

PROPOSED RULEMAKING

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 121, 129 AND 139]

Surface Coating Processes (RBI # 4)

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

The proposed rulemaking provides procedures for determining compliance with volatile organic compound (VOC) emission limits for the surface coating processes in § 129.52 (relating to surface coating processes). These proposed amendments include an averaging approach for evaluating VOC emissions from diptanks; an exemption for small quantities of coatings; and revision of the existing Table I to express VOC emission standards in surface coating processes in volume-solids-based and weight-solids-based emission limits. The proposed 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 EPA's Control Techniques Guidelines (CTG), apply Statewide to wood furniture manufacturing facilities with actual or potential emissions of 25 tons per year or more of VOCs.

This proposal was adopted by the Board at its meeting of September 15, 1998.

A. *Effective Date*

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

B. *Contact Persons*

For further information, contact Terry Black, Chief, Regulation and Policy Development Section, Division of Compliance and Enforcement, Bureau of Air Quality, Rachel Carson State Office Building, 12th Floor, P. O. Box 8468, Harrisburg, PA 17105-8468, (717) 787-1663; 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 proposal is available through the Department of Environmental Protection (Department) Web site (<http://www.dep.state.pa.us>).

C. *Statutory Authority*

The proposed rulemaking is being made under the authority of section 5(a)(1) of the Air Pollution Control 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 proposed 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 Techni-

cal Guidance" issued by Secretary Seif on August 4, 1995, and Executive Order 1996-1 (Regulatory Review and Promulgation). The RBI changes for the surface coating provisions in § 129.52 (relating to surface coating processes) are the fourth in a series of amendments to the air resources regulations. The proposed revisions to § 129.52 delete existing language to adjust coatings to a standard solvent density of 7.36 pounds per gallon and to a solids basis. The proposed amendments calculate and express VOC emission standards in volume-solids-based and weight-solids-based emission limits and add criteria to allow for emission averaging of VOCs from diptanks 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 proposal.

These proposed amendments establish presumptive RACT requirements for certain wood furniture manufacturing operations. Section 183(a) of the Clean Air Act requires the United States Environmental Protection Agency (EPA) to issue CTG for 11 categories of stationary sources of volatile organic compounds (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 (61 FR 25223, May 20, 1996). The wood furniture manufacturing operations CTG establish a "presumptive norm" RACT for the control of affected stationary sources. The standards apply Statewide to wood furniture manufacturing facilities located in the ozone transport region or marginal, moderate, serious and severe ozone nonattainment areas 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 furniture manufacturing facilities to submit a RACT rule to the EPA on or before May 20, 1997, as a revision to the State Implementation Plan (SIP). State rules should require affected sources to install and operate required control devices and implement procedures to demonstrate compliance no later than May 20, 1998 (61 FR 50823, September 27, 1996). In keeping with the RBI, the required wood furniture manufacturing provisions shall be no more stringent than the Federal CTG.

The Department consulted with the Air Quality Technical Advisory Committee (AQTAC) during the development of the proposed rulemaking. On January 16, 1998, and May 29, 1998, the AQTAC recommended that the proposed rulemaking be submitted to the Board for consideration. Following promulgation of the proposed amendments to Chapters 121, 129 and 139 the provisions will be submitted to the EPA as a SIP revision.

E. *Summary of Regulatory Requirements*

This proposed rulemaking implements the fourth series of changes under the Department's RBI for air resources regulations and establishes criteria to implement the presumptive RACT requirements for wood furniture manufacturing operations. The presumptive RACT requirements are governed by limitations on VOC emissions

and the implementation of work practice standards. A summary of the proposed rulemaking follows:

Chapter 121. General Provisions

The proposed amendments to § 121.1 (relating to definitions) include the following definitions which are based on 40 CFR Part 63, Subpart JJ (relating to National Emission Standards for Wood Furniture Manufacturing Operations) and the CTG document for the control of VOCs from wood furniture manufacturing operations: "alternative method," "as applied," "as supplied," "basecoat," "CPDS—certified product data sheet," "coating," "coating solids (or solids)," "compliant coating," "continuous coater," "conventional air spray," "enamel," "equivalent method," "MSDS—material safety data sheet," "nonpermanent final finish," "normally closed container," "operating parameter value," "pollution prevention," "sealer," "stain," "strippable spray booth coating," "substrate," "thinner," "touch-up and repair," "washoff operations," "waterborne coating," "wood furniture," "wood furniture component" and "wood furniture manufacturing operations."

This proposed rulemaking deletes the following terms from § 121.1: "semitransparent spray stains," "semitransparent wiping and glazing stains" and "wood cabinet and furniture finishing."

These proposed amendments also include revisions to the following existing definitions:

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

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

"Surface coating process"—The proposed 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 proposal deletes the existing definition of "topcoat" and defines the term "topcoat" as the last film-building coating applied to a substrate in a surface coating process. The term does not include nonpermanent final finishes.

"VOC—Volatile Organic Compound"—The proposed amendment to the VOC definition adds 40 CFR 51.100, the Federal citation for VOCs determined by the EPA Administrator to have negligible photochemical reactivity.

"Washcoat"—The proposed 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.

Chapter 129. Sources of VOCs

§ 129.52. Surface coating processes.

The proposed amendments include the following revisions to this section:

§ 129.52(b)(1)—The proposed 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)—This proposed change adds an equation for calculating the VOC content on the basis of

weight of VOC per volume of coating solids to be used in evaluating compliance for Table I categories 1 through 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 proposed amendment adds the equation for calculating the VOC content of a dip coating on a 30-day rolling average basis. The methodology for calculating the VOC content includes the gallons of make-up solvent added to the coating in the dip tank over any consecutive 30-day period to replace evaporated solvent. The specific viscosity of the coating being applied would be maintained in accordance with the guidance published in EPA-340/1-86-016, *A Guide for Surface Coating Calculations*.

§ 129.52(b)(1)(iii)—This proposed 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 the proposed §§ 129.101—129.107.

§ 129.52(b)(1)(iv)—This proposed amendment adds the equation for calculating the VOC content of dip coating during a wood furniture manufacturing on a 30-day rolling average basis. This method of calculating the VOC content includes the gallons of make-up solvent added to the coating in the dip tank over any consecutive 30-day period to replace evaporated solvent and therefore maintain a specific viscosity of the coating being applied, according to guidance published in *A Guide for Surface Coating Calculations* (EPA-340/1-86-016). The proposed revision also specifies that sampling and testing is done in accordance with the methods in Chapter 139 to reference the various methods, particularly for volume solids analysis, developed by the American Society for Testing and Materials (ASTM) which will be included in revisions to the Source Testing Manual.

§ 129.52(b)(2)—The existing equation for calculating the percentage of emission reductions needed to comply if using control equipment is deleted. A new equation is proposed 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 proposed 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 proposed change also emphasizes the need for facilities to keep records of volume solids content.

§ 129.52(g)—Moves the existing requirement for maintaining records for 2 years from the existing § 129.52(c) to a separate subsection to emphasize and add clarity to the amendments.

§ 129.52(h)—This proposed 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 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 proposed requirements in § 129.101 (relating to general provisions and applicability) provide that the provisions in §§ 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 designated as severe, serious, moderate or marginal ozone nonattainment and which emits or has the potential to emit 25 tons or more per year of VOCs from wood furniture manufacturing operations. These requirements are in addition to the wood cabinet and furniture finishing provisions in § 129.52. The most stringent VOC emission limitation will apply to a wood furniture manufacturing operation that meets the threshold limits for both § 129.52 and §§ 129.101—129.107.

Subsection (b) requires the owners or operators of existing wood furniture manufacturing operations to also comply with the requirements in § 129.52. If the actual emissions or potential to emit (PTE) for VOCs is 25 tons per year or greater, the owner or operator of the wood furniture manufacturing facility must comply with the requirements of §§ 129.101—129.107 within 1 year from the effective date of the final rulemaking. The compliance deadline does not apply to facilities that have obtained EPA-approved SIP revisions for RACT prior to the adoption of §§ 129.101—129.107 as a final-form regulation. 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 issued a CTG for the control of VOC emissions from wood furniture manufacturing operations (61 FR 25223, May 20, 1996).

Subsection (c) provides a compliance deadline for the owner or operator of an existing wood furniture manufacturing facility which increases its actual emissions or its potential to emit to 25 tons per year or more of VOCs from wood furniture manufacturing operations after the effective date of this proposal. Within 1 year after increasing actual VOC emissions or the potential to emit to 25 tons per year or more, the owner or operator of the affected facility must comply with §§ 129.101—129.107. The newly proposed presumptive RACT requirements for wood manufacturing operations would not apply to facilities with EPA-approved SIP revisions for RACT prior to the adoption of this proposal.

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 provided use of the coatings is approved in writing by the Department prior to use. Subsection (f) requires the owner or operator to submit a written request to the Department to 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 exempted 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 coating, as applied) the emission limits of VOCs for wood furniture manufacturing sealers, topcoats and strippable spray booth coatings that are actually used for coating the substrate. Facility owners or operators are authorized to demon-

strate compliance with the emission standards by using either of the following or a combination of the methods including the use of sealers, topcoats and strippable spray booth coatings with a VOC content equal to or less than the standard specified in Table IV; an emissions averaging approach which meets the requirements in § 129.107; a control system that will achieve a reduction in emissions equivalent to 0.8 lb VOC/lb solids for topcoats and 1.9 lb VOC/lb solids for sealers, as applied. The proposed emission limit for high solids topcoats is 1.8 lb VOC/lb solids, as applied and 1.9 lb VOC/lb solids, as applied for high solids sealers. An allowable emissions limit equal to 2.3 lb VOC/lb solids, as applied, is proposed for the use of acid-cured alkyd amino vinyl sealers. When using acid-cured alkyd amino conversion varnish topcoats, the VOC emissions limit is 2.0 lb VOC/lb solids, as applied. These proposed emission limits for sealers and topcoats are equivalent to coatings with a solids content of approximately 32 to 35% by weight.

§ 129.103. Work practice standards.

This section establishes work practice standards to reduce VOC emissions from wood furniture manufacturing operations. The proposed work practice standards include the development of a work practice implementation plan which includes an 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 §§ 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 must 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 wood furniture manufacturing facility must 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 specified in §§ 129.103(b)—(j), the owner or operator must revise the plan.

Subsection (b) describes the elements of the operator training program. A copy of the required operator training program must 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 must complete the operator training program. The proposal requires any new personnel hired after date of publication of the final rulemaking to be trained upon hiring. The operator training program must be completed within 6 months of the date of publication of the final rule by employees hired before the effective date of the rule.

Subsection (c) specifies the requirements for the proposed 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 must also include procedures to address the detection and repair of leaks. At a minimum, an attempt to repair the leaks must 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 must 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 must be developed for recording the following:

(1) The quantity and type of solvent used each month for washoff and cleaning.

(2) The number of pieces washed off and the reason for the washoff.

(3) The net quantity of spent solvent generated from each activity. The net quantity of spent solvent is equivalent to the total amount of solvent that is generated from the activity minus any solvent that is reused onsite for operations other than cleaning or washoff and any solvent that was sent offsite for disposal.

Subsection (e) specifies the work practices for spray booth cleaning. Unless a spray booth is being refurbished, the use of a strippable spray booth material with a VOC content no greater than 8.0% by weight of VOC is required for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters. If the spray booth is being refurbished, no more than 1 gallon of solvent may be used to prepare the booth prior to applying the booth coating.

Proposed § 129.103 also includes work practice standards for the storage of equipment, 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 unless the air spray guns are used in accordance with the procedures in § 129.103(g)(1)—(6). Conventional air spray guns may be used to automatically 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. The use of 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 must 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. The proposed 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 period.

§ 129.104. Compliance procedures and monitoring requirements.

This section describes compliance procedures and monitoring requirements used to demonstrate compliance with the proposed presumptive RACT requirements 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 the compliance methods. When a combination of compliance options are selected, the owner or operator must demonstrate compliance with each applicable compliance technique. When compliant coatings are being used, the owner or operator must maintain certified product data sheets 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 (b) describes the requirements for initial compliance. The owners or operators of a facility demon-

strating compliance through the use of compliant coatings must submit an initial compliance status report in accordance with § 129.106(b). In accordance with subsection (b)(1), the initial compliance report must indicate that 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 which specifies 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. The report must also specify 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 must 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 must meet the requirements specified in Chapter 139 (relating to sampling and testing).

Continuous compliance demonstrations.

The owners or operators of wood furniture manufacturing operations subject to the requirements of this proposal must submit a compliance certification with the semiannual report required under § 129.106(c). Facilities using compliant coatings to demonstrate compliance are required to maintain records that prove that the coatings 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.

Section 129.104(c)(2) explains the continuous compliance requirements for facilities using continuous coaters to apply sealers or topcoats. The compliance certification submitted to the Department must 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 compliance continually, the certification must specify the days of noncompliance and the reasons for noncompliance.

Subsection (c)(3) specifies the requirement for facilities which 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 must 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 control system exceeds the operating parameter values,

the certification must identify the days of noncompliance and the reasons for noncompliance.

Each 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.

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 responsible official must 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 must 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 and control systems. The recordkeeping requirements include the following:

(1) A certified product data sheet for each coating and strippable spray booth coating.

(2) Records of the VOC content as applied, 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. Facilities applying sealers, topcoats, or both, using continuous coaters must 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 copies of the work practice implementation plan and all records associated with meeting the requirements of that plan must be maintained onsite. The records kept for the work practice implementation plan must satisfy the recordkeeping requirements for applicable provisions of the work practice implementation plan including the operator training program, the leak inspection and maintenance plan, cleaning and washoff solvent accounting system and restrictions on the use of conventional air spray guns.

§ 129.106. Reporting requirements.

This section establishes reporting requirements for wood furniture manufacturing operations subject to §§ 129.101–129.107. The owner or operator of a facility using a control system must submit an initial notification to the Department that meets the requirements of 40 CFR 63.9(b) (relating to notification regulations). This submittal notifies the Department that VOC emissions

from the facility meet or exceed the applicability threshold for the presumptive RACT requirements for wood furniture manufacturing operations.

Subsection (b) 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 must include the items required by § 129.104(b).

Subsection (c) requires the submittal of semiannual reports certifying compliance for the previous 6 months of wood furniture manufacturing operations. The first report should be submitted to the Department within 30-calendar days after the end of the first 6-month period following the compliance date. Subsequent reports must 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 an emissions averaging program which 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 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 will 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 an emissions averaging approach.

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 the effective date of this proposal. 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 must demonstrate that the facility's actual emissions are less than the allowable emissions.

Subsection (g) requires that the written summary of the emissions averaging program submitted to the Department include monitoring, recordkeeping and reporting procedures that will allow Department inspectors and 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 must 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 proposed revisions to this section reflect name changes for the Department and the Bureau of Air Quality.

§ 139.14. Emissions of VOCs.

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

F. Benefits and Costs

Executive Order 1996-1 requires a cost/benefit analysis of the proposed amendments.

Benefits

Compliance with the proposed amendments will reduce VOC emissions to the atmosphere. Implementation of the proposed work practice standards will reduce 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 generated from overspraying. Emission reductions resulting from this proposal are also expected to reduce worker exposure to VOC emissions and other pollutants.

Compliance Costs

The proposed amendments will affect approximately 450 surface coating facilities, including 80 wood furniture manufacturing facilities, which are currently subject to recordkeeping and reporting requirements. Approximately 20 of the major wood furniture manufacturing operations that would be subject to this proposal have submitted case-by-case RACT determinations to the EPA for approval as SIP revisions. The EPA has indicated that case-by-case RACT determinations for wood furniture manufacturing operations must, at a minimum, meet the requirements of the CTG for wood furniture manufacturing operations to be approvable as a SIP revision. Consequently, these provisions should be approved by the EPA as a SIP revision prior to the adoption of this proposal as a final rulemaking.

The proposed amendments to § 129.52 will result in estimated savings of \$5,625,000 for approximately 450 affected facilities. These cost savings are based on a reduction of .25 FTE per facility per year in recordkeeping and reporting efforts, at an average salary of \$50,000 for a total of \$5,625,000 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 the proposed regulations in Chapter 129.

Pollution Prevention

The proposed work practice standards for the wood furniture manufacturing industry will reduce VOC emissions from affected sources. The proposed restrictions on the use of conventional air spray guns will 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 also reduce emissions and prevent pollution from wood finishing, clean-up and washoff operations.

Paperwork Requirements

These proposed amendments contain recordkeeping and reporting provisions needed to demonstrate compliance with the requirements of the proposed surface coating and wood furniture manufacturing requirements. The owner or operator of an affected facility which complies with the wood furniture manufacturing provisions in §§ 129.101—129.107 must 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 must also prepare and maintain records of work practice plan activities, use of compliant coatings or an alternative methodology. The facilities must also validate and verify information used to demonstrate compliance and prepare and maintain compliance certification records. However, the paperwork requirements will vary for facilities using compliant coatings, add-on air pollution control equipment or an emissions averaging approach to demonstrate compliance with the presumptive RACT requirements.

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 (relating to National emission standards for wood furniture manufacturing operations). 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 the effective date of the final rulemaking.

G. Sunset Review

This proposed rulemaking will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on February 17, 1999, the Department submitted a copy of the proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

If IRRC has objections to any portion of the proposed amendments, it will notify the Department within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria which have not been met by that portion. The Regulatory Review Act specifies detailed procedures for the Department, the Governor and the General Assembly to review these objections before final publication of the regulations.

I. *Public Comments*

Written Comments—Interested persons are invited to submit comments, suggestions or objections regarding the proposed amendments to the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17105-8477). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by May 10, 1999. Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by May 10, 1999. The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final-form regulations will be considered.

Electronic Comments—Comments may be submitted electronically to the Board at RegComments@dep.state.pa.us. A subject heading of the proposal and return name and address must be included in each transmission. Comments submitted electronically must also be received by the Board by May 10, 1999.

J. *Public Hearings*

The Board will hold four public hearings for the purpose of accepting comments on this proposal. The hearings will be held at 10 a.m. as follows:

- April 6, 1999 Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA
- April 7, 1999 Department of Environmental Protection
Southcentral Regional Office
Susquehanna River Conference Room
909 Elmerton Avenue
Harrisburg, PA
- April 8, 1999 Department of Environmental Protection
Southeast Regional Office
Suite 6010, Lee Park
555 North Lane
Conshohocken, PA
- April 9, 1999 Department of Environmental Protection
Northcentral Regional Office
208 W. Third Street
Williamsport, PA

The Department is specifically requesting comments on the following issues:

- (1) Whether the Department should require the owners or operators of wood furniture manufacturing facilities with actual emissions or a potential to emit 25 tons per year or more of VOC emissions to comply with both the surface coating requirements in § 129.52 and the proposed presumptive RACT requirements in §§ 129.101—129.107.
- (2) Whether the Department should adopt the reporting requirements in 40 CFR 63.7—63.10. These general reporting provisions specify time frames for reporting performance test results, monitoring parameter values and excess performance test results. The EPA's model rule for wood furniture manufacturing operations provides the general MACT reporting requirements as an optional State presumptive RACT program component.

Persons wishing to present testimony at a hearing are requested to contact Kate Coleman at the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526, at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 10 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on its behalf at each hearing.

Persons with a disability who wish to attend a hearing and require an auxiliary aid, service or other accommodation to participate should contact Kate Coleman at (717) 787-4526, or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

JAMES M. SEIF,
Chairperson

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:

* * * * *

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, documentation furnished by a coating supplier or an outside laboratory for a coating, strippable spray booth coating or solvent that provides:

(i) The hazardous air pollutant (HAP) content by percent weight calculated from data measured using the EPA Reference Method 311 or an equivalent or alternative method.

(ii) 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 that the coating does not release additional VOC as reaction byproducts during the cure (that is, all of the VOC is solvent). The VOC content stated should represent the maximum VOC emission potential of the coating, strippable spray booth coating or solvent.

* * * * *

Coating—For purposes of wood furniture manufacturing operations, a protective, decorative or functional material applied in a thin layer to a surface. The term includes paints, topcoats, clear coats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings.

Coating solids or solids—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.

* * * * *

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, roll 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.

* * * * *

Enamel—A coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer or previously applied enamel coat. The term includes a coating that 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.

* * * * *

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 [, but not limited to,] large farm machinery, small farm machinery, small appliances, commercial and industrial machinery, fabricated metal products [,] and items listed under the *Standard Industrial Classification* [**Code**] **Codes** 3300 through [**3900**] **3999**. The term does not include cans, coils, automobiles, light-duty trucks, metal furniture, magnet wire, large appliances, fully assembled exteriors of airplanes 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.

* * * * *

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

* * * * *

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 [**are**] 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 in 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.

* * * * *

[**Semitransparent spray stains**—Colored liquids and toners applied to wood to change or to enhance the surface without concealing the surface, including, but not limited to, toners and nongrain-raising stains.

Semitransparent wiping and glazing stains—Colored liquids applied to wood to enhance the grain character and to partially fill the porous surface of the wood.]

* * * * *

Stain—For purposes of wood furniture manufacturing operations, 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—

(i) A coating that:

(A) 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.

(B) Is subsequently peeled off and disposed.

(C) By meeting the conditions of clauses (A) and (B), reduces or eliminates the need to use solvents to clean spray booth walls.

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—[A clear liquid which provides the final protective and aesthetic properties to wood finishes] The last film-building coating that is applied 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.

* * * * *

[**Wash coat**] **Washcoat**—[**Low solids, clear**] Clear liquids having a solids content by weight of 12% or less, applied over [**semitransparent**] 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 [cabinet and furniture finishing] furniture—[**The application of liquids to products**] A product made of wood, a wood product such as rattan or wicker or an engineered wood product such as particle-board 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) [**and**], **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 [**all**] a surface coating [**processes**] **process category**, regardless of the size of the facility, which [**emit**] **emits** or [**have**] **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) [**tons**] 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 [**weight of VOCs per gallon of coating (minus water)**] **VOC content of each coating as applied** is equal to or less than the [**level**] **standard**

specified in Table I [after adjustment to a standard solvent density of 7.36 pounds per gallon and to a solids basis].

(i) The VOC content expressed in units of weight of VOC per volume of coating solids shall be calculated as follows:

$$\text{VOC} = (W_o)(D_c)/V_n$$

Where:

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

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

W_v = 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 liquid coating

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

$$\text{VOC}_A = \frac{\sum_i (W_{oi} \times D_{ci} \times Q_i) + \sum_J (W_{oJ} \times D_{dJ} \times Q_J)}{\sum_i (V_{ni} \times Q_i)}$$

Where:

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

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

D_{ci} = Density of each coating (i) added to the dip tank, in pounds per gallon

Q_i = Quantity of each coating (i) added to the dip tank, in gallons

V_{ni} = Percent solids by volume of each coating (i) added to the dip tank, expressed as a decimal fraction

W_{oJ} = Percent VOC by weight of each diluent (J) added to the dip tank, expressed as a decimal fraction

D_{dJ} = Density of each diluent (J) added to the dip tank, in pounds per gallon

Q_J = Quantity of each diluent (J) added to the dip tank, in gallons

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

$$\text{VOC}_B = (W_o)/(W_n)$$

Where:

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

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

W_v = 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 liquid coating

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

$$\text{VOC}_C = \frac{\sum_i (W_{oi} \times D_{ci} \times Q_i) + \sum_J (W_{oJ} \times D_{dJ} \times Q_J)}{\sum_i (W_{ni} \times D_{ci} \times Q_i)}$$

Where:

VOC_C = VOC content in lb VOC/lb of coating solids for a given wood furniture dip coating on a 30-day rolling average basis

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

D_{ci} = Density of each coating (i) added to the dip tank, in pounds per gallon

Q_i = Quantity of each coating (i) added to the dip tank, in gallons

W_{ni} = Percent solids by weight of each coating (i) added to the dip tank, expressed as a decimal fraction

W_{oJ} = Percent VOC by weight of each diluent (J) added to the dip tank, expressed as a decimal fraction

D_{dJ} = Density of each diluent (J) added to the dip tank, in pounds per gallon

Q_J = Quantity of each diluent (J) added to the dip tank, in gallons

(v) 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). [by a specific percentage if the percentage is determined as follows:

$$\% \text{ reduction} = 100 \left\{ 1 - \frac{Y \left\{ 1 - \frac{X}{Z_1} \right\}}{X \left\{ 1 - \frac{Y}{Z_2} \right\}} \right\}$$

where X = pounds of VOC per gallon of coating (minus water) for present coating

Y = pounds of VOC per gallon of coating (minus water) found in Table I

Z_1 = density of VOC in pounds per gallon for present coating

Z_2 = standard solvent density (7.36 pounds per gallon)]

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 coating as applied, 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 the [gallons of coating used, the coating density before and after addition of diluents, the gallons of diluents used and the density of the diluents, the gallons of water contained in the coating and the weight percent of the organic volatiles in the coating. The records shall be maintained for 2 years and shall be submitted to the Department on a schedule reasonably prescribed by the Department.] following:

(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 gallons used.

(iii) The mix ratio.

(iv) The density or specific gravity.

(v) The weight percent of total volatiles, water, solids and exempt solvents.

(vi) The volume percent of solids.

(2) The VOC content of each coating, thinner and other component as supplied.

(3) The VOC content of each coating as applied.

* * * * *

(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

Allowable Content of VOCs in Surface Coatings by Process Category

Allowable VOC content

Weight of VOC per Volume of Coating [(minus water)] Solids

(Editor's Note: The following Table I replaces the existing Table I which appears at 25 Pa. Code pages 129-14 and 129-15, serial pages (199518) and (248195) and is printed in regular type to improve readability.)

Surface Coating Process Category	lbs VOC per gal coating solids	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
(d) two piece can end exterior	10.05	1.20
(e) side-seam spray	21.92	2.63
(f) end sealing compound	7.32	0.88
2. Coil coating	4.02	0.48
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 through 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		

Surface Coating Process Category	lbs VOC per gal coating solids	kg VOC per liter coating solids
	WEIGHT OF VOC PER WEIGHT OF COATING SOLIDS	
	lbs VOC per lb coating solids	kg VOC per kg coating solids
11. Wood cabinet and furniture finishing		
(a) clear topcoat	3.0	3.0
(b) washcoat	14.3	14.3
(c) final repair coat	3.3	3.3
(d) opaque ground coats and enamels	2.2	2.2
(e) all other coatings	14.3	14.3
(f) clear sealers	3.9	3.9

Category 11 was adopted on May 7, 1988

(Editor's Note: The following sections are new and have been printed in regular type to enhance readability.)

WOOD FURNITURE MANUFACTURING OPERATIONS

§ 129.101. General provisions and applicability.

(a) Beginning on _____ *(Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking)*, this section and §§ 129.102—129.107 (relating to wood furniture manufacturing operations) 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) In addition to the requirements in § 129.52 (relating to surface coating processes), the owner or operator of an existing wood furniture manufacturing facility subject to subsection (a) shall comply this section and §§ 129.102—129.107 by _____ *(Editor's Note: The blank refers to a date 1 year from the effective date of adoption of this proposal)*, except for those facilities which have RACT determinations approved by the EPA as revisions to the SIP prior to _____. *(Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking.)*

(c) In addition to the requirements in § 129.52 (relating to surface coating processes), the owner or operator of an existing wood furniture manufacturing facility that emits or increases its 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 EPA revisions to the SIP prior to _____. *(Editor's Note: The blank refers to the effective date of adoption of this proposed rulemaking.)*

(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) When subject to § 129.52 and this section and §§ 129.102—129.107, the more stringent limitation applies to the wood furniture manufacturing operation.

(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 when one of the following applies:

(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 using one of the following methods:

(1) Using sealers, topcoats and strippable spray booth coatings with a VOC content equal to or less than the standard specified in Table IV:

(1) Waterborne Topcoats	0.8
(2) High Solids Coating Systems	
Sealer	1.9
Topcoat	1.8
(3) Acid-cured alkyd amino vinyl systems	
(i) Acid-cured alkyd amino vinyl sealer	2.3
Acid-cured alkyd amino conversion varnish topcoat	2.0
(ii) Other Sealer	1.9
Acid-cured alkyd amino conversion varnish topcoat	2.0
(iii) Acid-cured alkyd amino vinyl sealer	2.3
Other Topcoat	1.8
(4) Waterborne spray strippable 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 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.* By _____ *(Editor's Note: The blank refers to a date 60 days after the effective date of adoption of this proposed rule-*

making), an owner or operator of a facility subject to the requirements in this section, §§ 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 provisions of 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) New personnel hired after _____ (*Editor's Note:* The blank refers to the effective date of adoption of this proposed rulemaking) shall be trained upon hiring.

(2) Existing personnel hired before _____ (*Editor's Note:* The blank refers to the effective date of adoption of this proposed rulemaking) shall be trained by _____. (*Editor's Note:* The blank refers to a date 6 months after the effective date of adoption of this proposed rulemaking.)

(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 record the following:

(1) The quantity and type of solvent used each month for washoff and cleaning.

(2) The number of pieces washed off and the reason for the washoff.

(3) The net quantity of spent solvent generated from each activity. The net quantity of spent solvent is equivalent to the total amount of solvent that is generated from the activity minus any solvent that is reused onsite for operations other than cleaning or washoff and any solvent that was sent offsite for disposal.

(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 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:

(1) Using normally closed tanks for washoff.

(2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

§ 129.104. Compliance procedures and monitoring requirements.

(a) 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):

(i) Maintain certified product data sheets for each of these coatings.

(ii) Maintain documentation showing the VOC content of the coating as applied, 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 specified in Chapter 139 (relating to sampling and testing).

(2) To comply through the use of a control system as described in § 129.102(4):

(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 a coating as applied, lbs VOC/lb solids

E = the emission limit 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 specified 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 = 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(b) (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(b) 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(b) 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, §§ 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 establishing 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)(iii).

(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 specified 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(b), 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, §§ 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(c).

(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) Where 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, §§ 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, top-

coats, or both, using continuous coaters shall maintain the records required by subsection (a) 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 specified 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 § 129.103 or 129.104(a)(1) shall maintain a copy of the compliance certifications submitted in accordance with § 129.106(c) (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(b) and the semiannual reports required by § 129.106(c).

§ 129.106. Reporting requirements.

(a) *Initial notification.* The owner or operator of a facility subject to this requirement shall submit to the Department an initial notification which meets the requirements of 40 CFR 63.9(b) (relating to notification requirements).

(b) *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).

(c) *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 § 129.102 (relating to emission standards) may use an emissions averaging approach which meets the equivalency requirements in § 129.51(a) (relating to general) to achieve compliance with § 129.52 (relating to surface coating processes) or this section and §§ 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 facility may choose other coatings for its emissions averaging program, provided 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 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 _____ (*Editor's Note:* The blank refers to the effective date of adoption of this proposed rulemaking.). 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 [**Resources**] **Protection**, Bureau of Air Quality [**Control**], 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).

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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 [**volatile organic content,**] **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).

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