions in subsections (b)—(j). The owner or operator of the facility shall comply with the work practice implementation plan.
- (2) Make available the written work practice implementation plan for inspection by the Department upon request. If the Department determines that the work practice implementation plan does not adequately address the criteria specified in subsections (b)—(j), the Department may require that the facility owner or operator modify the plan.
- (b) Operator training program. New and existing personnel, including contract personnel, who are involved in coating, cleaning or washoff operations or implementation of the requirements of this section, §§ 129.101, 129.102 and 129.104—129.107 shall complete an operator training program.
- (1) For a facility subject to § 129.101(b), new personnel hired after June 10, 2000, shall be trained upon hiring. For a facility subject to the requirements of § 129.101(c), new personnel shall be trained upon hiring.
- (2) For a facility subject to § 129.101(b), existing personnel hired before June 10, 2000, shall be trained by December 11, 2000. For a facility subject to § 129.101(c), existing personnel shall be trained at least 6 months before the compliance date.

- (3) Personnel shall be given refresher training annually.
- (4) A copy of the written operator training program shall be maintained with the work practice implementation plan. The operator training program shall include the following:
- (i) A list of all current personnel by name and job description that are required to be trained.
- (ii) An outline of the subjects to be covered in the initial and annual refresher training sessions for each position or group of personnel.
- (iii) Lesson plans for courses to be given at the initial and annual refresher training sessions that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize coating usage and overspray and appropriate management of cleanup wastes.
- (iv) A description of the methods to be used at the completion of the initial or annual refresher training sessions to demonstrate and document successful completion.
 - (v) A record of the date each employe is trained.
- (c) Leak inspection and maintenance plan. An owner or operator of a facility shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan which shall include the following:
- (1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings or solvents.
 - (2) An inspection schedule.
- (3) The methods for documenting the date and results of each inspection and any repairs that were made.
- (4) The time frame between identifying a leak and making the repair, which shall adhere to the following schedule:
- (i) A first attempt at repairs, including tightening of packing glands, shall be made within 5 working days after the leak is detected.
- (ii) Final repairs shall be made within 15 working days, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within 3 months.
- (d) Cleaning and washoff solvent accounting system. A solvent accounting form shall be developed to account for solvents used in cleaning and washoff operations. The information recorded on the form shall include the following:
- (1) The total number of pieces processed through washoff operations each month and the reason for the washoff operations.
- (2) The name and total quantity of each solvent used each month for:
 - (i) Cleaning activities.
 - (ii) Washoff operations.
- (3) The name and total quantity of each solvent evaporated to the atmosphere each month from:
 - (i) Cleaning activities.
 - (ii) Washoff operations.

- (e) Spray booth cleaning. An owner or operator of a facility may not use compounds containing more than 8.0% by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, the facility shall use no more than 1.0 gallon of solvent to prepare the booth prior to applying the booth coating.
- (f) Storage requirements. An owner or operator of a facility shall use normally closed containers for storing coating, cleaning and washoff materials.
- (g) Application equipment requirements. An owner or operator of a facility may not use conventional air spray guns to apply coatings except under any of the following circumstances:
- (1) To apply coatings that have a VOC content no greater than 1.0 lb VOC/lb solids (1.0 kg VOC/kg solids), as applied.
- (2) For touch-up and repair coatings under one of the following circumstances:
- (i) The coatings are applied after completion of the wood furniture manufacturing operation.
- (ii) The coatings are applied after the stain and before any other type of coating is applied, and the coatings are applied from a container that has a volume of no more than 2.0 gallons.
- (3) The spray is automated, that is, the spray gun is aimed and triggered automatically, not manually.
- (4) The emissions from the surface coating process are directed to a VOC control system.
- (5) The conventional air spray gun is used to apply coatings and the cumulative total usage of those coatings is no more than 5.0% of the total gallons of coating used during each semiannual reporting period.
- (6) The conventional air spray gun is used to apply stain on a part for which the Department notifies the operator, in writing, of its determination that it is technically or economically infeasible to use any other spray application technology. To support the facility's claim of technical or economic infeasibility, a videotape, a technical report or other documentation shall be submitted to the Department showing either independently or in combination, the following:
- (i) The production speed is too high or the part shape is too complex for one operator to coat the part, and the application station is not large enough to accommodate an additional operator.
- (ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- (h) *Line cleaning*. The solvent used for line cleaning shall be pumped or drained into a normally closed container.
- (i) Spray gun cleaning. The solvent used to clean spray guns shall be collected into a normally closed container.
- (j) Washoff operations. The emissions from washoff operations shall be controlled by the following: $\frac{1}{2}$
- (1) Using normally closed containers for washoff operations.
- (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

§ 129.104. Compliance procedures and monitoring requirements.

- (a) *Compliance methods.* An owner or operator of a facility subject to the emission standards in § 129.102 (relating to emission standards) shall demonstrate compliance with those provisions by using one or more of the following methods:
- (1) To support that each sealer, topcoat and strippable spray booth coating meets the requirements of § 129.102(1) (relating to emission standards):
 - Maintain CPDSs for each of the coatings.
- (ii) Maintain documentation showing the VOC content of the as applied coating in lbs VOC/lb solids, if solvent or other VOC is added to the coating before application.
- (iii) Perform sampling and testing in accordance with the procedures and test methods in Chapter 139 (relating to sampling and testing).
- (2) To comply through the use of a control system as described in § 129.102(3):
- (i) Calculate the required overall control efficiency needed to demonstrate compliance using the following equation:

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

Where:

 $C = the \ VOC$ content of the as applied coating, lbs VOC/lb solids

E = the Table IV emission limit which shall be achieved by the affected emission point(s), lbs VOC/lb solids

- O = the overall control efficiency of the control system, expressed as a percentage
- (ii) Document that the value of C in the equation in subparagraph (i) is obtained from the VOC and solids content of the as applied coating.
- (iii) Determine the overall control efficiency of the control system using the procedures and test methods in Chapter 139 and demonstrate that the value of O calculated by the following equation is equal to or greater than the value of O calculated by the equation in subparagraph (i):

$$O = (F \times N) (100)$$

Where:

F = the control device efficiency, expressed as a fraction

 $N=\mbox{the capture device efficiency, expressed as a fraction }$

- (b) *Initial compliance.*
- (1) Compliant coatings. An owner or operator of a facility subject to § 129.102(1) that is complying through the procedures in subsection (a)(1) shall submit an initial compliance status report as required by § 129.106(a) (relating to reporting requirements), stating that compliant sealers, topcoats and strippable spray booth coatings are being used by the facility.
- (2) Continuous coaters. An owner or operator of a facility subject to § 129.102(1) that is complying through the procedures in subsection (a)(1) and is applying sealers, topcoats, or both, using continuous coaters shall demonstrate initial compliance by either:
- (i) Submitting an initial compliance status report as required by § 129.106(a) stating that compliant sealers,

topcoats, or both, as determined by the VOC content of the coating in the reservoir and as calculated from records, are being used.

- (ii) Submitting an initial compliance status report as required by § 129.106(a) stating that compliant sealers, topcoats, or both, as determined by the VOC content of the coating in the reservoir, are being used and the viscosity of the coating in the reservoir is being monitored. The facility shall also provide data that demonstrates the correlation between the viscosity and the VOC content of the coating in the reservoir.
- (3) *Control systems.* An owner or operator of a facility using a control system to comply with this section and §§ 129.101—129.103 and 129.105—129.107 shall demonstrate initial compliance by submitting a report to the Department that:
- (i) Identifies the operating parameter value to be monitored for the capture device and discusses why the parameter is appropriate for demonstrating ongoing compliance.
- (ii) Includes the results of the initial performance testing using the procedures and test methods specified in Chapter 139.
- (iii) Includes calculations of the overall control efficiency (O) using the equation in subsection (a)(2)(iii).
- (iv) Defines those operating conditions of the control system critical to determining compliance and establishes operating parameter values that will ensure compliance with the standard:
- (A) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter value.
- (B) For compliance with another control system, the operating parameter value shall be established using the procedures identified in subsection (c)(3)(iv).
- (v) An owner or operator of a facility complying with this paragraph shall calculate the site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, using the procedures in Chapter 139.
- (4) Work practice implementation plan. An owner or operator of a facility subject to the work practice standards of § 129.103 (relating to work practice standards) shall submit an initial compliance status report as required by § 129.106(a), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.
- (c) Continuous compliance demonstrations. An owner or operator of a facility subject to the requirements of this section and §§ 129.101—129.103 and 129.105—129.107 shall submit, in writing, to the Department a compliance certification with the semiannual report required by § 129.106(b).
- (1) *Compliant coatings.* An owner or operator of a facility subject to § 129.102 that is complying through the procedures specified in subsection (a)(1) shall demonstrate continuous compliance by the following:
 - (i) Using compliant coatings.
- (ii) Maintaining records that demonstrate the coatings are compliant.
- (iii) Submitting a compliance certification which states that compliant sealers, topcoats, or both, and strippable

- spray booth coatings have been used each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.
- (2) Continuous coaters. An owner or operator of a facility subject to § 129.102 that is complying through the procedures specified in subsection (a)(1) and is applying sealers, topcoats, or both, using continuous coaters shall demonstrate continuous compliance by either:
- (i) Using compliant coatings as determined by the VOC content of the coating in the reservoir and as calculated from records, and submitting a compliance certification which states that compliant sealers, topcoats, or both, have been used each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.
- (ii) Using compliant coatings, as determined by the VOC content of the coating in the reservoir, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the viscosity of the coating in the reservoir each time solvent is added, maintaining records of solvent additions and submitting a compliance certification which states that compliant sealers, topcoats, or both, as determined by the VOC content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.
- (3) *Control systems.* An owner or operator of a facility subject to § 129.102 that is complying through the use of a control system shall demonstrate continuous compliance by the following:
- (i) Installing, calibrating, maintaining and operating monitoring equipment approved, in writing, by the Department.
- (ii) Using a device to monitor the site-specific operating parameter value established in accordance with subsection (b)(3)(i).
- (iii) When a thermal incinerator is used, a temperature monitoring device equipped with a continuous recorder is required and shall be installed in the firebox or in the ductwork immediately downstream of the firebox at a location before any substantial heat exchange occurs.
- (iv) An owner or operator using a control system not listed in this section shall submit, in writing, to the Department a description of the system, test data verifying the performance of the system, the appropriate operating parameter values that will be monitored and the monitoring device that will be used to demonstrate continuous compliance with the standard and receive, in writing, the Department's approval prior to use.
- (v) An owner or operator of a facility may not operate the control system at a daily average value greater than or less than (as appropriate) the operating parameter value. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.
- (vi) Submitting a compliance certification which states that the control system has not been operated at a daily average value greater than or less than (as appropriate)

the operating parameter value for each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.

- (4) Work practice implementation plan. An owner or operator of a facility subject to the work practice standards of § 129.103 shall demonstrate continuous compliance by following the work practice implementation plan and submitting a compliance certification which states that the work practice implementation plan is being followed, or should otherwise identify the periods of noncompliance with the work practice standards and the reasons for noncompliance.
- (d) Compliance certification requirements. The compliance certification shall be signed by a responsible official of the company that owns or operates the facility. In addition to the certification requirements of this section, the certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

§ 129.105. Recordkeeping requirements.

- (a) Requirement. The owner or operator of a wood furniture manufacturing operation shall keep records to demonstrate compliance with this section and §§ 129.101—129.104, 129.106 and 129.107. The records shall be maintained for at least 5 years.
- (b) *Compliant coatings.* The following records shall be maintained to demonstrate compliance with § 129.102 (relating to emission standards).
- (1) A certified product data sheet for each coating and strippable spray booth coating subject to the emission limits of § 129.102.
- (2) The VOC content as applied, lbs VOC/lb solids (kg VOC/kg solids), of each coating and strippable spray booth coating subject to the emission limits of § 129.102, and copies of data sheets documenting how the as applied values were determined.
- (c) Continuous coaters. The owner or operator of a facility subject to the emission limits of § 129.102 that is complying through the procedures specified in § 129.104(a)(1) (relating to compliance procedures and monitoring requirements) and is applying sealers, topcoats, or both, using continuous coaters shall maintain the records required by subsections (a) and (b) and records of the following:
- (1) Solvent and coating additions to the continuous coater reservoir.
 - (2) Viscosity measurements.
- (d) *Control systems.* The owner or operator of a facility complying through the procedures in § 129.104(a)(2) by using a control system shall maintain the following records:
- (1) Copies of the calculations to support the equivalency of using a control system, as well as the data that are necessary to support the calculation of C and E in § 129.104(a)(2)(i) and O in § 129.104(a)(2)(iii).
- (2) Records of the daily average value of each continuously monitored parameter for each operating day. If all recorded values for a monitored parameter are within the range established during the initial performance test, the owner or operator may record that all values were within the range rather than calculating and recording an average for that day.

- (e) Work practice implementation plan. The owner or operator of a facility subject to the work practice standards of § 129.103 (relating to work practice standards) shall maintain onsite copies of the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including:
- (1) Records demonstrating that the operator training program is in place.
- (2) Records maintained in accordance with the leak inspection and maintenance plan.
- (3) Records associated with the cleaning and washoff solvent accounting system.
- (4) Records associated with the limitation on the use of conventional air spray guns showing total coating usage and the percentage of coatings applied with conventional air spray guns for each semiannual reporting period.
- (5) Records showing the VOC content of compounds used for cleaning booth components, except for solvent used to clean conveyors, continuous coaters and their enclosures or metal filters.
- (6) Copies of logs and other documentation developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- (f) In addition to the recordkeeping requirements of subsection (a), the owner or operator of a facility that complies with \S 129.103 or \S 129.104(a)(1) shall maintain a copy of the compliance certifications submitted in accordance with \S 129.106(b) (relating to reporting requirements) for each semiannual period following the compliance date.
- (g) The owner or operator of a facility shall maintain a copy of the other information submitted with the initial status report required by § 129.106(a) and the semiannual reports required by § 129.106(b).

§ 129.106. Reporting requirements.

- (a) Initial compliance report date. The initial compliance report shall be submitted to the Department within 60 days after the compliance date specified in § 129.101(b) and (c) (relating to general provisions and applicability). The report shall include the items required by § 129.104(b) (relating to compliance procedures and monitoring requirements).
- (b) Semiannual compliance report dates. When demonstrating compliance in accordance with § 129.104(a)(1) or (2), a semiannual report covering the previous 6 months of wood furniture manufacturing operations shall be submitted to the Department according to the following schedule:
- (1) The first report shall be submitted within 30 calendar days after the end of the first 6-month period following the compliance date specified in § 129.101(b) and (c)
- (2) Subsequent reports shall be submitted within 30 calendar days after the end of each 6-month period following the first report.
- (3) Each semiannual report shall include the information required by § 129.104(c) and (d), a statement of whether the facility was in compliance or noncompliance and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.

§ 129.107. Special provisions for facilities using an emissions averaging approach.

(a) Emissions averaging approach. An owner or operator of a facility subject to the emission limitations in

- \S 129.102 (relating to emission standards) may use an emissions averaging approach which meets the equivalency requirements in \S 129.51(a) (relating to general) to achieve compliance with \S 129.52 (relating to surface coating processes) or this section and $\S\S$ 129.101—129.106.
- (b) Additional requirement. When complying with the requirements of § 129.52 or this section and §§ 129.101—129.106 through emissions averaging, an additional 10% reduction in emissions shall be achieved when compared to a facility using a compliant coatings approach to meet the requirements of this section and §§ 129.101—129.106.
- (c) *Program goals and rationale.* When using an emissions averaging program, the following shall be submitted to the Department in writing:
- (1) A summary of the reasons why the facility would like to comply with the emission limitations through an equivalency determination using emissions averaging procedures.
- (2) A summary of how averaging can be used to meet the emission limitations.
- (d) *Program scope.* A description of the types of coatings that will be included in the facility's emissions averaging program shall also be submitted to the Department in writing:
- (1) Stains, basecoats, washcoats, sealers and topcoats may all be used in the emissions averaging program.
- (2) The owner or operator of the facility may choose other coatings for its emissions averaging program, if the program meets the equivalency requirements in § 129.51(a).
- (3) Coatings that are applied using continuous coaters may only be used in an emissions averaging program if the owner or operator of the facility can determine the amount of coating used each day.
- (4) A daily averaging period shall be used, except under the following conditions:
- (i) A longer averaging period may be used if the owner or operator of the facility demonstrates in writing to the satisfaction of the Department that the emissions do not fluctuate significantly on a day-to-day basis.
- (ii) The owner or operator of the facility requests in writing and the Department approves in writing the longer averaging period.
- (e) *Program baseline*. The baseline for each coating included in the emissions averaging program shall be the lower of the actual or allowable emission rate as of June 10, 2000. The facility baseline emission rate may not be higher than what was presumed in the 1990 emissions inventory for the facility unless the Department has accounted for the increase in emissions as growth.

- (f) Quantification procedures. The emissions averaging program shall specify methods and procedures for quantifying emissions. Quantification procedures for VOC content are included in Chapter 139 (relating to sampling and testing). The quantification procedures shall also include methods to determine the usage of each coating and shall be accurate enough to ensure that the facility's actual emissions are less than the allowable emissions.
- (g) Monitoring, recordkeeping and reporting. A written summary of the monitoring, recordkeeping and reporting procedures that will be used to demonstrate compliance on a daily basis, when using an emissions averaging approach, shall be submitted to the Department.
- (1) The monitoring, recordkeeping and reporting procedures shall be structured so that inspectors and facility owners or operators can determine a facility's compliance status for any day.
- (2) The monitoring, recordkeeping and reporting procedures shall include methods for determining required data when monitoring, recordkeeping and reporting violations result in missing, inadequate or erroneous monitoring and recordkeeping.

CHAPTER 139. SAMPLING AND TESTING Subchapter A. SAMPLING AND TESTING METHODS AND PROCEDURES GENERAL

§ 139.4. References.

The references referred to in this chapter are as follows:

* * * * *

(5) Source Testing Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, Bureau of Air Quality, Post Office Box 8468, Harrisburg, Pennsylvania 17105-8468, including future revisions as noted in § 139.5(b) (relating to revisions to the source testing manual and continuous source monitoring manual).

STATIONARY SOURCES

§ 139.14. Emissions of VOCs.

- (a) The following are applicable to tests for determining volatile organic content:
- (1) Test methods and procedures for the total volatiles content, solids content, exempt solvent content, water content and density of surface coatings shall be equivalent to those specified in § 139.4(1) and (5) (relating to references).

 $[Pa.B.\ Doc.\ No.\ 00\text{-}1027.\ Filed for public inspection June 9, 2000, 9:00\ a.m.]$