POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Organic Material Emission Standards and Limitations for the Metro East Area

2) Code Citation: 35 Ill. Adm. Code 219

3)

Section Numbers:	Proposed Action:
219.105	Amended
219.106	Amended
219.112	Amended
219.204	Amended
219.205	Amended
219.207	Amended
219.208	Amended
219.210	Amended
219.211	Amended
219.212	Amended
219.219	New
219.890	New
219.891	New
219.892	New
219.894	New
219.900	New
219.901	New
219.902	New
219.903	New
219.904	New

4) Statutory Authority: Implementing Section 10 and authorized by Sections 27, 28, and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28, and 28.5]

5) A Complete Description of the Subjects and Issues Involved: The Illinois Environmental Protection Agency (Illinois EPA) proposed this rulemaking to satisfy Illinois' obligation to submit a State Implementation Plan addressing requirements under Sections 172 and 182 of the federal Clean Air Act, 42 USC 7401 et seq., for sources of volatile organic material (VOM) emissions in areas designated as nonattainment with respect to the ozone National Ambient Air Quality Standard. The United States Environmental Protection Agency (USEPA) issued Control Techniques Guidelines (CTGs) for the following Group IV Consumer and Commercial Product Categories: Miscellaneous Metal and Plastic Parts Coatings, Auto and Light-Duty Truck Coatings, Miscellaneous Industrial Adhesives, and Fiberglass Boat Manufacturing Materials. In the CTGs, the USEPA

recommended control measures that it believes constitute reasonably available control technology for the product categories.

The Illinois EPA proposes amending Part 219 to implement such recommendations for the Metro East nonattainment area. Generally, the proposal amends Subpart F of Part 219 regarding VOM limitations for automobile and light-duty truck coatings and miscellaneous metal and plastic parts coatings. The proposal also adds Subparts II and JJ to Part 219, which set forth new VOM limitations for fiberglass boat manufacturing materials and miscellaneous industrial adhesives, respectively.

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The regulatory proposal included the Illinois EPA's Technical Support Document, which relied on several sources. Copies of the documents the Illinois EPA relied upon are available for review with the Pollution Control Board and are listed below:

Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Control Techniques Guidelines for Miscellaneous Industrial Adhesives, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives, 73 Fed. Reg. 58481-91 (Oct. 7, 2008).

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; National Emission Standards for Hazardous

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Air Pollutants for Surface Coating of Plastic Parts and Products, 72 Fed. Reg. 20227-37 (Apr. 24, 2007).

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? Yes

10) Are there any other proposed rulemakings pending on this Part? Yes

Section Number:	Proposed Action:	Illinois Register Citation:
219.106	Amend	33 Ill. Reg. 16460; November 20, 2009
219.204	Amend	33 Ill. Reg. 16460; November 20, 2009
219.205	Amend	33 Ill. Reg. 16460; November 20, 2009
219.207	Amend	33 Ill. Reg. 16460; November 20, 2009
219.210	Amend	33 Ill. Reg. 16460; November 20, 2009
219.211	Amend	33 Ill. Reg. 16460; November 20, 2009
219.212	Amend	33 Ill. Reg. 16460; November 20, 2009
219.218	New	33 Ill. Reg. 16460; November 20, 2009
219.106	Amend	34 Ill. Reg. 1941; February 5, 2010
219.181	Amend	34 Ill. Reg. 1941; February 5, 2010
219.187	New	34 Ill. Reg. 1941; February 5, 2010
219.204	Amend	34 Ill. Reg. 1941; February 5, 2010
219.205	Amend	34 Ill. Reg. 1941; February 5, 2010
219.207	Amend	34 Ill. Reg. 1941; February 5, 2010
219.210	Amend	34 Ill. Reg. 1941; February 5, 2010
219.211	Amend	34 Ill. Reg. 1941; February 5, 2010
219.212	Amend	34 Ill. Reg. 1941; February 5, 2010
219.217	Amend	34 Ill. Reg. 1941; February 5, 2010
219.401	Amend	34 Ill. Reg. 1941; February 5, 2010
219.402	Amend	34 Ill. Reg. 1941; February 5, 2010
219.403	Amend	34 Ill. Reg. 1941; February 5, 2010
219.404	Amend	34 Ill. Reg. 1941; February 5, 2010
219.405	Amend	34 Ill. Reg. 1941; February 5, 2010
219.406	Repeal	34 Ill. Reg. 1941; February 5, 2010
219.407	Amend	34 Ill. Reg. 1941; February 5, 2010
219.408	Repeal	34 Ill. Reg. 1941; February 5, 2010
219.409	Amend	34 Ill. Reg. 1941; February 5, 2010
219.411	Amend	34 Ill. Reg. 1941; February 5, 2010

219.412	New	34 Ill. Reg. 1941; February 5, 2010
219.413	New	34 Ill. Reg. 1941; February 5, 2010
219.415	New	34 Ill. Reg. 1941; February 5, 2010
219.416	New	34 Ill. Reg. 1941; February 5, 2010
219.417	New	34 Ill. Reg. 1941; February 5, 2010

11) Statement of Statewide Policy Objective: This rulemaking does not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].

12) Time, Place, and Manner in which interested persons may comment on this proposed rulemaking: Interested persons may request copies of the Board's opinion and order by calling the Clerk's office at 312/814-3620 or may download copies from the Board's Web site at www.ipcb.state.il.us.

The Board will accept written public comment on this proposal for 45 days after the date of publication in the *Illinois Register*. Comments should refer to Docket R10-20 and be addressed to:

John Therriault
Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

The Board has scheduled hearings according to the deadlines and for the purposes established by Section 28.5. Each hearing will continue from day-to-day until business is completed:

First hearing:
Wednesday, April 28, 2010
9:00 AM
Illinois Pollution Control Board Conference Room, First Floor
1021 N. Grand Ave. East
(North Entrance)
Springfield, Illinois

Second hearing:
(if necessary)
Wednesday, May 19, 2010
10:00 AM
Pollution Control Board Conference Room 11-512
James R. Thompson Center
100 W. Randolph St.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

Chicago, Illinois

Third hearing: Wednesday, June 2, 2010
(if necessary) 10:00 AM
Pollution Control Board Conference Room 11-512
James R. Thompson Center
100 W. Randolph St.
Chicago, Illinois

A March 18, 2010, hearing officer order contains additional details concerning participation in the rulemaking. For more information contact hearing officer Tim Fox at 312/814-6085 or email at foxt@ipcb.state.il.us.

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not for profit corporations affected: This rulemaking will impact any small business, small municipality, and not for profit corporation that falls within one of the Group IV Product Categories and meets the applicability thresholds specified in the proposal.

B) Reporting, bookkeeping or other procedures required for compliance: The proposed rulemaking requires that the owner or operator of a subject source perform emissions monitoring, submit certifications, complete required tests, and maintain records and make reports as required.

C) Types of Professional skills necessary for compliance: No professional skills beyond those currently required by the existing state and federal air pollution control regulations applicable to affected sources will be required.

14) Regulatory Agenda on which this rulemaking was summarized: January 2010

The full text of the Proposed Amendments begins on the next page:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSIONS STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 219
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS
FOR THE METRO EAST AREA

SUBPART A: GENERAL PROVISIONS

Section
219.100 Introduction
219.101 Savings Clause
219.102 Abbreviations and Conversion Factors
219.103 Applicability
219.104 Definitions
219.105 Test Methods and Procedures
219.106 Compliance Dates
219.107 Operation of Afterburners
219.108 Exemptions, Variations, and Alternative Means of Control or Compliance Determinations
219.109 Vapor Pressure of Volatile Organic Liquids
219.110 Vapor Pressure of Organic Material or Solvent
219.111 Vapor Pressure of Volatile Organic Material
219.112 Incorporations by Reference
219.113 Monitoring for Negligibly-Reactive Compounds

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section
219.119 Applicability for VOL
219.120 Control Requirements for Storage Containers of VOL
219.121 Storage Containers of VPL
219.122 Loading Operations
219.123 Petroleum Liquid Storage Tanks
219.124 External Floating Roofs
219.125 Compliance Dates
219.126 Compliance Plan (Repealed)
219.127 Testing VOL Operations
219.128 Monitoring VOL Operations
219.129 Recordkeeping and Reporting for VOL Operations

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section
219.141 Separation Operations
219.142 Pumps and Compressors
219.143 Vapor Blowdown
219.144 Safety Relief Valves

SUBPART E: SOLVENT CLEANING

Section
219.181 Solvent Cleaning in General
219.182 Cold Cleaning

SUBPART TT: OTHER EMISSION UNITS

Section
219.980 Applicability
219.983 Permit Conditions
219.986 Control Requirements
219.987 Compliance Schedule
219.988 Testing

SUBPART UU: RECORDKEEPING AND REPORTING

Section
219.990 Exempt Emission Units
219.991 Subject Emission Units

219.APPENDIX A~~:~~ List of Chemicals Defining Synthetic Organic Chemical and Polymer Manufacturing
219.APPENDIX B~~:~~ VOM Measurement Techniques for Capture Efficiency (Repealed)
219.APPENDIX C~~:~~ Reference Methods and Procedures
219.APPENDIX D~~:~~ Coefficients for the Total Resource Effectiveness Index (TRE) Equation
219.APPENDIX E~~:~~ List of Affected Marine Terminals
219.APPENDIX G~~:~~ TRE Index Measurements for SOCMI Reactors and Distillation Units
219.APPENDIX H~~:~~ Baseline VOM Content Limitations for Subpart F, Section 219.212 Cross-Line Averaging

AUTHORITY: Implementing Section 10 and authorized by Sections 27, 28 and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28 and 28.5].

SOURCE: Adopted in R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days~~,~~; amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. 4242, effective March 3, 1994; amended in R94-12 at 18 Ill. Reg. 14987, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16415, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16980, effective November 15, 1994; emergency amendment in R95-10 at 19 Ill. Reg. 3059, effective February 28, 1995, for a maximum of 150 days; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6958, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7385, effective May 22, 1995; amended in R96-2 at 20 Ill. Reg. 3848, effective February 15, 1996; amended in R96-13 at 20 Ill. Reg. 14462, effective October 28, 1996; amended in R97-24 at 21 Ill. Reg. 7721, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3517, effective February 2, 1998; amended in R04-12/20 at 30 Ill. Reg. 9799, effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. ~~7086,~~7110, effective April 30, 2007; amended in R10-~~20,~~20 at 34 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 219.105 Test Methods and Procedures

a) Coatings, Inks and Fountain Solutions

The following test methods and procedures shall be used to determine compliance of as applied coatings, inks, and fountain solutions with the limitations set forth in this Part.

1) Sampling: Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOM added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOM added after the sample is taken must be measured and accounted for in the calculations in subsection (a)(3) of this Section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:

A) ASTM D 3925-81 (1985) standard practice for sampling liquid paints and related pigment coating. This practice is incorporated by reference in Section 219.112 of this Part.

B) ASTM E 300-86 standard practice for sampling industrial chemicals. This practice is incorporated by reference in Section 219.112 of this Part.

2) Analyses: The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.

A) Method 24 of 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part, shall be used to determine the VOM content and density of coatings. If it is demonstrated to the satisfaction of the Agency and the USEPA that plant coating formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.

B) Method 24A of 40 CFR ~~Part~~ 60, Appendix A, incorporated by reference in Section 219.112, shall be used to determine the VOM content and density of rotogravure printing inks and related coatings. If it is demonstrated to the satisfaction of the Agency and USEPA that the plant coating formulation data are equivalent to Method 24A results, formulation data may be used. In the event of any inconsistency between a Method 24A test and formulation data, the Method 24A test will govern.

C) The following ASTM methods are the analytical procedures for determining VOM:

i) ASTM D 1475-85: Standard test method for density of paint, varnish, lacquer and related products. This test method is incorporated by reference in Section 219.112 of this Part.

ii) ASTM D 2369-87: Standard test method for volatile content of a coating. This test method is incorporated by reference in Section 219.112 of this Part.

iii) ASTM D 3792-86: Standard test method for water content of water-reducible paints by direct injection into a gas chromatograph. This test method is incorporated by reference in Section 219.112 of this Part.

iv) ASTM D 4017-81 (1987): Standard test method for water content in paints and paint materials by the Karl Fischer method. This test method is incorporated by reference in Section 219.112 of this Part.

v) ASTM D 4457-85: Standard test method for determination of dichloromethane and 1,1,1, trichloroethane in paints and coatings by direct injection into a gas chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOM.) This test method is incorporated by reference in Section 219.112 of this Part.

vi) ASTM D 2697-86: Standard test method for volume non-volatile matter in clear or pigmented coatings. This test method is incorporated by reference in Section 219.112 of this Part.

vii) ASTM D 3980-87: Standard practice for interlaboratory testing of paint and related materials. This practice is incorporated by reference in Section 219.112 of this Part.

viii) ASTM E 180-85: Standard practice for determining the precision of ASTM methods for analysis of and testing of industrial chemicals. This practice is incorporated by reference in Section 219.112 of this Part.

ix) ASTM D 2372-85: Standard method of separation of vehicle from solvent-reducible paints. This method is incorporated by reference in Section 219.112 of this Part.

D) Use of an adaptation to any of the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section may not be used unless approved by the Agency and USEPA. An owner or operator must submit sufficient documentation for the Agency and USEPA to find that the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.

3) Calculations: Calculations for determining the VOM content, water content and the content of any compounds which are specifically exempted from the definition of VOM of coatings, inks and fountain solutions as applied shall follow the guidance provided in the following documents:

A) "A Guide for Surface Coating Calculation", EPA-340/1-86-016, incorporated by reference in Section 219.112 of this Part.

B) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986), EPA-450/3-84-019, incorporated by reference in Section 219.112 of this Part.

C) "A Guide for Graphic Arts Calculations", August 1988, EPA-340/1-88-003, incorporated by reference in Section 219.112 of this Part.

b) Automobile or Light-Duty Truck Test Protocol

1) The protocol for testing, including determining the transfer efficiency of coating applicators, at primer surfacer operations and topcoat operations at an automobile or light-duty truck assembly source shall follow the procedures in the following:

A) Prior to May 1, 2011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat

Operations" ("topcoat protocol"), December 1988, EPA-450/3-88-018, incorporated by reference in Section 219.112 of this Part.

B) On and after May 1, 2011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations" ("topcoat protocol"), September 2008, EPA-453/R-08-002, incorporated by reference in Section 219.112 of this Part.

2) Prior to testing pursuant to the applicable topcoat protocol, the owner or operator of a coating operation subject to the topcoat or primer surfacer limit in ~~Sections~~Section 219.204(a)(1)(B)~~(2)~~, ~~or 219.204~~(a)(1)(C)~~(3)~~, ~~219.204~~(a)(2)(B), ~~219.204~~(a)(2)(C), or ~~219.204~~(a)(2)(E) shall submit a detailed testing proposal specifying the method by which testing will be conducted and how compliance will be demonstrated consistent with the applicable topcoat protocol. The proposal shall include, at a minimum, a comprehensive plan (including a rationale) for determining the transfer efficiency at each booth through the use of in-plant or pilot testing, the selection of coatings to be tested (for the purpose of determining transfer efficiency) including the rationale for coating groupings, the method for determining the analytic VOM content of as applied coatings and the formulation solvent content of as applied coatings, and a description of the records of coating VOM content as applied and coating's usage ~~which~~that will be kept to demonstrate compliance. Upon approval of the proposal by the Agency and USEPA, the compliance demonstration for a coating line may proceed.

c) Capture System Efficiency Test Protocols

1) Applicability
The requirements of subsection (c)(2) of this Section shall apply to all VOM emitting process emission units employing capture equipment (e.g., hoods, ducts), except those cases noted ~~below.~~in this subsection (c)(1).

A) If an emission unit is equipped with (or uses) a permanent total enclosure (PTE) that meets Agency and USEPA specifications, and which directs all VOM to a control device, then the emission unit is exempted from the requirements described in subsection (c)(2) of this Section. The Agency and USEPA specifications to determine whether a structure is considered a PTE are given in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. In this instance, the capture efficiency is assumed to be 100 percent and the emission unit is still required to measure control efficiency using appropriate test methods as specified in subsection (d) of this Section.

B) If an emission unit is equipped with (or uses) a control device designed to collect and recover VOM (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOM to the recovered liquid VOM. The general procedure for use in this situation is given in 40 CFR 60.433, incorporated by reference in Section 219.112 of this Part, with the following additional restrictions:

i) The source owner or operator shall obtain data each operating day for the solvent usage and solvent recovery to permit the determination of the solvent recovery efficiency of the system each operating day using a 7-day rolling period. The recovery efficiency for each operating day is computed as the ratio of the total recovered solvent for that day and the most recent prior 6 operating days to the total solvent usage for the same 7-day period used for the

recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433 incorporated by reference in Section 219.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 72 hours following each 7-day period. A source that believes that the 7-day rolling period is not appropriate may use an alternative multi-day rolling period not to exceed 30 days, with the approval of the Agency and USEPA. In addition, the criteria in subsection (c)(1)(B)(ii) or subsection (c)(1)(B)(iii) below must be met.

ii) The solvent recovery system (i.e., capture and control system) must be dedicated to a single coating line, printing line, or other discrete activity that by itself is subject to an applicable VOM emission standard, or

iii) If the solvent recovery system controls more than one coating line, printing line or other discrete activity that by itself is subject to an applicable VOM emission standard, the overall control (i.e., the total recovered VOM divided by the sum of liquid VOM input from all lines and other activities venting to the control system) must meet or exceed the most stringent standard applicable to any line or other discrete activity venting to the control system.

2) Capture Efficiency Protocols

The capture efficiency of an emission unit shall be measured using one of the protocols given below. Appropriate test methods to be utilized in each of the capture efficiency protocols are described in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. Any error margin associated with a test method or protocol may not be incorporated into the results of a capture efficiency test. If these techniques are not suitable for a particular process, then an alternative capture efficiency protocol may be used, pursuant to the provisions of Section 219.108(b) of this Part.

A) Gas/gas method using temporary total enclosure (TTE). The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The capture efficiency equation to be used for this protocol is:

~~CE = GW/(GW+ FW)~~

where:

CE = capture efficiency, decimal fraction; ~~GW~~ Gw = mass of VOM captured and delivered to control device using a TTE; ~~FW~~ Fw = mass of uncaptured VOM that escapes from a TTE.

Method 204B or 204C contained in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain ~~GW~~Gw. Method 204D in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain ~~FW~~Fw.

B) Liquid/gas method using TTE. The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The capture efficiency equation to be used for this protocol is:

where:

CE=capture efficiency, decimal fraction;L=mass of liquid VOM input to process emission unit;Fw=mass of uncaptured VOM that escapes from a TTE. Method 204A or 204F contained in Appendix M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part is used to obtain L. Method 204in Appendix M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part is used to obtain Fw.

C) Gas/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure, as determined by Method 204 of Appendix M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part and in which "FB" and "G" are measured while operating only the affected line or emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

CE = (L - FW)/L

where:

CE = capture efficiency, decimal fraction; L G= mass of liquid VOM input to process emission unit; FW VOM captured and delivered to control device;FB= mass of uncaptured VOM that escapes from a TTE. building enclosure.
Method 204AB or 204FC contained in Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain LG. Method 204E in Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain FWFB.

CD) GasLiquid/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure as determined by Method 204 of Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part and in which "FB" and "GL" are measured while operating only the affected line or emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

CE = G/(G + FB)

where:

CE = capture efficiency, decimal fraction;

G = mass of VOM captured and delivered to control device;

FB = mass of uncaptured VOM that escapes from building enclosure.

Method 204B or 204C contained in Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain G. Method 204E in

~~Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain FB.~~

~~D) Liquid/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure as determined by Method 204 of Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part and in which "FB" and "L" are measured while operating only the affected line emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:~~

~~CE = (L - FB)/L~~

~~where:~~

~~CE = capture efficiency, decimal fraction; L =~~ L=mass of liquid VOM input to process emission unit; FB = mass of uncaptured VOM that escapes from building enclosure.

Method 204A or 204F contained in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain L. Method 204E in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain FB.

E) Mass balance using Data Quality Objective (DQO) or Lower Confidence Limit (LCL) protocol. For a liquid/gas input where an owner or operator is using the DQO/LCL protocol and not using an enclosure as described in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part, the VOM content of the liquid input (L) must be determined using Method 204A or 204F in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The VOM content of the captured gas stream (G) to the control device must be determined using Method 204B or 204C in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The results of capture efficiency calculations (G/L) must satisfy the DQO or LCL statistical analysis methodology as described in Section 3 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 219.112 of this Part. Where capture efficiency testing is done to determine emission reductions for the purpose of establishing emission credits for offsets, shutdowns, and trading, the LCL protocol cannot be used for these applications. In enforcement cases, the LCL protocol cannot confirm non-compliance; capture efficiency must be determined using a protocol under subsection (c)(2)(A), (B), (C) or (D) of this Section, the DQO protocol of this subsection (c)(2)(E), or an alternative protocol pursuant to Section 219.108(b) of this Part.

BOARD NOTE: Where LCL was used in testing emission units that are the subject of later requests for establishing emission credits for offsets, shutdowns, and trading, prior LCL results may not be relied upon to determine the appropriate amount of credits. Instead, to establish the appropriate amount of credits, additional testing may be required that would satisfy the protocol of Section 219.105(c)(2)(A), (B), (C) or (D), the DQO protocol of Section 219.105(c)(2)(E), or an alternative protocol pursuant to Section 219.108(b) of this Part.

3) Simultaneous testing of multiple lines or emission units with a common control device. If an owner or operator has multiple lines sharing a common

control device, the capture efficiency of the lines may be tested simultaneously, subject to the following provisions:

A) Multiple line testing must meet the criteria of Section 4 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 219.112 of this Part;

B) The most stringent capture efficiency required for any individual line or unit must be met by the aggregate of lines or units; and

C) Testing of all the lines of emission units must be performed with the same capture efficiency test protocol.

4) Recordkeeping and Reporting

A) All owners or operators affected by this subsection must maintain a copy of the capture efficiency protocol submitted to the Agency and the USEPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to the Agency within ~~sixty (~~60~~)~~ days ~~of~~after the test date. A copy of the results must be kept on file with the source for a period of ~~three (~~3~~)~~ years.

B) If any changes are made to capture or control equipment, then the source is required to notify the Agency and the USEPA of these changes and a new test may be required by the Agency or the USEPA.

C) The source must notify the Agency 30 days prior to performing any capture efficiency or control test. At that time, the source must notify the Agency which capture efficiency protocol and control device test methods will be used. Notification of the actual date and expected time of testing must be submitted a minimum of 5 working days prior to the actual date of the test. The Agency may at its discretion accept notification with shorter advance notice provided that such arrangements do not interfere with the Agency's ability to review the protocol and/or observe testing.

D) Sources utilizing a PTE must demonstrate that this enclosure meets the requirement given in Method 204 in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part, for a PTE during any testing of their control device.

E) Sources utilizing a TTE must demonstrate that their TTE meets the requirements given in Method 204 in Appendix M or 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part, for a TTE during any testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.

F) Any source utilizing the DQO or LCL protocol must submit the following information to the Agency with each test report:

i) A copy of all test methods, Quality Assurance/Quality Control procedures, and calibration procedures to be used from those described in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part;

ii) A table with information on each sample taken, including the sample identification and the VOM content of the sample;

iii) The quantity of material used for each test run;

iv) The quantity of captured VOM for each test run;

v) The capture efficiency calculations and results for each test run;

vi) The DQO and/or LCL calculations and results; and

vii) The Quality Assurance/Quality Control results, including how often the instruments were calibrated, the calibration results, and the calibration gases used.

d) Control Device Efficiency Testing and Monitoring

1) The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in subsection (f) of this Section.

2) An owner or operator:

A) That uses an afterburner or carbon adsorber to comply with any Section of Part 219 shall use Agency and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in subsection (d)(3) of this Section. The continuous monitoring equipment must monitor the following parameters:

i) For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

ii) For each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.

iii) For each carbon adsorber, the VOM concentration of each carbon adsorption bed exhaust or the exhaust of the bed next in sequence to be desorbed.

B) Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured, expressed in degrees Celsius or ± 0.5~~oC~~° C, whichever is greater.

C) Of an automobile or light-duty truck primer surfacer operation or topcoat operation subject to subsection (d)(2)(A) ~~above~~, shall keep a separate record of the following data for the control devices, unless alternative provisions are set forth in a permit pursuant to Title V of the Clean Air Act:

i) For thermal afterburners for which combustion chamber temperature is monitored, all 3-hour periods of operation in which the average combustion temperature was more than 28° C (50° F) below the average combustion temperature measured during the most recent performance test that demonstrated that the operation was in compliance.

ii) For catalytic afterburners for which temperature rise is monitored, all 3-hour periods of operation in which the average gas temperature before the catalyst bed is more than 28° C (50° F) below the average gas temperature

immediately before the catalyst bed measured during the most recent performance test that demonstrated that the operation was in compliance.

iii) For catalytic afterburners and carbon adsorbers for which VOM concentration is monitored, all 3-hour periods of operation during which the average VOM concentration or the reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organic monitoring device during the most recent determination of the recovery efficiency of a carbon adsorber or performance test for a catalytic afterburner, which determination or test that demonstrated that the operation was in compliance.

3) An owner or operator that uses a carbon adsorber to comply with Section 219.401 of this Part may operate the adsorber during periods of monitoring equipment malfunction, provided that:

A) The owner or operator notifies in writing the Agency and USEPA, within 10 days after the conclusion of any 72 hour period during which the adsorber is operated and the associated monitoring equipment is not operational, of such monitoring equipment failure and provides the duration of the malfunction, a description of the repairs made to the equipment, and the total to date of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational;

B) During such period of malfunction the adsorber is operated using timed sequences as the basis for periodic regeneration of the adsorber;

C) The period of such adsorber operation does not exceed 360 hours in any calendar year without the approval of the Agency and USEPA; and

D) The total of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational shall be reported, in writing, to the Agency and USEPA by January 31~~st~~ of the following calendar year.

e) Overall Efficiency

1) The overall efficiency of the emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in 40 CFR 60.433, incorporated by reference in Section 219.112 of this Part, (and revised by subsection (c)(1)(B) of this Section) for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency used to calculate the product of the capture and control efficiency is the total capture efficiency over the entire line.

2) For coating lines which are both chosen by the owner or operator to comply with Section 219.207(a), (d), (e), (f), or (g) of this Part by the alternative in Section 219.207(b)(2) of this Part and meet the criteria allowing them to comply with Section 219.207 instead of Section 219.204 of this Part, the overall efficiency of the capture system and control device, as determined by the test methods and procedures specified in subsections (c), (d) and (e)(1) of this Section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

~~E = ([VOMa - VOMi]/VOMa) x 100~~

where:

E = Equivalent overall efficiency of the capture system and control device as a percentage; VOMa = Actual VOM content of a coating, or the daily-weighted average VOM content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in subsection (a)(4)(i) of this Part in units of kg VOM/1 (~~lb~~lb VOM/gal) of coating solids as applied; ~~VOM1~~ VOM1 = The VOM emission limit specified in Sections 219.204 or 219.205 of this Part in units of kg VOM/1 (~~lb~~lb VOM/gal) of coating solids as applied.

f) Volatile Organic Material Gas Phase Source Test Methods

The methods in 40 CFR ~~Part~~ 60, Appendix A, incorporated by reference in Section 219.112 of this Part delineated below shall be used to determine control device efficiencies.

1) 40 CFR ~~Part~~ 60, Appendix A, Method 18, 25 or 25A, incorporated by reference in Section 219.112 of this Part as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in subsections (f)(1)(A) and (B) below, the test shall consist of three separate runs, each lasting a minimum of 60 min, unless the Agency and the USEPA determine that process variables dictate shorter sampling times.

A) When the method is to be used to determine the efficiency of a carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual adsorber vessels.

B) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

2) 40 CFR ~~Part~~ 60, Appendix A, Method 1 or 1A, incorporated by reference in Section 219.112 of this Part, shall be used for sample and velocity traverses.

3) 40 CFR ~~Part~~ 60, Appendix A, Method 2, 2A, 2C or 2D, incorporated by reference in Section 219.112 of this Part, shall be used for velocity and volumetric flow rates.

4) 40 CFR ~~Part~~ 60, Appendix A, Method 3, incorporated by reference in Section 219.112 of this Part, shall be used for gas analysis.

5) 40 CFR ~~Part~~ 60, Appendix A, Method 4, incorporated by reference in Section 219.112 of this Part, shall be used for stack gas moisture.

6) 40 CFR ~~Part~~ 60, Appendix A, Methods 2, 2A, 2C, 2D, 3 and 4, incorporated by reference in Section 219.112 of this Part, shall be performed, as applicable, at least twice during each test run.

7) Use of an adaptation to any of the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section may not be used unless approved by the Agency and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Agency and the USEPA to find that the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.

g) Leak Detection Methods for Volatile Organic Material
Owners or operators required by this Part to carry out a leak detection monitoring program shall comply with the following requirements:

1) Leak Detection Monitoring

A) Monitoring shall comply with 40 CFR 60, Appendix A, Method 21, incorporated by reference in Section 219.112 of this Part.

B) The detection instrument shall meet the performance criteria of Method 21.

C) The instrument shall be calibrated before use on each day of its use by the methods specified in Method 21.

D) Calibration gases shall be:

i) Zero air (less than 10 ppm of hydrocarbon in air); and

ii) A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.

E) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

2) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:

A) The requirements of subsections (g)(1)(A) through (g)(1)(E) of this Section ~~above~~ shall apply.

B) The background level shall be determined as set forth in Method 21.

3) Leak detection tests shall be performed consistent with:

A) "APTI Course SI 417 controlling Volatile Organic Compound Emissions from Leaking Process Equipment", EPA-450/2-82-015, incorporated by reference in Section 219.112 of this Part.

B) "Portable Instrument User's Manual for Monitoring VOM Sources", EPA-340/1-86-015, incorporated by reference in Section 219.112 of this Part.

C) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOM and VHAP", EPA-450/3-88-010, incorporated by reference in Section 219.112 of this Part.

D) "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008, incorporated by reference in Section 219.112 of this Part.

h) Bulk Gasoline Delivery System Test Protocol

1) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR 60, Subpart XX, Section 60.503, incorporated by reference in Section 219.112 of this Part.

2) Other tests shall be performed consistent with:

A) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", EPA-340/1-80-012, incorporated by reference in Section 219.112 of this Part.

B) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", EPA-450/2-77-026, incorporated by reference in Section 219.112 of this Part.

i) Notwithstanding other requirements of this Part, upon request of the Agency where it is necessary to demonstrate compliance, an owner or operator of an emission unit which is subject to this Part shall, at his own expense, conduct tests in accordance with the applicable test methods and procedures specific in this Part. Nothing in this Section shall limit the authority of the USEPA pursuant to the Clean Air Act, as amended, to require testing.

j) Stage II Gasoline Vapor Recovery Test Methods
The methods for determining the acceptable performance of Stage II Gasoline Vapor Recovery System are delineated in "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities," found at EPA 450/3-91-022b and incorporated by reference in Section 219.112 of this Part. Specifically, the test methods are as follows:

1) Dynamic Backpressure Test is a test procedure used to determine the pressure drop (flow resistance) through balance vapor collection and control systems (including nozzles, vapor hoses, swivels, dispenser piping and underground piping) at prescribed flow rates.

2) Pressure Decay/Leak Test is a test procedure used to quantify the vapor tightness of a vapor collection and control system installed at gasoline dispensing facilities.

3) Liquid Blockage Test is a test procedure used to detect low points in any vapor collection and control system where condensate may accumulate.

(Source: Amended at 34 Ill. Reg._____, effective _____)

Section 219.106 Compliance Dates

a) Except as provided in subsections (b) and (c) ~~below~~, compliance with the requirements of this Part is required by May 15, 1992, consistent with the provisions of Section 219.103 of this Part.

b) As this Part is amended from time to time, compliance dates included in the specific Subparts supersede the requirements of this Section except as limited by Section 219.101(b) of this Subpart.

c) Any owner or operator of a source subject to the requirements of Section 219.204(a)(2) or 219.204(q) of this Part shall comply with the applicable requirements in ~~such Section(s)~~those Sections, as well as all applicable requirements in Sections 219.205 through 219.214 and 219.219, by May 1, 2011.

(Source: Amended at 34 Ill. Reg. ____, effective ___~~.)~~ _____)

Section 219.112 Incorporations by Reference

The following materials are incorporated by reference and do not contain any subsequent additions or amendments:

a) American Society for Testing and Materials, ~~1916 Race Street, Philadelphia, PA 19103.~~100 Barr Harbor Drive, West Conshohocken PA 19428-9555

1) ASTM D 2879-86

2) ASTM D 323-82

3) ASTM D 86-82

4) ASTM D 369-69 (1971)

5) ASTM D 396-69

6) ASTM D 2880-71

7) ASTM D 975-68

8) ASTM D 3925-81 (1985)

9) ASTM E 300-86

10) ASTM D 1475-85

11) ASTM D 2369-87

12) ASTM D 3792-86

13) ASTM D 4017-81 (1987)

14) ASTM D 4457-85

15) ASTM D 2697-86

16) ASTM D 3980-87

17) ASTM E 180-85

18) ASTM D 2372-85

19) ASTM D 97-66

20) ASTM E 168-87 (1977)

21) ASTM E 169-87

22) ASTM E 260-91

23) ASTM D 2504-83

24) ASTM D 2382-83

25) ASTM D 323-82 (approved 1982)

b) Standard Industrial Classification Manual, published by Executive Office of the President, Office of Management and Budget, Washington, D.C., 1987.

c) American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks", Second ed., February~~,~~ 1980.

d) 40 CFR ~~Part~~ 60 (July 1, 1991).

e) 40 CFR ~~Part~~ 61 (July 1, 1991).

f) 40 CFR ~~Part~~ 50 (July 1, 1991).

g) 40 CFR ~~Part~~ 51 (July 1, 1991) and 40 CFR ~~Part 51~~51, Appendix M, Methods 204-204F (July 1, 1999).

h) 40 CFR ~~Part~~ 52 (July 1, 1991).

i) 40 CFR ~~Part~~ 80 (July 1, 1991) and 40 CFR ~~Part 80~~80, Appendixes D, E, and F (July 1, 1993).

j) "A Guide for Surface Coating Calculation", July 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-016.

k) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coating", (revised June 1986), United States Environmental Protection Agency, Washington D.C., EPA-450/3-84-019.

l) "A Guide for Graphic Arts Calculations", August 1988, United States Environmental Protection Agency, Washington D.C., EPA-340/1-88-003.

m) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", December 1988, United States Environmental Protection Agency, Washington D.C., EPA-450/3-88-018.

n) "Control of Volatile Organic Emissions from Manufacturing of Synthesized Pharmaceutical Products", December 1978, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-029.

o) "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", December 1978, Appendix B, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-051.

p) "Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners", September 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-82-009.

q) "APTI Course SI417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment", 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-82-015.

r) "Portable Instrument User's Manual for Monitoring VOM Sources", June 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-015.

s) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOM and VHAP", October 1988, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-88-010.

t) "Petroleum Refinery Enforcement Manual", March 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-008.

u) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-012.

v) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", December 1977, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-77-026.

w) "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities", November 1991, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-91-022b.

x) California Air Resources Board, Compliance Division. Compliance Assistance Program: Gasoline Marketing and Distribution: Gasoline Facilities Phase I & II (October 1988, rev. November 1993) (CARB Manual).

y) "Guidelines for Determining Capture Efficiency", January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency, Research Triangle Park, NC.

z) Memorandum "Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emissions", February 1995, John S. Seitz, Director, Office of Air Quality Planning and Standards, United States Environmental Protection Agency.

aa) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations", September 2008, United States Environmental Protection Agency, Washington, D.C., EPA-453/R-08-002.

bb) 40 CFR ~~63,~~63 Subpart PPPP, Appendix A (2008).

cc) 46 CFR Subchapter Q (2007).

dd) 46 CFR Subchapter T (2008).

(Source: Amended at 34 Ill. Reg. _____, effective ~~_____~~ _____)

SUBPART F: COATING OPERATIONS

Section 219.204 Emission Limitations

Except as provided in Sections 219.205, 219.207, 219.208, 219.212, 219.215 and 219.216 of this Subpart, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. Except as otherwise provided in

~~Sections~~Section 219.204(a), (j), (l), (n), and (q), compliance with the emission limitations marked with an asterisk in this Section is required on and after March 15, 1996, and compliance with emission limitations not marked with an asterisk is required until March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with this Subpart must be demonstrated through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(c) of this Subpart except where noted. (Note: The equation presented in Section 219.206 of this Part shall be used to calculate emission limitations for determining compliance by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.) The emission limitations are as follows:

a) Automobile or Light-Duty Truck Coating	kg/l	lb/gal		1) Prior to May 1, 2011:		
A~~1~~) Prime coat	0.14	0.14*	(1.2)*	(1.2)		
B~~2~~) Primer surface coat	1.81	1.81*	(15.1)	(15.1)*		

~~(Note~~BOARD NOTE: The primer surface coat limitation is in units of kg (lbs) of VOM per l (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire primer surface operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the primer surface limitation.

C) Topcoat	kg/l	lb/gal	1.81 (15.1)	1.81* (15.1)*

BOARD NOTE: The topcoat limitation is in units of kg (lbs) of VOM per 1 (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 ~~does not apply to the primer surface limitation.)~~

~~kg/l lb/gal C3) Topcoat 1.81 (15.1) 1.81* (15.1)* (Note: The topcoat limitation is in units of kg (lbs) of VOM per l (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205~~ of this Part does not apply to the topcoat limitation.~~)~~

~~kg/llb/gal~~ ~~D4)~~ D)Final repair ~~coat~~ coatkg/llb/gal0.58 (4.8) 0.58* (4.8)*

2) On and after May 1, 2011, subject automobile and light-duty truck coating lines shall comply with the following limitations. ~~Such~~These limitations shall not apply to materials supplied in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less:

A) Electrodeposition primer (EDP) operations. For purposes of this subsection (a)(2)(A), "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created.

kg VOM/l coating solids applied lb VOM/gal coating solids ~~coating solids applied~~ ~~applied i~~appliedi) When solids turnover ratio (RT) is greater than or equal to ~~0.160~~ ~~0.084~~ 0.1600.084(0.7)

ii) When RT is greater than or equal to 0.040 and ~~0.084 x (0.084 x 3500.160-RT~~ less than ~~0.160~~ 0.1600.084 x 3500.160-RT ~~x (0.084 x 3500.160-RT~~ x 8.34)

B) Primer~~-~~ surfacer ~~operations~~ ~~kg VOM/l~~ ~~lb~~operationskg VOM/l coating solids depositedlb VOM/gal coating solids ~~coating solids~~ deposited ~~deposited~~ i) VOM content ~~1.44~~ ~~(12.0)~~ limitation~~:~~ 1.44(12.0)ii) Compliance with the limitation set forth in subsection (a)(2)(B)(i) shall be based on the daily-weighted average from an entire primer surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the primer surfacer limitation. C) Topcoat ~~operations~~ ~~kg VOM/l~~ ~~lb~~operationskg VOM/l coating solids depositedlb VOM/gal coating solids ~~coating solids~~ ~~deposited~~ ~~deposited~~ ~~i)~~ depositedi)VOM content ~~1.44~~ ~~(12.0)~~ limitation~~:~~1.44(12.0)ii) Compliance with the limitation set forth in subsection (a)(2)(C)(i) shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the topcoat limitation. D) Combined primer~~-~~ surfacer and topcoat ~~operations~~ ~~kg VOM/l~~ ~~lb~~operationskg VOM/l coating solids depositedlb VOM/gal coating solids ~~coating solids~~ ~~deposited~~ ~~deposited~~ ~~i)~~ depositedi)VOM content limitation1.44 (12.0)

~~limitation:~~ii) Compliance with the limitation set forth in subsection (a)(2)(D)(i) shall be based on the daily-weighted average from the combined primer~~-~~ surfacer and topcoat operations. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the combined primer~~-~~ surfacer and topcoat limitation. E) Final repair coat ~~operations~~

	~~kg/l coatings~~	~~lb/gal coatings~~
		~~i)~~

operationskg/l coatingslb/gal coatingsi)VOM content limitation~~:~~ 0.58 (4.8)ii) Compliance with the final repair operations limitation set forth in subsection (a)(2)(E)(i) shall be on an occurrence-weighted average basis, calculated in accordance with the equation below, in which clear coatings shall have a weighting factor of 2 and all other coatings shall have a weighting factor of 1.

$$VOM_{tot} = \frac{2VOM_{cc} + \sum_{i=1}^{n} VOM_i}{n + 2}$$

~~Where:~~

where:

VOMtot = Total VOM content of all coatings, as applied, on an occurrence weighted average basis, and used to determine compliance with this subsection (a)(2)(E).i = Subscript denoting a specific coating applied.n = Total number of coatings applied in the final repair operation, other than clear coatings.VOMcc = The VOM content, as applied, of the clear coat used in the final repair operation.VOMi = The VOM content of each coating used in the final repair operation, as applied, other than clear coatings.
F) Miscellaneous Materials. For reactive adhesives subject to this subsection (a)(2)(F), compliance shall be demonstrated in accordance with the methods and procedures set forth in Appendix A to Subpart PPPP of 40 CFR 63, incorporated by reference in Section 219.112 of this Part.

	~~kg/l~~	~~lb/gal~~
~~i)~~ kg/llb/gali)Glass bonding primer	0.90	(7.51)
ii) Adhesive	0.25	(2.09)
iii) Cavity wax	0.65	(5.42)
iv) Trunk sealer	0.65	(5.42)
v) Deadener	0.65	(5.42)
vi) Gasket/gasket sealing material	0.20	(1.67)
~~material~~ vii) Underbody coating	0.65	(5.42)
viii) Trunk interior coating	0.65	(5.42)
ix) Bedliner	0.20	(1.67)
x) Weatherstrip adhesive	0.75	(6.26)
xi) Lubricating wax/compound	0.70	(5.84)

b)Can Coatingkg/llb/gal1)Sheet basecoat and ~~overvarnishA~~overvarnishA)Sheet basecoat0.34(2.8)0.26*(2.2)*B)Overvarnish0.34(2.8)0.34(2.8)*2)Exterior basecoat and overvarnish0.34(2.8)0.25*(2.1)*3)Interior body spray ~~coatA~~coatA)Two piece0.51(4.2)0.44*(3.7)*B)Three piece0.51(4.2)0.51*(4.2)*4)Exterior end coat0.51(4.2)0.51*(4.2)*5)Side seam spray coat0.66(5.5)0.66*(5.5)*6)End sealing compound coat0.44(3.7)0.44*(3.7)*
~~kg/llb/galc~~c)Paper ~~Coating~~Coatingkg/llb/gal0.35 (2.9)0.28*(2.3)*

~~(Note~~BOARD NOTE: The paper coating limitation shall not apply to any owner or operator of any paper coating line on which flexographic or rotogravure printing is performed if the paper coating line complies with the emissions limitations in Section 219.401 of this Part. In addition, screen printing on paper is not regulated as paper coating, but is regulated under Subpart TT of this Part.~~)~~

~~kg/llb/gald~~d)Coil ~~Coating~~Coatingkg/llb/gal0.31 (2.6)0.20*(1.7)*
e)Fabric Coating0.35 (2.9)0.28*(2.3)*
f)Vinyl Coating0.45 (3.8)0.28*(2.3)*
g)Metal Furniture Coating1)Air dried
0.36(3.0)0.34*(2.8)*2)Baked0.36(3.0)0.28*(2.3)*
h)Large Appliance Coating1)Air
dried0.34(2.8)0.34*(2.8)*2)Baked0.34(2.8)0.28*(2.3)*
~~(Note~~BOARD NOTE: The limitation shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 ~~l~~l (1 quart) in any one rolling eight-hour period.~~)~~

kg/llb/gali)Magnet Wire Coating0.20(1.7)0.20*(1.7)*
j)Prior to May 1, 2011: Miscellaneous Metal Parts and Products Coating1)Clear coating0.52(4.3)0.52*(4.3)*2)Extreme performance ~~coatingA~~coatingA)Air dried0.42(3.5)0.42*(3.5)*B)Baked0.42(3.5)0.40*(3.3)*3)Steel pail and drum interior coating0.52(4.3)0.52*(4.3)*4)All other ~~coatingsA~~coatingsA)Air ~~Dried~~dried0.42(3.5)0.40*(3.3)*B)Baked0.36(3.0)0.34*(2.8)*5)Metallic ~~CoatingA~~CoatingA)Air ~~Dried~~dried0.42(3.5)0.42*(3.5)*B)Baked0.36(3.0)0.36(3.0)*6) For purposes of subsection 219.204(j)(5) of this Section, "metallic coating" means a coating which contains more than 1/4 lb/gal of metal particles, as applied.
~~(Note~~BOARD NOTE: On and after May 1, 2011, the limitations in Section 219.204(q) shall apply to this category of coating.~~)~~

k)Heavy Off-Highway Vehicle Products Coatingkg/llb/gal1)Extreme performance prime coat0.42(3.5)0.42*(3.5)*2)Extreme performance topcoat (air dried)0.42 (3.5)0.42*(3.5)*3)Final repair coat (air dried)0.42(3.5)0.42*(3.5)*4) All other coatings are subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j) ~~above~~.
l) Wood Furniture Coating1)Limitations before March 15, 1998:kg/llb/~~galA~~galA)Clear topcoat0.67(5.6)B)Opaque stain0.56(4.7)C)Pigmented coat0.60(5.0)D)Repair coat0.67(5.6)E)Sealer0.67(5.6)F)Semi-transparent stain0.79(6.6)G)Wash coat0.73(6.1)
~~(Note:~~BOARD NOTE: Prior to March 15, 1998, an owner or operator of a wood furniture coating operation subject to this Section shall apply all coatings, with the exception of no more than 37.8 ~~l~~l (10 gal) of coating per day used for touch-up and repair operations, using one or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc spray application system, heated airless spray application system, roller coating, brush or wipe coating application system, dip coating application system or high volume low pressure (HVLP) application system.~~)~~

2) On and after March 15, 1998, wood furniture sealers and topcoats must comply with one of the limitations specified in subsections (~~l~~el)(2)(A) through (E)~~, below~~:kg VOM/kg solidslb VOM/lb solidsA)Topcoat0.8(0.8)B)Sealers and topcoats with the following limits:i)Sealer other than acid-cured alkyd amino vinyl sealer1.9(1.9)ii)Topcoat other than acid-cured alkyd amino conversion varnish topcoat1.8(1.8)iii)Acid-cured alkyd amino vinyl sealer2.3(2.3)iv)Acid-cured alkyd amino conversion varnish topcoat2.0(2.0)C) Meet the provisions

of Section 219.215 of this Subpart for use of an averaging approach;D) Achieve a reduction in emissions equivalent to the requirements of Section 219.204(l)(2)(A) or (B) of this Subpart, as calculated using Section 219.216 of this Subpart; ~~or~~E~~or~~E) Use a combination of the methods specified in Section 219.204(l)(2)(A) through (D) of this Subpart.3) Other wood furniture coating limitations on and after March 15, 1998:kg/llb/galA)Opaque stain0.56(4.7)B)Non-topcoat pigmented coat0.60(5.0)C)Repair coat0.67(5.6)D)Semi-transparent stain0.79(6.6)E)Wash coat0.73(6.1)4) Other wood furniture coating requirements on and after March 15, 1998:A) No source subject to the limitations of subsection (l)(2) or (3) of this Section and utilizing one or more wood furniture coating spray booths shall use strippable spray booth coatings containing more than 0.8 kg VOM/kg solids (0.8 lb VOM/lb solids), as applied.B) Any source subject to the limitations of subsection (l)(2) or (3) of this Section shall comply with the requirements of Section 219.217 of this Subpart.C) Any source subject to the limitations of subsection (~~l~~el)(2)(A) or (B) of this Section and utilizing one or more continuous coaters, shall for each continuous coater, use an initial coating which complies with the limitations of subsection (l)(2)(A) or (B) of this Section. The viscosity of the coating in each reservoir shall always be greater than or equal to the viscosity of the initial coating in the reservoir. The owner or operator shall:i) Monitor the viscosity of the coating in the reservoir with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added;ii) Collect and record the reservoir viscosity and the amount and weight of VOM per weight of solids of coating and solvent each time coating or solvent is added; ~~andiii~~andiii) Maintain these records at the source for a period of three years.

m)Prior to May 1, 2011: Plastic Parts Coating: Automotive/~~Transportationkg/llb/gal~~ ~~1)Interiors~~ ~~A)Bakedi~~Transportation1)Interiorskg/llb/galA)Bakedi)Color coat0.49*(4.1)*ii)Primer0.46*(3.8)*B)Air ~~Driedi~~Driedi)Color coat0.38*(3.2)*ii)Primer0.42*(3.5)*2)Exteriors (flexible and non-flexible)A)~~Bakedi~~Bakedi)Primer0.60*(5.0)*ii)Primer non-flexible0.54*(4.5)*iii)Clear coat0.52*(4.3)*iv)Color coat0.55*(4.6)*B)Air ~~Driedi~~Driedi)Primer0.66*(5.5)*ii)Clear coat0.54*(4.5)*iii)Color coat (red & black)0.67*(5.6)*iv)Color coat (others)0.61*(5.1)*3)~~SpecialtyA~~SpecialtyA)Vacuum metallizing basecoats, texture basecoats0.66*(5.5)*B)Black coatings, reflective argent coatings, air bag cover coatings, and soft coatings0.71*(5.9)*C)Gloss reducers, vacuum metallizing topcoats, and texture topcoats0.77*(6.4)*D)Stencil coatings, adhesion primers, ink pad coatings, electrostatic prep coatings, and resist coatings0.82*(6.8)*E)Head lamp lens coatings0.89*(7.4)* ~~(Note~~BOARD NOTE: On and after May 1, 2011, the limitations in Section 219.204(q) shall apply to this category of coating.~~)~~

n) Prior to May 1, 2011: Plastic Parts Coating: Business ~~Machine~~Machinekg/llb/gal ~~kg/l~~ ~~lb/gal~~ 1)Primer0.14*(1.2)*2)Color coat (non-texture coat)0.28*(2.3)*3)Color coat (texture coat)0.28*(2.3)*4)Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings0.48*(4.0)*5)Specialty ~~CoatingsA~~CoatingsA)Soft coat0.52*(4.3)*B)Plating resist0.71*(5.9)*C)Plating sensitizer0.85*(7.1)* ~~(Note~~BOARD NOTE: On and after May 1, 2011, the limitations in Section 219.204(q) shall apply to this category of coating.~~)~~

q) Miscellaneous Metal Parts and Products Coatings and Plastic Parts and Products Coatings On and After May 1, 2011. On and after May 1, 2011, the owner or operator of a miscellaneous metal or plastic parts coating line shall comply

with the limitations ~~below~~in this subsection (q). The limitations in this subsection (q) shall not apply to aerosol coating products or powder coatings.

1) Metal Parts and Products. For purposes of this subsection (q)(1), "corrosion resistant basecoat" means a water-borne epoxy coating applied via an electrodeposition process to a metal surface prior to spray coating, for the purpose of enhancing corrosion resistance. Also for purposes of subsection (q)(1), "marine engine coating" means any extreme performance protective, decorative, or functional coating applied to an engine that is used to propel watercraft. The limitations in subsection (q)(1) shall not apply to stencil coats, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating. The limitations in Section 219.219, however, shall apply to ~~such~~these coatings unless specifically excluded in Section 219.219.

~~kg/l~~ ~~kg/l~~
~~(lb/gal)~~ - ~~(lb/gal)~~

~~coatings~~ kg VOM/l coating solids ~~A)~~ applied lb VOM/gal coating solids appliedA) General one component ~~coating~~
~~i~~coatingi) Air ~~Dried:~~ ~~0.34~~ ~~0.54~~
dried0.340.54(2.8) (4.52) ii) Baked: ~~0.28~~
~~0.40~~ 0.280.40(2.3) (3.35)
B) General multi-component ~~coating~~
~~i~~coatingi) Air ~~Dried:~~ ~~0.34~~ - ~~0.54~~
dried0.340.54(2.8) (4.52) ii) Baked: ~~0.28~~
~~0.40~~ 0.280.40(2.3)
(3.35) C) Camouflage coating: ~~0.42~~ ~~0.80~~
0.420.80(3.5) (6.67)

D) Electric-insulating varnish: ~~0.42~~ ~~0.80~~
0.420.80(3.5) (6.67)
E) Etching filler: ~~0.42~~ ~~0.80~~
0.420.80(3.5) (6.67) F) Extreme high-gloss ~~coating~~
~~i~~coatingi) Air ~~Dried:~~ ~~0.42~~ ~~0.80~~
dried0.420.80(3.5) (6.67) ii) Baked: ~~0.36~~
~~0.61~~ 0.360.61(3.0) (5.06)
G) Extreme performance ~~coatingi~~coatingi) Air ~~Dried:~~
~~0.42~~ ~~0.80~~ dried0.420.80(3.5)
(6.67) ii) Baked: ~~0.36~~ ~~0.61~~
0.360.61(3.0) (5.06) H) Heat-resistant
~~coatingi~~coatingi) Air ~~Dried:~~ ~~0.42~~ ~~0.80~~
dried0.420.80(3.5) (6.67) ii) Baked: ~~0.36~~
~~0.61~~ 0.360.61(3.0) (5.06)
I) High performance architectural ~~0.74~~
~~4.56~~0.744.56coating: (6.2) (38.0) J) High
temperature coating: ~~0.42~~ ~~0.80~~ 0.420.80(3.5)
(6.67) K) Metallic ~~coating~~ ~~i~~coatingi) Air ~~Dried:~~
~~0.42~~ ~~0.80~~ dried0.420.80(3.5) (6.67) ii)
Baked: ~~0.36~~ ~~0.61~~
0.360.61(3.0) (5.06) L) Military specification
~~coating~~
~~i~~coatingi) Air ~~Dried:~~ ~~0.34~~ ~~0.54~~
dried0.340.54(2.8) (4.52) ii) Baked: ~~0.28~~
~~0.40~~ 0.280.40(2.3)
(3.35) M) Mold-seal coating: ~~0.42~~ ~~0.80~~

0.420.80(3.5) (6.67) N) Pan backing coating: 0.42 0.80 0.420.80(3.5) (6.67) O) Prefabricated architectural coating: multi-component i)componenti) Air Dried: 0.42 0.80 dried0.420.80(3.5) (6.67) ii) Baked: 0.28 0.40 0.280.40(2.3) (3.35) P) Prefabricated architectural coating: one-component i)componenti) Air Dried: 0.42 0.80 dried0.420.80(3.5) (6.67) ii) Baked: 0.28 0.40 0.280.40(2.3) (3.35)Q) Pretreatment coating: 0.42 0.80 0.420.80(3.5) (6.67) R) Repair coats and touch-up coatings i) coatingsi)Air Dried: dried0.42 (3.5) ii) Baked: 0.36 (3.01) (3.01)S) Silicone release coating: 0.42 0.80 0.420.80(3.5) (6.67) T) Solar-absorbent coating icoatingi) Air Dried: 0.42 0.80 dried0.420.80(3.5) (6.67) ii) Baked: 0.36 0.61 0.360.61(3.0) (5.06) U) Vacuum-metalizing coating: 0.42 0.80 0.420.80(3.5) (6.67) V) Drum coating, new, exterior: 0.34 0.54 0.340.54(2.8) (4.52)W) Drum coating, new, interior: 0.42 0.80 0.420.80(3.5) (6.67) X) Drum coating, reconditioned, 0.42 0.80 exterior: 0.42 (3.5) 0.80 (6.67) Y) Drum coating, reconditioned, 0.50 1.17 interior: 0.50 (4.2) 1.17 (9.78) Z) Steel pail and drum interior 0.52 1.24 coating: 0.521.24(4.3) (10.34) AA) Marine engine coatingicoatingi) Air Dried: 0.42 0.80 dried0.420.80(3.5) (6.67) ii) Baked: primer/topcoat 0.42 0.80 0.420.80(3.5) (6.67) iii) Baked: corrosion resistant 0.28 0.40 basecoat 0.28 (2.3) 0.40 (3.35)iv) Clear coating: 0.52 1.24 0.521.24(4.3) (10.34) BB) All other coatings i) Air Dried: 0.40 .73 coatingsi)Air dried0.400.73(3.3) (5.98)ii) Baked: 0.34 0.54 primer/topcoat0.340.54(2.8) (4.52)

2) Plastic Parts and Products: Miscellaneous. For purposes of this subsection (q)(2), miscellaneous plastic parts and products are plastic parts and products that are not subject to subsectionssubsection (q)(3), (q)(4), (q)(5), or (q)(6) of this Section. The limitations in subsection (q)(2) shall not apply to touch-up and repair coatings; stencil coats applied on clear or transparent substrates; clear or translucent coatings; coatings applied at a paint manufacturing facility while conducting performance tests on the coatings; any individual coating category used in volumes less than 189.2 liters (50 gallons) in any one calendar year, if the total usage of all such coatings does not exceed 756.9 liters (200 gallons) per calendar year per source and substitute compliant coatings are not available; reflective coatings applied to highway cones; mask coatings that are less than 0.5 mm thick (dried) if the area coated is less than 25 square inches; electromagnetic interference/radio

frequency interference (EMI/RFI) shielding coatings; and heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices if the total usage of all such coatings does not exceed 378.4 liters (100 gallons) per calendar year per source. The limitations in Section 219.219, however, shall apply to such coatings unless specifically excluded in Section 219.219.)

| ~~kg/l~~ ~~kg/l~~

| kg/l (lb/gal) coatingskg/l (lb/gal) – ~~(lb/gal~~ solidsA) ~~coatings solids A)~~ General one component: ~~0.28 0.40~~ coating0.280.40(2.3) (3.35)B) General multi -component: ~~0.42 0.80~~ 0.420.80(3.5) (6.67)C) Electric dissipating coatings ~~0.80~~ ~~8.96~~0.808.96and shock-free coatings: (6.7) (74.7)D) Extreme performance ~~0.42 0.80~~ (2-pack coatings): ~~0.42~~ 0.42 (3.5) 0.80 (6.67) E) Metallic coating: ~~0.42 0.80~~ 0.420.80(3.5) (6.67) F) Military specification ~~coating~~ ~~i~~coatingi) 1-pack coatings: ~~0.28 0.54~~ 0.280.54(2.3) (4.52)ii) 2-pack coatings: ~~0.42 0.80~~ 0.420.80(3.5) (6.67) G) Mold-seal coating: ~~0.76 5.24~~ 0.765.24(6.3) (43.7)H) Multi-colored coating: ~~0.68 3.04~~ 0.683.04(5.7) (25.3) I) Optical coating: ~~0.80 8.96~~ 0.808.96(6.7) (74.7) J) Vacuum-metalizing coating: ~~0.80 8.96~~ 0.808.96(6.7) (74.7)

3) Plastic Parts and Products: Automotive/Transportation

| kg/l ~~kg/l~~ (lb/gal) coatingskg/l (lb/gal) – ~~(lb/gal~~ solidsA) ~~coatings solidsA)~~ High bake coatings - interior and exterior ~~parts~~partsi) Flexible primer: ~~0.54 1.39~~ 0.541.39(4.5) (11.58) ii) Non-flexible primer: ~~0.42 0.80~~ 0.420.80(3.5) (6.67)iii) ~~Base coats:~~ ~~0.52 1.24~~ Basecoats0.521.24(4.3) (10.34) iv) Clear coat: ~~0.48 1.05~~ 0.481.05(4.0) (8.76) v) Non-basecoat/clear coat: ~~0.52 1.24~~ 0.521.24(4.3) (10.34)

B) Low bake/air dried coatings - exterior ~~parts~~partsi) Primers: ~~0.58 1.66~~ 0.581.66(4.8) (13.80) ii) Basecoat: ~~0.60 1.87~~ 0.601.87(5.0) (15.59) iii) Clear coats: ~~0.54 1.39~~ 0.541.39(4.5) (11.58) iv) Non-basecoat/clear coat: ~~0.60 1.87~~ 0.601.87(5.0) (15.59) C) Low bake/air dried coatings - interior ~~parts i~~partsi) Color coat: ~~0.38 .67~~ 0.380.67(3.2) (5.66)ii) Primer: ~~0.42 0.80~~ 0.420.80(3.5) (6.67)D) Touchup and repair coatings: ~~0.62 2.13~~ 0.622.13(5.2) (17.72)

E) ~~Specialtyi~~Specialtyi) Vacuum ~~metalizing~~metallizing basecoats, texture
~~0.66~~ ~~2.62~~basecoats: 0.66
(5.5) 2.62
(21.8)ii) Reflective argent coatings, air bag cover coatings, ~~0.71~~
~~3.64~~and soft coatings: 0.71
(5.9) 3.64
(29.7)iii) Gloss reducers, vacuum ~~metalizing~~metallizing topcoats,
~~0.77~~ ~~6.06~~and texture topcoats: 0.77
(6.4) 6.06
(49.1) iv) Stencil coats, adhesion primers, ink pad coatings,
electrostatic prep coats, ~~0.82~~ ~~(11.67)~~and resist coats: 0.82
(6.8) (11.67)
(89.4) v) Head lamp lens coating: 0.89
(7.4) F) Red, yellow, and black
coatings: Subject coating lines shall comply with a limit determined by multiplying the appropriate limit in subsections (q)(3)(A) through (q)(3)(E) of this Section by 1.15.

4) Plastic Parts and Products: Business Machine. The limitations of this subsection (q)(4) shall not apply to vacuum ~~metalizing~~metallizing coatings, gloss reducers, texture topcoats, adhesion primers, electrostatic preparation coatings, stencil coats, and resist coats other than plating resist coats. The limitations in Section 219.219, however, shall apply to such coatings unless specifically excluded in Section 219.219.

~~kg/l~~ ~~kg/l~~

kg/l (lb/gal) coatingskg/l
(lb/gal) ~~(lb/gal~~
solidsA)
~~coatings~~ ~~solids~~
~~A)~~ Primers: ~~0.14~~ ~~0.17~~
0.140.17(1.2) (1.4) B) Topcoat: ~~0.35~~
~~0.57~~ 0.350.57(2.9) (4.80)C) Color coat
(texture coat): ~~0.28~~ ~~0.40~~ 0.280.40(2.3)
(4.80) D) Color coat (non-texture coat): ~~0.28~~
~~0.40~~ 0.280.40(2.3)
(4.80)
E) Texture coats other than color ~~0.35~~ ~~0.57~~
texture coats: 0.35
(2.9) 0.57
(4.80)

F) EMI/RFI shielding
coatings: ~~0.48~~ ~~1.05~~ 0.481.05(4.0)
(8.76)G) Fog coat: ~~0.26~~ ~~0.38~~
0.260.38(2.2) (3.14)H) Touchup and repair:
~~0.35~~ ~~0.57~~ 0.350.57(2.9)
(4.80)I) Specialty ~~coatingsi~~coatingsi) Soft coat: ~~0.52~~
~~1.24~~ 0.521.24(4.3) (10.34) ii) Plating
resist: ~~0.71~~ ~~3.64~~ 0.713.64(5.9)
(29.7) iii) Plating sensitizer: 0.85 (23.4)
(7.1) (201.0)

5) Pleasure Craft Surface Coatings
~~kg/l~~ ~~kg/l~~

kg/l (lb/gal) coatingskg/l
(lb/gal) ~~(lb/gal~~
solidsA)

~~coatings~~ ~~solids~~

~~A)~~ Extreme high gloss coating - ~~0.49~~ ~~1.10~~
topcoat ~~:~~ 0.491.10(4.1) (9.2)B) High gloss coating -
topcoat ~~:~~ ~~0.42~~ ~~0.80~~ 0.420.80(3.5)
(6.7) C) Pretreatment wash primer ~~:~~ ~~0.78~~ ~~6.67~~
0.786.67(6.5) (55.6)D) Finish primer~~/~~
surfacer ~~:~~ ~~0.42~~ ~~0.80~~ 0.420.80(3.5)
(6.7) E) High build primer/surfacer ~~:~~ ~~0.34~~ ~~0.55~~
0.340.55(2.8) (4.6)F) Aluminum
substrate antifoulant ~~0.56~~ ~~1.53~~0.561.53coating ~~:~~
(4.7) (12.8)G) Other substrate antifoulant ~~0.33~~
~~0.53~~coating ~~:~~ 0.330.53(2.8) (4.4) H)
All other pleasure craft surface ~~0.42~~ ~~0.80~~coatings for metal or
plastic ~~:~~ 0.42
(3.5) 0.80
(6.7)

6) Motor Vehicle Materials

kg/l (lb/gal)

~~coatingsA~~ coatings~~A~~) Cavity wax ~~:~~ 0.65
(5.42)B) Sealer ~~:~~ 0.65
(5.42) C) Deadener ~~:~~ 0.65
(5.42) D) Gasket/gasket sealing material ~~:~~ 0.20
(1.67) E) Underbody coating ~~:~~
0.65 (5.42) F) Trunk interior coating ~~:~~
0.65 (5.42) G) Bedliner ~~:~~
0.20 (1.67) H) Lubricating wax/compound ~~:~~
0.70
(5.84)

(Source: Amended at 34 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 219.205 Daily-Weighted Average Limitations

No owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of this Section shall operate the subject coating line unless the owner or operator has demonstrated compliance with subsection (a), (b), (c), (d), (e), (f), (g), ~~or~~ (h), or (i) of this Section (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(d) of this Subpart:

a) No owner or operator of a coating line subject to only one of the limitations from among Section 219.204(a)(1)(A), (a)(1)(D)~~(4)~~, (a)(2)(A), (a)(2)(E), (a)(2)(F), (c), (d), (e), (f), or (i) of this Subpart shall apply coatings on any such coating line, during any day, whose daily-weighted average VOM content exceeds the emission limitation to which the coatings are subject.

b) Prior to May 1, 2011, ~~noNo~~no owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of Section 219.204(j) of this Subpart shall apply coatings to miscellaneous metal parts or products on the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(j) of this Subpart during the same day (e.g., all coatings used on the line are

subject to 0.42 kg/l (3.5 lbs/gal), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(j) of this Subpart, during the same day, the owner or operator shall have a site-specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

c) No owner or operator of a can coating line subject to the limitations of Section 219.204(b) of this Subpart shall operate the subject coating line using a coating with a VOM content in excess of the limitations specified in Section 219.204(b) of this Subpart unless all of the following requirements are met:

1) An alternative daily emission limitation for the can coating operation, i.e., for all of the can coating lines at the source, shall be determined according to subsection (c)(2) of this Section. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation.

where:

Ed = Actual VOM emissions for the day in units of kg/day (lbs/day);i = Subscript denoting a specific coating applied;n = Total number of coatings applied in the can coating operation, i.e. all can coating lines at the source;Vi = Volume of each coating applied for the day in units of l/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);Ci = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (Ad) shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, on a daily basis as follows:

where:

Ad = The VOM emissions allowed for the day in units of kg/day (lbs/day);i = Subscript denoting a specific coating applied;n = Total number of surface coatings applied in the can coating operation;Ci = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);Di = The density of VOM in each coating applied. For the purposes of calculating Ad, the density is 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM);Vi = Volume of each surface coating applied for the day in units of l (gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);Li = The VOM emission limitation for each surface coating applied as specified in Section 219.204(b) of this Subpart in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

d) No owner or operator of a heavy off-highway vehicle products coating line subject to the limitations of Section 219.204(k) of this Subpart shall apply

coatings to heavy off-highway vehicle products on the subject coating line unless the requirements of subsection (d)(1) or (d)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(k) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(k) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

e) No owner or operator of a wood furniture coating line subject to the limitations of Section 219.204(l)(1) or (l)(3) of this Subpart shall apply coatings to wood furniture on the subject coating line unless the requirements of subsection (e)(1) or (e)(2) of this Section, in addition to the requirements specified in the note to Section 219.204(l)(1) of this Subpart, are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(l)(1) or (l)(3) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(l)(1) or (l)(3) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

f) Prior to May 1, 2011, ~~noNo~~no owner or operator of a plastic parts coating line subject to the limitations of Section 219.204(m) or (n) of this Subpart shall apply coatings to business machine or automotive/transportation plastic parts on the subject coating line unless the requirements of subsection (f)(1) or (f)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(m) or (n) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

g) No owner or operator of a metal furniture coating line subject to the limitations of Section 219.204(g) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (g)(1) or (g)(2) of this Section are met:

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used~~,~~; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(g) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

h) No owner or operator of a large appliance coating line subject to the limitations of Section 219.204(h) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used~~,~~; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(h) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

i) On and after May 1, 2011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts or products coating line, pleasure craft surface coating line, or motor vehicle materials coating line subject to the limitations of Section 219.204(q) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (i)(1) or (i)(2) of this Section are met:

1) For each coating line ~~which~~that applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(q) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line ~~which~~that applies coatings subject to more than one numerical emission limitation in Section 219.204(q) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by ~~the~~ USEPA as a SIP revision. To receive approval,

the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 219.207 Alternative Emission Limitations

a) Any owner or operator of a coating line subject to Section 219.204 of this Subpart, except coating lines subject to Section 219.204(q)(6), may comply with this Section, rather than with Section 219.204 of this Subpart, if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with subsection (c), (d), (e), (f), (g), (h), (i), ~~or~~ (j), or (k) of this Section (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Section 219.105 of this Part and the recordkeeping and reporting requirements specified in Section 219.211(e) of this Subpart; and the control device is equipped with the applicable monitoring equipment specified in Section 219.105(d) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with subsection (c), (d), (e), (f), (g), (h), (i), (j), or (k) of this Section may be used as an alternative to compliance with Section 219.204 of this Subpart only if the alternative is approved by the Agency and approved by the USEPA as a SIP revision.

b) Alternative Add-On Control Methodologies

1) The coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency, or

2) The system used to control VOM from the coating line is demonstrated to have an overall efficiency sufficient to limit VOM emissions to no more than what is allowed under Section 219.204 of this Subpart. Use of any control system other than an afterburner, carbon adsorption, condensation, or absorption scrubber system can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. The use of transfer efficiency credits can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. Baseline transfer efficiencies and transfer efficiency test methods must be approved by the Agency and the USEPA. Such overall efficiency is to be determined as follows:

A) Obtain the emission limitation from the appropriate subsection in Section 219.204 of this Subpart;

B) Unless complying with an emission limitation in Section 219.204 that is already expressed in terms of weight of VOM per volume of solids, ~~cCalculate~~calculate "S" according to the equation in Section 219.206 of this Subpart;

C) Calculate the overall efficiency required according to Section 219.105(e) of this Part. For the purposes of calculating this value, according to the equation in Section 219.105(e)(2) of this Part, VOM1 is equal to the value of "S" as determined above in subsection (b)(2)(B) of this Section. If the coating line is complying with an emission limitation in Section 219.204 of this Subpart

that is already expressed in terms of weight of VOM per volume of solids, VOM1 is equal to ~~such~~that emission limitation.

c) No owner or operator of a coating line subject to only one of the emission limitations from among Section 219.204(a)(1)(A), (a) (1)(D)~~(4)~~, (a)(2)(A), (a)(2)(E), (a)(2)(F), (c), (d), (e), (f) or (i) of this Subpart and equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. No owner or operator of a coating line subject to Section 219.204(a)(1)(B)~~(2)~~, ~~or~~ (a)(1)(C~~)(3~~), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~ of this Part~~ and equipped with a capture system and control device shall operate the coating line unless the owner or operator demonstrates compliance with such limitation in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) or (b)(1)(B)~~ of this Part~~, as applicable.

d) No owner or operator of a miscellaneous metal parts and products coating line ~~which~~that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 ~~(~~(3.5 lbs/gal~~)~~), and ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

e) No owner or operator of a heavy off-highway vehicle products coating line ~~which~~that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(k) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 ~~(~~(3.5 lbs/gal~~)~~), and ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

f) No owner or operator of a wood furniture coating line ~~which~~that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/1 ~~(~~(5.6 lbs/gal~~)~~), and ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. If compliance is achieved by meeting the requirements in subsection (b)(2) of this Section, then the provisions in the note to Section 219.204(l) of this Subpart must also be met.

g) No owner or operator of a can coating line ~~and~~ equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (g)(1) or (g)(2) of this Section are met.

1) An alternative daily emission limitation for the can coating operation, i.e., for all of the can coating lines at the source, shall be determined according to Section 219.205(c)(2) of this Subpart. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation:

~~n~~
~~Ed = ? Vi Ci (1 Fi)~~
~~i=1~~

where:

Ed= Actual VOM emissions for the day in units of kg/day (lbs/day);i= Subscript denoting the specific coating applied;n= Total number of surface coatings as applied in the can coating operation;Vi= Volume of each coating as applied for the day in units of ~~l~~l/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);Ci= The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM) ~~andFi~~; andFi= Fraction, by weight, of VOM emissions from the surface coating, reduced or prevented from being emitted to the ambient air. This is the overall efficiency of the capture system and control device.

2) The coating line is equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.

h) No owner or operator of a plastic parts coating line ~~which~~that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l ~~(~~(3.5 lbs/gal~~)~~), and ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

i) No owner or operator of a metal furniture coating line ~~which~~that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l ~~(~~(2.8 lbs/gal~~)~~), and ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

j) No owner or operator of a large appliance coating line ~~which~~that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l ~~(~~(2.8 lbs/gal~~)~~), and ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

k) On and after May 1, 2011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts and products coating line, or pleasure craft surface coating line ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless:

1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or

2) The owner or operator of the coating line complies with all requirements set forth in subsection (b)(2) of this Section.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 219.208 Exemptions From Emission Limitations

a) Exemptions for all coating categories except wood furniture coating. The limitations of this Subpart shall not apply to coating lines within a source,

that otherwise would be subject to the same subsection of Section 219.204 (because they belong to the same coating category, e.g., can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices. (For example, can coating lines within a source would not be subject to the limitations of Section 219.204(b) of this Subpart if the combined actual emissions of VOM from the can coating lines never exceed 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices.) Prior to May ~~1,~~ 2011, ~~vVolatile~~volatile organic material emissions from heavy off-highway vehicle products coating lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. On and after May 1, 2011, VOM emissions from heavy off-highway vehicle products coating lines shall be combined with VOM emissions from miscellaneous metal parts and products coating lines and plastic parts and products coating lines to determine applicability. Any owner or operator of a coating source shall comply with the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(a) of this Subpart if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices and, therefore, are not subject to the limitations of Section 219.204 of this Subpart. Once a category of coating lines at a source is subject to the limitations in Section 219.204 of this ~~Subpart~~Part the coating lines are always subject to the limitations in Section 219.204 of this Subpart.

b) Applicability for wood furniture coating

1) The limitations of this Subpart shall apply to a source's wood furniture coating lines if the source contains process emission units, not regulated by Subparts B, E, F (excluding Section 219.204(l) of this Subpart), H (excluding Section 219.405 of this Part), Q, R, S, T (excluding Section 219.486 of this Part), V, X, Y, Z or BB of this Part, which as a group both:

A) Have a maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used, and

B) Are not limited to less than 91 Mg (100 tons) of VOM per calendar year if no air pollution control equipment were used, through production or capacity limitations contained in a federally enforceable permit or SIP revision.

2) The limitations of this Subpart shall apply to a source's wood furniture coating lines, on and after March 15, 1996, if the source contains process emission units, which as a group, have a potential to emit 22.7 Mg (25 tons) or more of VOM per calendar year and have not limited emissions to less than 22.7 Mg (25 tons) of VOM per calendar year through production or capacity limitations contained in a federally enforceable operating permit or SIP revision, and ~~which:~~that:

A) Are not regulated by Subparts B, E, F (excluding Section 219.204(l) of this Subpart), H, Q, R, S, T (excluding Section 219.486 of this Part), V, X, Y, Z or BB of this Part; and

B) Are not included in any of the following categories: synthetic organic chemical manufacturing industry (SOCMI) distillation, SOCMI reactors, plastic parts coating (business machines), plastic parts coating (other), offset lithography, industrial wastewater, autobody refinishing, SOCMI batch

processing, volatile organic liquid storage tanks and clean-up solvents operations.

3) If a source ceases to fulfill the criteria of subsection (b)(1) or (b)(2) of this Section, the limitations of Section 219.204(l) of this Subpart shall continue to apply to any wood furniture coating line which was ever subject to the limitations of Section 219.204(l) of this Subpart.

4) For the purposes of subsection (b) of this Section, an emission unit shall be considered to be regulated by a Subpart if it is subject to the limitations of that Subpart. An emission unit is not considered regulated by a Subpart if it is not subject to the limits of that Subpart, e.g., the emission unit is covered by an exemption in the Subpart or the applicability criteria of the Subpart are not met.

5) Any owner or operator of a wood furniture coating line to which the limitations of this Subpart are not applicable due to the criteria in subsection (b) of this Section shall, upon request by the Agency or the USEPA, submit records to the Agency and the USEPA within 30 calendar days from the date of the request that document that the coating line is exempt from the limitations of this Subpart.

c) On and after March 15, 1996, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by subsections 219.204(b), (d), (f), (g), and (i)~~, (j), (m) and (n)~~ of this Subpart; provided that the source-wide volume of such coatings used does not exceed 0.95 ~~l~~1 (1 quart) per eight- hour period or exceed 209 ~~l~~1/yr (55 gal/yr) for any rolling twelve month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (~~ed~~d) of this Section.

d) Prior to May 1, 2011, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by subsections 219.204(j), (m), and (n) of this Subpart, provided that the source-wide volume of ~~such~~the coatings used does not exceed 0.95 l (1 quart) per eight-hour period or exceed 209 l/yr (55 gal/yr) for any rolling twelve month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (e) of this Section.

~~ed~~e) On and after March 15, 1996, the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of Section 219.204(b), (d), (f), (g), (i), (j), (m) and (n) of this Subpart because of the provisions of Section 219.208(c) or (d) of this Subpart shall:

1) Collect and record the name, identification number, and volume used of each touch-up and repair coating, as applied on each coating line, per eight-hour period and per month;

2) Perform calculations on a daily basis, and maintain at the source records of such calculations of the combined volume of touch-up and repair coatings used source-wide for each eight-hour period;

3) Perform calculations on a monthly basis, and maintain at the source records of such calculations of the combined volume of touch-up and repair coatings used source-wide for the month and the rolling twelve month period;

4) Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to subsections (~~ed~~e)(1) and (~~ed~~e)(2) of this Section on or before January 31 of the following year;

5) Maintain at the source for a minimum period of three years all records required to be kept under this subsection and make such records available to the Agency upon request;

6) Notify the Agency in writing if the use of touch-up and repair coatings at the source ever exceeds a volume of 0.95 ~~l~~L (1 quart) per eight-hour period or exceeds 209 ~~l~~l/yr (55 gal/yr) for any rolling twelve month period within 30 days after any such exceedance. Such notification shall include a copy of any records of such exceedance; and

7) "Touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 219.208, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 219.210 Compliance Schedule

Every owner or operator of a coating line (of a type included within Section 219.204 of this Subpart) shall comply with the requirements of Section 219.204, 219.205, 219.207 or 219.208 and Section 219.211 or Sections 219.212 and 219.213 of this Subpart in accordance with the appropriate compliance schedule as specified in subsection (a), (b), (c), (d), (e), ~~or~~ (f), or (g) below:

a) No owner or operator of a coating line ~~which~~that is exempt from the limitations of Section 219.204 of this Subpart because of the criteria in Section 219.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.211(b) of this Subpart.

b) No owner or operator of a coating line complying by means of Section 219.204 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.204 and 219.211(c) of this Subpart.

c) No owner or operator of a coating line complying by means of Section 219.205 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.205 and 219.211(d) of this Subpart.

d) No owner or operator of a coating line complying by means of Section 219.207 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.207 and 219.211(e) of this Subpart.

e) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.204, 219.205 or 219.207 of this Subpart, shall operate said coating line on or after March 15,

1996, unless the owner or operator complies with and continues to comply with, respectively, the applicable requirements in Section 219.204, or the alternative control options in Sections 219.205 or 219.207 and the requirements of Section 219.211.

f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.212 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with the requirements of Sections 219.212 and 219.213 of this Subpart.

g) No owner or operator of a coating line subject to the emission limitations in Section 219.204(a)(2) or ~~219.204~~(q) of this Subpart, or subject to the limitations in Section 219.219 of this Subpart, shall operate ~~said~~the coating line on or after a date consistent with Section 219.106(c) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.204(a)(2) or ~~219.204~~(q), if applicable, or the alternative control options in Section 219.205 or 219.207, and all applicable requirements in Sections 219.211 and 219.219 of this Subpart.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 219.211 Recordkeeping and Reporting

a) The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in Section 219.105 of this Part to establish the records required under this Section.

b) Any owner or operator of a coating line ~~which~~that is exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) or (b) of this Subpart shall comply with the following:

1) For sources exempt from Section 219.208(a) of this Subpart, by a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the coating line or group of coating lines is exempt under the provisions of Section 219.208(a) of this Subpart. Such certification shall include:

A) A declaration that the coating line is exempt from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart; and

B) Calculations ~~which~~that demonstrate that the combined VOM emissions from the coating line and all other coating lines in the same category never exceed 6.8 kg (15 lbs) per day before the application of capture systems and control devices. The following equation shall be used to calculate total VOM emissions:

where:

Te = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day); m = Number of coating lines at the source that otherwise would be subject to the same

subsection of Section 219.104 of this Part (because they belong to the same category, e.g., can coating);j = Subscript denoting an individual coating line;n = Number of different coatings as applied each day on each coating line;i = Subscript denoting an individual coating;Ai = Weight of VOM per volume of each coating (minus water and any compounds ~~which~~that are specifically exempted from the definition of VOM) as applied each day on each coating line in units of kg VOM/l (lbs VOM/gal);~~Bi~~ andBi= Volume of each coating (minus water and any compounds ~~which~~that are specifically exempted from the definition of VOM) as applied each day on each coating line in units of l/day (gal/day). The instrument or method by which the owner or operator accurately measured or calculated the volume of each coating as applied on each coating line each day shall be described in the certification to the Agency.

2) For sources exempt under Section 219.208(b) of this Subpart, by March 15, 1998, or upon initial start-up, the owner or operator of a coating line or a group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the source is exempt under the provisions of Section 219.208(b) of this Subpart. Such certification shall include:

A) A declaration that the source is exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart; and

B) Calculations ~~which~~that demonstrate that the source meets the criteria of exemption because of Section 219.208(b) of this Subpart.

3) For sources exempt under Section 219.208(a) of this Subpart, on and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of lines referenced in this subsection (b) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line; and

B) The weight of VOM per volume and the volume of each coating (minus water and any compounds ~~which~~that are specifically exempted from the definition of VOM) as applied each day on each coating line.

4) For sources exempt under Section 219.208(b) of this Subpart, on and after March 15, 1998, the owner or operator of a coating line or group of coating lines referenced in this subsection (b) shall collect and record all of the following information for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line; and

B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line on a monthly basis.

5) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart shall notify the Agency of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by

sending a copy of such record to the Agency within 30 days after the exceedance occurs.

6) On and after March 15, 1998, any owner or operator of a source exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart shall notify the Agency if the source's VOM emissions exceed the limitations of Section 219.208(b) of this Subpart by sending a copy of calculations showing such an exceedance within 30 days after the change occurs.

c) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart other than Section 219.204(a)(1)(B)~~(2)~~, ~~and~~ (a)(1)(C)~~(3)~~, (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and complying by means of Section 219.204 of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from Section 219.205, Section 219.207, Section 219.215, or Section 219.216 of this Subpart to Section 219.204 of this Subpart; the owner or operator of a subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. ~~Such~~ The certification shall include:

A) The name and identification number of each coating as applied on each coating line;

B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line; ~~and~~

C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line; ~~.~~

D) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line, and the solids turnover ratio of the EDP operation, with supporting calculations;

E) For coating lines subject to the limitations of Section 219.204(a)(2)(E), the weight of VOM per volume of each coating as applied each day on each coating line, calculated on an occurrence weighted average basis;

F) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line; ~~and~~

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line;

B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;

C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line and certified product data sheets for each coating; ~~and~~

D) On and after March 15, 1998, for wood furniture coating spray booths subject to the limitation of Section 219.204(l)(4)(A) of this Subpart, the weight of VOM per weight of solids in each strippable spray booth coating as applied each day on each spray booth and certified product data sheets for each coating;~~.~~

E) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line, certified product data sheets for each coating, and the solid turnover ratio for the EDP operation, calculated on a calendar monthly basis, with supporting calculations;

F) For coating lines subject to the limitations of Section 219.204(a)(2)(E), the weight of VOM per volume of each coating as applied each day on each coating line, calculated on an occurrence weighted average basis, and certified product data sheets for each coating;

G) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line, and certified product data sheets for each coating;

3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:

A) Any record showing violation of Section 219.204 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d)(1) or (e)(1)~~below~~, respectively. Upon changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d) or (e) of this Section, respectively.

d) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of Section 219.205 of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing subject coating line from Section 219.204 or Section 219.207 to Section 219.205 of this Subpart; the owner or operator of the subject coating line shall certify to the Agency that the coating line will be in compliance with Section

219.205 on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. ~~Such~~ The certification shall include:

A) The name and identification number of each coating line which will comply by means of Section 219.205 of this Subpart.

B) The name and identification number of each coating as applied on each coating line.

C) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

D) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.

E) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line.

F) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.

~~GE~~G) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.

~~HF~~H) The method by which the owner or operator will create and maintain records each day as required in subsection (d)(2) of this Section.

~~IG~~I) An example of the format in which the records required in subsection (d)(2) of this Section will be kept.

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line.

B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.

D) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line~~; and~~.

E) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.

~~FD~~F) The daily-weighted average VOM content of all coatings as applied on each coating line as defined in Section 219.104 of this Part.

3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:

A) Any record showing violation of Section 219.205 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (e)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (e) of this Section, respectively.

e) Any owner or operator of a coating line subject to the limitations of Section 219.207 and complying by means of Section 219.207(c), (d), (e), (f), (g), ~~or~~ (h), or (k) of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing coating line from Section 219.204 or Section 219.205 to Section 219.207 of this Subpart, the owner or operator of the subject coating line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 219.207 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

A) The weight of VOM per volume of coating solids as applied each day on each coating line, if complying pursuant to Section 219.207(b)(2) of this Subpart.

B) Control device monitoring data.

C) A log of operating time for the capture system, control device, monitoring equipment and the associated coating line.

D) A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:

A) Any record showing violation of Section 219.207 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (d)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart ~~Part~~ from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.

f) Any owner or operator of a primer surfacer operation or topcoat operation, or combined primer surfacer and topcoat operation, subject to the limitations of Section 219.204(a)(1)(B)~~(2)~~, ~~or~~ (a)(1)(C~~)(3)~~), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating operation, the owner or operator of a subject coating operation shall certify to the Agency that the operation will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. ~~Such~~ The certification shall include:

A) The name and identification number of each coating operation which will comply by means of Section 219.204(a)(1)(B)~~(2)~~, ~~and~~ (a)(1)(C~~)(3)~~), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and the name and identification number of each coating line in each coating operation.

B) The name and identification number of each coating as applied on each coating line in the coating operation.

C) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

D) The transfer efficiency and control efficiency measured for each coating line.

E) Test reports, including raw data and calculations documenting the testing performed to measure transfer efficiency and control efficiency.

F) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.

G) The method by which the owner or operator will create and maintain records each day as required in subsection (f)(2) ~~below.~~

H) An example format for presenting the records required in subsection (f)(2) ~~below.~~

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating operation shall collect and record all of the following information each day for each topcoat or primer surfacer coating operation and maintain the information at the source for a period of three years:

A) All information necessary to calculate the daily-weighted average VOM emissions from the coating operations in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted, and approved pursuant to Section 219.204(a)(1)(B)~~(2)~~, ~~or~~ (a)(1)(C)~~(3)~~, (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart including:

i) The name and identification number of each coating as applied on each coating operation.

ii) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating operation.

B) If a control device~~(s) is~~ or devices are used to control VOM emissions, control device monitoring data; a log of operating time for the capture system, control device, monitoring equipment and the associated coating operation; and a maintenance log for the capture system, control device and monitoring equipment, detailing all routine and non-routine maintenance performed including dates and duration of any outages.

3) On and after a date consistent with Section 219.106 of this Part or on and after the initial start-up date, the owner or operator of a subject coating operation shall determine and record the daily VOM emissions in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted and approved pursuant to Section 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(a)(2) or (a)(3)~~ of this Subpart within 10 days from the end of the month and maintain this information at the source for a period of three years.

4) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating operation shall notify the Agency in the following instances:

A) Any record showing a violation of Section 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(a)(2) or (a)(3)~~ of this Subpart shall be reported by sending a copy of such record to the Agency within 15 days from the end of the month in which the violation occurred.

B) The owner or operator shall notify the Agency of any change to the operation at least 30 days before the change is effected. The Agency shall determine whether or not compliance testing is required. If the Agency determines that compliance testing is required, then the owner or operator shall submit a testing proposal to the Agency within 30 days and test within 30 days of the approval of the proposal by the Agency and USEPA.

g) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of Section 219.219 of this Subpart shall comply with the following:

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes:

A) A description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 219.219 of this Subpart;

B) For sources subject to Section 219.219(a)(6), the work practices plan specified in ~~such~~that Section;

C) For sources subject to Section 219.219(b)(6), the application ~~method(s)~~methods used to apply coatings on the subject coating line~~.~~;

2) Notify the Agency of any violation of Section 219.219 of this Subpart by providing a description of the violation and copies of records documenting ~~such~~the violation to the Agency within 30 days following the occurrence of the violation; and

3) Maintain at the source all records required by this subsection (g) for a minimum of three years from the date the document was created and make ~~such~~those records available to the Agency upon request.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 219.212 Cross-Line Averaging to Establish Compliance for Coating Lines

a) On and after March 15, 1996, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart, except coating lines subject to the limitations in Section 219.204(a)(2) or (q) of this Subpart, and with coating lines in operation prior to January 1, 1991 ("pre-existing coating lines"), may, for pre-existing coating lines only, elect to comply with the requirements of this Section, rather than complying with the applicable emission limitations set forth in Section 219.204, if an operational change of the type described below has been made after January 1, 1991, to one or more pre-existing coating lines at the source. An operational change occurs when a pre-existing coating line is replaced with a line using lower VOM coating for the same purpose as the replaced line ("replacement line"). A source electing to rely on this Section to demonstrate compliance with the requirements of this Subpart shall operate pursuant to federally enforceable permit conditions approved by the Agency and USEPA.

b) An owner or operator of pre-existing coating lines subject to a VOM content limitation in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart must establish, by use of the equations in subsection (d) of this Section, that the calculated actual daily VOM emissions from all participating coating lines, as defined ~~below~~in this subsection, are less than the calculated daily allowable VOM emissions from the same group of coating lines. For any pre-existing coating line to be aggregated for the purposes of Section 219.212, 219.213, or 219.214 of this Subpart ("participating coating lines"), the source must establish that:

1) All coatings applied on the participating coating line shall, at all times, have a VOM content less than or equal to the applicable VOM content limitation for such coating listed in Appendix H of this Part; and

2) On the date the source elects to rely on this Section to demonstrate compliance with this Subpart, all coatings applied on the participating coating line are not already in compliance with the VOM content limitation for such

coating effective on or after March 15, 1996; or the participating coating line is a replacement line, as defined in subsection (a) of this Section with an operational change occurring on or after January 1, 1991.

c) Notwithstanding subsection (a) of this Section, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart, may also include as a participating coating line, until December 31, 1999, only, any replacement line that satisfies all of the following conditions:

1) The replacement line is operated as a powder coating line;

2) The replacement line was added after July 1, 1988; and

3) The owner or operator also includes as a participating coating line one or more coating lines that satisfy the criteria of a replacement line, as described in subsection (a) of this Section.

d) To demonstrate compliance with this Section, a source shall establish the following:

1) An alternative daily emission limitation shall be determined for all participating coating lines at the source according to subsection (d)(2) of this Section. All participating coating lines shall be factored in each day to demonstrate compliance. Provided compliance is established pursuant to the requirements in this subsection, nothing in this Section requires daily operation of each participating line. Actual daily emissions from all participating coating lines (Ed) shall never exceed the alternative daily emission limitation (Ad) and shall be calculated by use of the following equation:

~~n~~
~~Ed = ? Vi Ci~~
~~i=1~~

where:

Ed = Actual daily VOM emissions from participating coating lines in units of kg/day (lbs/day); i = Subscript denoting a specific coating applied; n = Total number of coatings applied by all participating coating lines at the source; Vi ~~=~~ = Volume of each coating applied for the day in units of ~~l~~l/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); ~~andCi =~~ andCi = The VOM content of each coating as applied in units of kg VOM/~~l~~l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (Ad) shall be determined for all participating coating lines at the source on a daily basis as follows:

~~Ad=Al + Ap~~

where:

Al and Ap are defined in subsections (d)(2)(A) and (d)(2)(B) of this ~~subsection~~Section.

A) The portion of the alternative daily emissions limitation for coating operations at a source using non-powder coating (Al) shall be determined for all such participating non-powder coating lines on a daily basis as follows:

~~n~~
~~Ai = ? Vl Li (Di Ci)~~
~~i=1 (Di Li)~~

where:

~~Ai~~ Al= The VOM emissions allowed for the day in units of kg/day (lbs/day); ~~I~~ = i=Subscript denoting a specific coating applied; n = Total number of coatings applied ~~in the~~by all participating coating lines at the source;Ci = The VOM content of each coating as applied in units of kg VOM/~~l~~1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); Di = The density of VOM in each coating applied. For the purposes of calculating ~~Al,~~Ai, the density is 0.882 kg VOM/~~l~~ 1 VOM (7.36 lbs VOM/gal VOM); Vi = Volume of each coating applied for the day in units of~~l~~ 1 (gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); ~~and~~ Li = andLi=The VOM emission limitation for each coating applied, as specified in Section 219.204 of this Subpart, in units of kg VOM/~~l~~1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).
B) The portion of the alternative daily ~~emission~~emissions limitation for coating operations at a source using powdered coating (Ap) shall be determined for all such participating powder coating lines ~~at the source~~ on a daily basis as follows:

~~m n~~
~~Ap = ? ? Vj Lj Dj Kh~~
~~h=1 j=1 (Dj Lj)~~

where:

Ap = The VOM emissions allowed for the day in units of kg/day (lbs/day); h = Subscript denoting a specific powder coating line; j = Subscript denoting a specific powder coating applied; m = Total number of participating powder coating lines; n = Total number of powder coatings applied in the participating coating lines; Dj = The assumed density of VOM in liquid coating, 0.882 kg VOM/~~l~~1 VOM (7.36 lbs VOM/gal VOM); Vj = Volume of each powder coating consumed for the day in units of ~~l~~1 (gal) of coating; Lj = The VOM emission limitation for each coating applied, as specified in Section 219.204 of this Subpart, in units of kg VOM/~~l~~1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); ~~and~~ K = andK=A constant for each individual coating line representing the ratio of the volume of coating solids consumed on the liquid coating system which has been replaced to the volume of powder coating consumed on the replacement line to accomplish the same coating job. This value shall be determined by the source based on tests conducted and records

maintained pursuant to the requirements of Section 219.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid and powder. Tests methods and recordkeeping requirements shall be approved by the Agency and USEPA and contained in the source's operating permit as federally enforceable permit conditions, subject to the following restrictions:

~~i)~~ •K cannot exceed 0.9 for non-recycled powder coating systems; or~~ii)~~ •K cannot exceed 2.0 for recycled powder coating systems.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 219.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly Coatings and Miscellaneous Metal and Plastic Parts Coatings

a) Every owner or operator of a coating line subject to the requirements of Section 219.204(a)(2) of this Subpart shall:

1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;

2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing ~~such~~those materials;

3) Minimize spills of VOM-containing coatings, thinners, and coating-related waste materials;

4) Convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes;

5) Minimize VOM emissions from cleaning of storage, mixing, and conveying equipment;

6) Develop and implement a work practice plan to minimize VOM emissions from cleaning and from purging of equipment associated with coating lines subject to the limitations in Section 219.204(a)(2). The plan shall specify practices and procedures that the source will follow to ensure that VOM emissions from the operations listed ~~below~~in this subsection (a)(6) are minimized. If the owner or operator of the subject coating line has already implemented a work practice plan for ~~such~~the coating line pursuant to Subpart IIII of 40 CFR 63, incorporated by reference in Section 219.112 of this Part, the owner or operator may revise ~~such~~the plan as necessary to comply with this Section.

A) Vehicle body wiping;

B) Coating line purging;

C) Flushing of coating systems;

D) Cleaning of spray booth grates, walls, and equipment; and

F) Cleaning of external spray booth areas.

b) Except as provided in subsection (c) of this Section, every owner or operator of a coating line described in Section 219.204(q) of this Subpart shall:

1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;

2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing these materials;

3) Minimize spills of VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials;

4) Convey VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials from one location to another in closed containers or pipes;

5) Minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers; and

6) Apply all coatings using one or more of the following application methods:

A) Electrostatic spray;

B) High volume low pressure (HVLP) spray;

C) Flow coating. For the purposes of this subsection (~~e~~b)(6)(C), flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;

D) Roll coating;

E) Dip coating, including electrodeposition. For purposes of this subsection (~~e~~b)(6)(E), electrodeposition means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;

F) Airless spray;

G) Air-assisted airless spray; or

H) Another coating application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if ~~such~~the method is approved in writing by the Agency.

c) Notwithstanding subsection (b) of this Section, the application method limitations in subsection (b)(6) shall not apply to the following:

1) Coating lines complying with Section 219.207(k)(1);

2) For metal parts and products coating operations: touch-up coatings, repair coatings, textured finishes, stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting

coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating;

3) For pleasure craft surface coating operations: extreme high gloss coatings;

4) For plastic parts and products coating operations: airbrush operations using 18.9 liters (5 gallons) or less of coating per year.

(Source: Added at 34 Ill. Reg. _____, effective_____)

SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS

Section 219.890 Applicability

a) Except as provided in subsection (b) of this Section, on and after May 1, 2011, the requirements of this Subpart shall apply to the owners or operators of sources that manufacture hulls or decks of boats from fiberglass, or that build molds to make hulls or decks of boats from fiberglass, and that emit 6.8 kg/day (15 lbs/day) or more of VOM, calculated in accordance with Section 219.894(a)(1)(B), from open molding resin and gel coat operations, resin and gel coat mixing operations, and resin and gel coat application equipment cleaning operations, in the absence of air pollution control equipment. If a source is subject to this Subpart based upon such criteria, the limitations of this Subpart shall apply to the manufacture of all fiberglass boat parts at the source.

b) Notwithstanding subsection (a) of this Section, the requirements of this Subpart shall not apply to the following:

1) Surface coatings applied to fiberglass boats;

2) Industrial adhesives used in the assembly of fiberglass boats. Polyester resin putties used to assemble fiberglass parts shall not be considered industrial adhesives for purposes of this exclusion;

3) Closed molding operations.

c) If a source is or becomes subject to one or more of the limitations in this Subpart, the source is always subject to the applicable provisions of this Subpart.

d) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 219.894(a) of this Subpart.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 219.891 Emission Limitations and Control Requirements

a) Except as provided in subsection (f) of this Section, no owner or operator of a source subject to the requirements of this Subpart shall use a subject resin or gel coat at the source unless the resin and gel coat comply with subsection (b)(1) or (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of this Section. For sources complying pursuant

to subsection (b) or (c) of this Section, if the non-monomer VOM content of a resin or gel coat exceeds 5 percent, by weight, the excess non-monomer VOM shall be added to the monomer VOM content of ~~such~~the resin or gel coat in accordance with the equation below:

Weighted Average Monomer VOM Content ~~=~~ =

~~Where:~~
where:

Mi = Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams.VOMi = Monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation.i = Subscript denoting a specific open molding resin or gel coat applied.n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

VOMnm= Non-monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation.

b) VOM Content Limitations~~:~~

1) Except as provided in subsection (e) of this Section, the monomer VOM content of a subject resin or gel coat shall not exceed the following limitations~~:~~.:

Production ~~resin i~~resini)	Weighted average monomer VOM content (weight percent)	A)
~~ii) Nonatomized:~~	ii)Non-atomized	35
B) Pigmented gel coat~~:~~	33	C) Clear gel coat~~:~~
48	D) Tooling ~~resin i~~resini) Atomized~~:~~	30
~~ii) Nonatomized:~~	ii)Non-atomized	39
E) Tooling gel coat~~:~~	40	

2) Except as provided in subsection (e) of this Section, the weighted average monomer VOM content of a subject resin or gel coat shall not exceed the applicable limitation set forth in subsection (b)(1) of this Section on a 12-month rolling average basis. Equation 1 ~~below~~ shall be used to determine the weighted average monomer VOM content for resin and gel coat materials.

Equation 1:

Weighted Average Monomer VOM Content ~~=~~ =

where:

~~Where:~~

Mi = Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams.; VOMi = Monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation.; n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

c) Emissions Averaging Alternative. The owner or operator of a source subject to the requirements of this Subpart may elect to include some or all of the subject resin and gel coat operations at the source in the emissions averaging alternative. Resin and gel coat operations utilizing the emissions averaging alternative shall comply with a source-specific monomer VOM mass emission limit on a 12-month rolling average basis, calculated at the end of each calendar month. All subject resin and gel coat operations that do not utilize the emissions averaging alternative shall comply with the requirements in subsection (b) or (d) of this Section, as well as with all other applicable requirements in this Section.

1) The owner or operator of a source subject to this subsection (c) shall use Equation 2 below to determine the source-specific monomer VOM mass emission limit for resin and gel coats included in the emissions average:

Equation 2:

Where:

Monomer VOM Limit= where:

Monomer VOM Content= Total allowable monomer VOM that can be emitted from the open molding operations included in the average, expressed in kilograms per 12-month period. ; MR = Mass of production resin used in the past 12 months, excluding any materials that are exempt, expressed in megagrams.

(Mg); MPG = Mass of pigmented gel coat used in the past 12 months, excluding any materials that are exempt, expressed in megagrams.

Mg; MCG = Mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, expressed in megagrams.

Mg; MTR = Mass of tooling resin used in the past 12 months, excluding any materials that are exempt, expressed in megagrams.

Mg; MTG = Mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, expressed in megagrams.Mg.

The numerical coefficients associated with each term on the right hand side of Equation 2 are the allowable monomer VOM emission rates for that particular material in units of kg VOM/Mg of material used.

2) At the end of the first 12-month averaging period, and at the end of each subsequent month, the owner or operator of a source subject to this subsection (c) shall use Equation 3 below to calculate the monomer VOM emissions from the resin and gel coat operations included in the emissions average to determine whether suchthe emissions exceed the limitation calculated using Equation 2.

Equation 3:

Monomer VOM Emissions ~~= =~~ =

~~Where:~~

where:

Monomer VOM Emissions= Monomer VOM emissions calculated using the monomer VOM emission equations for each operation included in the average, expressed in ~~kilograms.~~kg;PVR = Weighted-average monomer VOM emission rate for production resin used in the past 12 months, expressed in ~~kilograms per megagram~~kg/Mg, calculated in accordance with Equation 4 ~~below.~~in subsection (c)(3);MR = Mass of production resin used in the past 12 months, expressed in ~~megagrams.~~Mg;PVPG = Weighted-average monomer VOM emission rate for pigmented gel coat used in the past 12 months, expressed in ~~kilograms per megagram~~kg/Mg, calculated pursuant to Equation 4 ~~below.~~

;MPG = Mass of pigmented gel coat used in the past 12 months, expressed in ~~megagrams.~~Mg;PVCG = Weighted-average monomer VOM emission rate for clear gel coat used in the past 12 months, expressed in ~~kilograms per megagram~~kg/Mg, calculated pursuant to Equation 4 ~~below.~~;MCG = Mass of clear gel coat used in the past 12 months, expressed in ~~megagrams.~~Mg;PVTR = Weighted-average monomer VOM emission rate for tooling resin used in the past 12 months, expressed in ~~kilograms per megagram~~kg/Mg, calculated pursuant to Equation 4 ~~below.~~;MTR = Mass of tooling resin used in the past 12 months, expressed in ~~megagrams.~~Mg;PVTG = Weighted-average monomer VOM emission rate for tooling gel coat used in the past 12 months, expressed in ~~kilograms per megagram~~kg/Mg, calculated pursuant to Equation 4 ~~below.~~;MTG = Mass of tooling gel coat used in the past 12 months, expressed in ~~megagrams~~Mg.

3) For purposes of Equation 3, the owner or operator of a source subject to this subsection (c) shall use Equation 4 below to calculate the weighted-average monomer VOM emission rate for the previous 12 months for each resin and gel coat operation included in the emissions average, except as provided in subsection (e) of this Section.

Equation 4:

~~Where:~~

where:

PVOP = Weighted-average monomer VOM emission rate for each open molding operation (PVR, PVPG, PVCG, PVTR, and PVTG) included in the average, expressed in ~~kilograms~~kg of monomer VOM per ~~megagram~~Mg of material applied~~.~~;Mi = Mass of resin or gel coat (i) used within an operation in the past 12 months, expressed in ~~megagrams.~~Mg;n = Number of different open molding resins and gel coats used within an operation in the past 12 months~~.~~;PVi = The monomer VOM emission rate for resin or gel coat (i) used within an operation in the past 12 months, expressed in ~~kilograms~~kg of monomer VOM per ~~megagram~~Mg of material applied. The monomer VOM emission rate formulas in subsection (c)(4) of this Section shall be used to compute PVi. If a source includes filled resins in the emissions average, the source shall use the value of PVF, calculated using

Equation 5 in subsection (e)(3) of this Section, as the value of PVi for ~~such~~those resins.; i = Subscript denoting a specific open molding resin or gel coat applied.

4) For purposes of Equation 4 and subsection (e)(3) of this Section, the following monomer VOM emission rate formulas shall apply:

A) Production resin, tooling resin:

i) Atomized: 0.014 x (Resin VOM%)2.425

ii) Atomized, plus vacuum bagging with roll-out: 0.01185 x (Resin VOM%)2.425

iii) Atomized, plus vacuum bagging without roll-out: 0.00945 x (Resin VOM%)2.425

iv) Nonatomized: 0.014 x (Resin VOM%)2.275

v) Nonatomized, plus vacuum bagging with roll-out: 0.0110 x (Resin VOM%)2.275

vi) Nonatomized, plus vacuum bagging without roll-out: 0.0076 x (Resin VOM%)2.275

B) Pigmented gel coat, clear gel coat, tooling gel coat: 0.445 x (Gel Coat VOM%)1.675.

d) Capture System and Control Device Requirements. No owner or operator of a source subject to the requirements of this Subpart that is utilizing a capture system and control device for a subject resin or gel coat operation shall conduct ~~such~~that operation unless the following requirements are satisfied:

1) An afterburner or carbon adsorber is installed and operated that meets the limitations set forth in this subsection (d). The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if ~~such~~that device complies with all limitations in this subsection (d), the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for ~~such~~the control device, and ~~such~~the plan is approved by the Agency and USEPA within federally enforceable permit conditions;

2) The VOM emissions at the outlet of the control device meet an emissions limitation determined using Equation 2 in subsection (c)(1) of this Section. In Equation 2, however, instead of using the mass of each material used over the past 12 months to determine the emission limitation, the owner or operator shall use the mass of each material used during the applicable control device performance test;

3) The owner or operator complies with all testing and monitoring requirements set forth in Section 219.892 of this Subpart.

e) Filled Resins. For all filled production and tooling resins, the owner or operator of a source subject to this Subpart shall adjust the monomer VOM emission rates determined pursuant to Section 219.891(b) and (c) of this

Subpart using Equation 5 ~~below~~in subsection (e)(3). If complying pursuant to Section 219.891(b), the emission rate determined using Equation 5 shall not exceed the limitations set forth in subsections (e)(1) and (e)(2) of this Section. If the non-monomer VOM content of a filled resin exceeds 5 percent, by weight, based on the unfilled resin, the excess non-monomer VOM shall be added to the monomer VOM content in accordance with the equation set forth in Section 219.891(a).

1) Tooling Resin: 54 kg (119.1 lbs) monomer VOM/Mg filled resin applied;

2) Production Resin: 46 kg (101.4 lbs) monomer VOM/Mg filled resin applied;

3) Equation 5:

~~Where:~~

where:

PVF = The as-applied monomer VOM emission rate for the filled production resin or tooling resin, expressed in ~~kilograms~~kg monomer VOM per ~~megagram~~Mg of filled material~~.~~; PVU = The monomer VOM emission rate for the unfilled resin, before filler is added, calculated using the formulas in Section 219.891(b)(4) of this Subpart~~.~~; % Filler = The weight-percent of filler in the as-applied filled resin system.

f) The limitations in subsections (a) through (e) of this Section shall not apply to the following materials. ~~Such~~These materials shall instead comply with the applicable requirements set forth in subsections (f)(1) through (f)(3)~~below~~.

1) Production resins, including skin coat resins, that must meet specifications for use in military vessels or must be approved by the United States Coast Guard for use in the construction of lifeboats, rescue boats, and other life-saving appliances approved under 46 CFR Subchapter Q, incorporated by reference in Section 219.112 of this Part, or for use in the construction of small passenger vessels regulated by 40 CFR Subchapter T, incorporated by reference in Section 219.112 of this Part. The owner or operator of a source subject to this Subpart shall apply all such resins with nonatomizing resin application equipment;

2) Production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch ups. ~~Such~~These materials shall not exceed 1 percent, by weight, of all ~~resin~~resins and gel coats used at a subject source on a 12-month rolling average basis;

3) Pure, 100 percent vinylester resins used for skin coats. The owner or operator of a source subject to this Subpart shall apply ~~such~~these resins with ~~nonatomizing~~non-atomizing resin application equipment, and the total amount of ~~such~~the resins shall not exceed 5 percent, by weight, of all resins used at the subject source on a 12-month rolling-average basis.

g) No owner or operator of a source subject to this Subpart shall use VOM- containing cleaning solutions to remove cured ~~resin~~resins and gel coats

from fiberglass boat manufacturing application equipment. Additionally, no owner or operator shall use VOM-containing cleaning solutions for routine cleaning of application equipment unless:

1) The VOM content of the cleaning solution is less than or equal to 5 percent, by weight; or

2) The composite vapor pressure of the cleaning solution is less than or equal to 0.50 ~~mm Hg~~mmHg at 68~~o~~ °F.

h) No owner or operator of a source subject to this Subpart shall use resin or gel coat mixing containers with a capacity equal to or greater than 208 liters (55 gallons), including those used for on-site mixing of putties and polyputties, unless such containers have covers with no visible gaps in place at all times, except when material is being manually added to or removed from a container or when mixing or pumping equipment is being placed in or removed from a container.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 219.892 Testing and Monitoring Requirements

a) Testing to demonstrate compliance with the requirements of Section 219.891 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise specified in this Subpart. ~~Such~~The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting ~~such~~the testing to allow the Agency to be present during testing.

b) Testing to demonstrate compliance with the monomer VOM content limitations for resin and gel coat materials in Section 219.891(b) of this Subpart shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, in accordance with SCAQMD 312-91, incorporated by reference in Section 219.112 of this Part.

c) The owner or operator of a source complying with this Subpart pursuant to Section 219.891(d) shall comply with the following:

1) By May 1, 2011, or upon initial start-up, whichever is later, and upon start-up of a new control device, conduct an initial performance test of the control device in accordance with this subsection (c) that demonstrates compliance with the emission limitation determined pursuant to Section 219.891(d).

2) Subsequent to the initial performance test described in subsection (c)(1) of this Section, conduct at least one performance test per calendar year. Performance tests used to demonstrate compliance with Section 219.891(d) shall be conducted at least six months apart, unless the performance test is being conducted following an exceedance of operating parameters as described in subsection (c)(3) of this Section, or per a request by the Agency.

3) Monitor and record relevant operating parameters, including the control efficiency of the control device and the amount of materials used in the fiberglass boat manufacturing process, during each control device performance test used to demonstrate compliance with Section 219.891(d). The owner or operator shall continue to operate the fiberglass boat manufacturing process

within ~~such~~the parameters until another performance test is conducted that demonstrates compliance with Section 219.891(d). The owner or operator shall monitor the parameters at all times when the control device is in operation. If the fiberglass boat manufacturing process exceeds any operating parameter by more than 10 percent, the owner or operator shall conduct additional performance testing in accordance with this Section within ~~ten~~10 operating days ~~of~~after the exceedance;

4) The methods and procedures of Section 219.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.891(d) of this Subpart, as follows:

A) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;

B) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part;

C) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:

i) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;

ii) The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and

iii) Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or ~~Method~~ 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest again using Method ~~25;~~25.

D) Notwithstanding the criteria or requirements in Method ~~25~~25, which specifies a minimum probe temperature of 129? C (265~~o~~ ?F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7~~oC~~?C (350~~o~~ ?F); and

E) During testing, the fiberglass boat manufacturing operation shall be operated at representative operating conditions and flow rates~~;~~.

5) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall:

A) Install, calibrate, operate, and maintain temperature monitoring ~~device(s)~~devices with an accuracy of 3~~o~~ ?C or 5~~o~~ ?F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and

B) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring ~~device(s)~~devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor~~;~~.

6) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall install, maintain, calibrate, and operate ~~such~~the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.891(d).

d) Testing to demonstrate compliance with the VOM content limitations for cleaning solutions in Section 219.891(g) of this Subpart, and with the non-monomer VOM content limitations for resin and gel coat materials in Section 219.891(a) of this Subpart, shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, as follows:

1) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 219.112 of this Part, shall be used to demonstrate compliance; or

2) For cleaning solvents, the manufacturer's specifications for VOM content may be used if ~~such~~the manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 219.105(a) of this Part~~;~~, provided, however, Method 24 shall be used to determine compliance.

e) The owner or operator of a source subject to this Subpart and relying on the VOM content of the cleaning solution to comply with Section 219.891(g)(1) of this Subpart shall:

1) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):

A) Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and

B) Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with Section 219.891(g)(1);

2) For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in Section 219.894(g) of this Subpart.

f) Testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents set forth in Section 219.891(g) of this Subpart shall be conducted in accordance with the applicable methods and procedures set forth in Section 219.110 of this Part.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 219.894 Recordkeeping and Reporting Requirements

a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 219.890(a) of this Subpart shall:

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the following:

A) A declaration that the source is exempt from the requirements in this Subpart because of the criteria in Section 219.890(a);

B) Calculations ~~which~~that demonstrate that combined emissions of VOM from all subject fiberglass boat manufacturing operations (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operation) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from fiberglass boat manufacturing operations at the source (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operations) and divide the amount by the number of days during that calendar month that ~~such~~the fiberglass boat manufacturing operations were in operation;

2) Notify the Agency of any record that shows that the combined emissions of VOM from subject fiberglass boat manufacturing operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of ~~such~~the record~~(s)~~ upon request by the Agency.

b) All sources subject to the requirements of this Subpart shall:

1) By May 1, 2011, or upon initial start-up of the source, whichever is later, and upon start-up of a new fiberglass boat manufacturing operation at the source, submit a certification to the Agency that includes:

A) Identification of each subject fiberglass boat manufacturing operation as of the date of certification;

B) A declaration that all subject fiberglass boat manufacturing operations, including related cleaning operations, are in compliance with the requirements of this Subpart;

C) The limitation with which each subject fiberglass boat manufacturing operation will comply (i.e., the VOM content limitation, the emissions averaging alternative, or the emissions control system alternative);

D) Initial documentation that each subject fiberglass boat manufacturing operation will comply with the applicable limitation, including copies of

manufacturer's specifications, test results (if any), formulation data, and calculations;

E) Identification of the ~~method(s)~~methods that will be used to demonstrate continuing compliance with the applicable limitations;

F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 219.891(h) of this Subpart;

G) A description of each fiberglass boat manufacturing operation exempt pursuant to Section 219.890(b) of this Subpart, if any;

H) A description of materials subject to Section 219.891(f) of this Subpart, if any, used in each fiberglass boat manufacturing operation;

2) At least 30 calendar days before changing the method of compliance ~~between Sections~~in accordance with Section 219.891(b), (c), and (d), notify the Agency in writing of ~~such~~the change. ~~Such~~The notification shall include a demonstration of compliance with the newly applicable subsection;

3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;

4) Retain all records required by this Section for at least three years and make ~~such~~those records available to the Agency upon request.

c) The owner or operator of a fiberglass boat manufacturing operation subject to the limitations of Section 219.891 of this Subpart and complying by means of Section 219.891(b) shall comply with the following.

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each subject resin and gel coat as applied each day by each subject fiberglass boat manufacturing operation;

2) Collect and record the following information each day for each fiberglass boat manufacturing operation complying with Section 219.891(b):

A) The name, identification number, and VOM content of each subject resin and gel coat as applied each day by each fiberglass boat manufacturing operation; and

B) If complying with Section 219.891(b)(2), the daily weighted average VOM content of all subject ~~resin~~resins and gel coats as applied by each subject fiberglass boat manufacturing operation.

d) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 219.891 of this Subpart and complying by means of Section 219.891(c) shall:

1) On and after May 1, 2011, collect and record the following information each month:

A) The amount of production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;

B) The VOM content of each production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;

C) Total monthly VOM emissions for all subject fiberglass boat manufacturing operations;

2) At the end of the first 12-month averaging period, and at the end of each subsequent month, collect and record the following information:

A) The monomer VOM mass emission limit for all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period, with supporting calculations;

B) The total actual emissions of VOM from all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period.

e) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 219.891 of this Subpart and complying by means of Section 219.891(d) shall:

1) By May 1, 2011, or upon initial start-up, whichever is later, and upon start-up of a new control device, submit a certification to the Agency that includes the following:

A) The type of control device used to comply with the requirements of Section 219.891(d);

B) The results of all tests and calculations necessary to demonstrate compliance with the requirements of Section 219.891(d); and

C) A declaration that the monitoring equipment required under Section 219.892 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

2) Within 90 days after conducting testing pursuant to Section 219.892, submit to the Agency a copy of all test results, as well as a certification that includes the following:

A) A declaration that all tests and calculations necessary to demonstrate whether the fiberglass boat manufacturing operation is in compliance with Section 219.891(d) have been properly performed;

B) A statement whether the fiberglass boat manufacturing ~~operation(s) is~~operations are or ~~is~~are not in compliance with Section 219.891(d);

C) The emissions limitation applicable during the control device performance test, with supporting calculations;

D) The operating parameters of the fiberglass boat manufacturing process during testing, as monitored in accordance with Section 219.892;

3) Collect and record daily the following information for each fiberglass boat manufacturing operation subject to the requirements of Section 219.891(d), and submit ~~such~~that information to the Agency upon request:

A) Afterburner or other approved control device monitoring data in accordance with Section 219.892 of this Subpart;

B) A log of operating time for the control device and monitoring equipment;

C) A maintenance log for the control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages;

D) Information to substantiate that the fiberglass boat manufacturing operation is operating in compliance with the parameters determined pursuant to Section 219.892.

f) The owner or operator of a source subject to the requirements in Section 219.891(f) of this Subpart shall collect and record the following information for each fiberglass boat manufacturing operation:

1) The name and identification number of each material subject to Section 219.891(f) as applied each day by each subject fiberglass boat manufacturing operation;

2) If subject to Section 219.891(f)(2), the amount of production and tooling ~~resin~~resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch -ups, used each month at the subject source, and the total amount of all ~~resin~~resins and gel coats used each month at the subject source;

3) If subject to Section 219.891(f)(3), the amount of pure, 100 percent vinylester resins used for skin coats each month at the subject source, and the total amount of all resins used each month at the subject source.

g) The owner or operator of a source subject to the requirements of Section 219.891 of this Subpart shall collect and record the following information for each cleaning solution used in each fiberglass boat manufacturing operation:

1) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.891(g) of this Subpart and ~~which~~that is prepared at the source with automatic equipment:

A) The name and identification of each cleaning solution;

B) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.892(d) of this Subpart;

C) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);

D) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;

E) The VOM content of the as-used cleaning solution, with supporting calculations; and

F) A calibration log for the automatic equipment, detailing periodic checks;

2) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.891(g), and ~~which~~that is not prepared at the source with automatic equipment:

A) The name and identification of each cleaning solution;

B) Date and time of preparation, and each subsequent modification, of the batch;

C) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.892(d);

D) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

E) The VOM content of the as-used cleaning solution, with supporting calculations;

3) For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with Section 219.891(g):

A) The name and identification of each cleaning solution;

B) Date and time of preparation, and each subsequent modification, of the batch;

C) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 219.892(f) of this Subpart;

D) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

E) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 219.110 of this Part.

(Source: Added at 34 Ill. Reg. _____, effective_____)

SUBPART JJ: MISCELLANEOUS INDUSTRIAL ADHESIVES

Section 219.900 Applicability

a) Except as provided in subsection (b) of this Section, on and after May 1, 2011, the requirements of this Subpart shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with Section 219.904(a)(1)(B), in the absence of air pollution control equipment.

b) Notwithstanding subsection (a) of this Section:

1) The requirements of this Subpart shall not apply to miscellaneous industrial adhesive application operations associated with the following:

A) Aerospace coatings;

B) Metal furniture coatings;

C) Large appliance coatings;

D) Flat wood paneling coatings;

E) Paper, film, and foil coatings;

F) Lithographic printing;

G) Letterpress printing;

H) Flexible package printing;

I) Coil coating;

J) Fabric coating;

K) Rubber tire manufacturing.

2) The requirements of Section 219.901(b) through (e) of this Subpart shall not apply to the following:

A) Adhesives or adhesive primers being tested or evaluated in any research and development operation or quality assurance or analytical laboratory;

B) Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems;

C) Adhesives or adhesive primers used in medical equipment manufacturing operations;

D) Cyanoacrylate adhesive application operations;

E) Aerosol adhesive and aerosol adhesive primer application operations;

F) Operations using polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities;

G) Operations using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less.

c) If a miscellaneous industrial adhesive application operation at a source is or becomes subject to one or more of the limitations in this Subpart, the miscellaneous industrial adhesive application operation is always subject to the applicable provisions of this Subpart.

d) The owner or operator of a source exempt from the emission limitations and control requirements of this Subpart because of the criteria in subsection (a) of this Section is subject to the recordkeeping and reporting requirements specified in Section 219.904(a) of this Subpart.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 219.901 Emission Limitations and Control Requirements

a) The owner or operator of a source subject to the requirements of this Subpart shall comply with the limitations in subsection (b), (c), or (d) of this Section, as well as with the limitations in subsections (e) and (f) of this Section. Notwithstanding this requirement, sources subject to Section 219.900(b)(2) shall comply with the limitations in subsection (f) of this Section only.

b) The owner or operator of adhesive application operations listed ~~below~~in this subsection (b) shall comply with the following VOM emission limitations. If an adhesive is used to bond dissimilar substrates together, the substrate category with the highest VOM emission limitation shall apply:

		kg VOM/l ~~lb~~adhesive or adhesive primer appliedlb VOM/gal	adhesive or adhesive ~~or adhesive~~ primer applied ~~or adhesive primer applied~~
1)	General adhesive application ~~operations~~		
~~A~~operationsA)	Reinforced plastic composite~~:~~	0.200 (1.7)	
B)	Flexible vinyl~~:~~	0.250 (2.1)	
C)	Metal~~:~~	0.030 (0.3)	
D)	Porous material (except wood)~~:~~	0.120 (1.0)	
E)	Rubber~~:~~	0.250 (2.1)	
F)	Wood~~:~~	0.030 (0.3)	
G)	Other substrates~~:~~	0.250 (2.1)	
2)	Specialty adhesive application operations		
A)	Ceramic tile installation~~:~~	0.130 (1.1)	
B)	Contact adhesive~~:~~	0.250 (2.1)	
C)	Cove base installation~~:~~	0.150 (1.3)	
D)	Indoor floor covering installation~~:~~	~~0.150 (1.3)~~ 0.150(1.3)E)	
	Outdoor floor covering installation~~:~~	~~0.250 (2.1)~~ 0.250(2.1)F)	
	Installation of perimeter bonded sheet flooring~~:~~	~~0.660 (5.5)~~ 0.660(5.5)G)	
	Metal to urethane/rubber molding or casting~~:~~	~~0.850 (7.1)~~ 0.850(7.1)H)	
	Motor vehicle adhesive~~:~~	0.250 (2.1)	
I)	Motor vehicle weatherstrip adhesive~~:~~	0.750 (6.3)	
J)	Multipurpose construction~~:~~	0.200 (1.7)	
K)	Plastic solvent welding	~~0.400 (3.3)~~	
	Plastic (acrylonitrile butadiene styrene (ABS) welding)~~:~~	0.400(3.3)L)	
	Plastic solvent welding (except ABS welding)~~:~~	~~0.500 (4.2)~~ 0.500(4.2)M)	
	Sheet rubber lining installation~~:~~	0.850 (7.1)	
N)	Single-ply roof membrane installation/repair (except ethylene propylenediene monomer (EPDM) roof membrane)~~:~~	~~0.250 (2.1)~~ 0.250(2.1)O)	
	Structural glazing~~:~~	0.100 (0.8)	
P)	Thin metal laminate~~:~~	0.780 (6.5)	
Q)	Tire repair~~:~~	0.100	

(0.8) R) Waterproof resorcinol glue~~:~~ 0.170
(1.4)

3) Adhesive primer application operations

A) Motor vehicle glass bonding primer 0.900
(7.5)

~~primer:~~ B) Plastic solvent welding adhesive primer 0.650 (5.4)

~~adhesive primer:~~ C) Single-ply roof membrane ~~0.250~~ ~~(2.1)~~ adhesive primer~~:~~ 0.250 (2.1)

D) Other adhesive primer~~:~~ 0.250 (2.1)

c) No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation unless the daily-weighted average VOM content of subject adhesives as applied each day by ~~such~~the operation, calculated in accordance with subsection (c)(1) of this Section, is less than or equal to the emissions limitation calculated in accordance with subsection (c)(2) of this Section.

1) Weighted Average of VOM Content of Adhesives Applied Each Day

~~VOM(WA) =~~ $\dfrac{\sum_{i=1}^{n} Mi \cdot VOMi}{\sum_{i=1}^{n} Mi}$

~~Where:~~
where:

~~VOM(WA)~~ VOMWA= The weighted average VOM content in units of kg (lbs) VOM per volume in l (gal) of all subject adhesives as applied each day; i = Subscript denoting a specific adhesive as applied; n = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation; Mi = The mass of each adhesive, as applied, in units of kg/l (lb/gal); VOMi = The VOM content in units of kg (lbs) VOM per volume in l (gal) of each adhesive as applied;

2) Mass Weighted Average VOM Limit for an Averaging Operation

~~Limit(WA) =~~ $\dfrac{\sum_{i=1}^{n} Mi \cdot Limiti}{\sum_{i=1}^{n} Mi}$

~~Where~~
where:

~~Limit(WA) =~~ LimitWA=The mass weighted average VOM limit in units of kg (lbs) VOM per volume in l (gal) of all subject adhesives as applied each day in a single operation; i = Subscript denoting a specific adhesive as applied;

n = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation; Mi = The mass of each adhesive, as applied, in units of kg/l (lb/gal); Limiti = The VOM limit, taken from subsection (b) of this ~~section~~Section, in units of kg (lbs) VOM per volume in l (gal) of each adhesive as applied~~;~~.

d) No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation employing a capture system and control device unless either:

1) An afterburner or carbon adsorption system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation;

2) An alternative capture and control system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation and is approved by the Agency and USEPA within federally enforceable permit conditions. The owner or operator shall submit a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for ~~such~~the control device; or

3) The owner or operator complies with the applicable limitation set forth in ~~Section 219.901~~subsection (b) of this ~~Subpart~~Section by utilizing a combination of low-VOM adhesives and an afterburner or carbon adsorption system. The owner or operator may use an alternative capture and control system if the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for ~~such~~the capture and control system and the system is approved by the Agency and USEPA within federally enforceable permit conditions.

e) The owner or operator of a source subject to this Subpart shall apply all miscellaneous industrial adhesives using one or more of the following methods:

1) Electrostatic spray;

2) High volume low pressure (HVLP) spray;

3) Flow coating. For the purposes of this Subpart, flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;

4) Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;

5) Dip coating, including electrodeposition. For purposes of this Subpart, "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;

6) Airless spray;

7) Air-assisted airless spray; or

8) Another adhesive application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if ~~such~~the method is approved in writing by the Agency.

f) The owner or operator of a source subject to this Subpart shall comply with the following work practices for each subject miscellaneous adhesive application operation at the source:

1) Store all VOM-containing adhesives, adhesive primers, process-related waste materials, cleaning materials, and used shop towels in closed containers;

2) Ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing ~~such~~those materials;

3) Minimize spills of VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials;

4) Convey VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials from one location to another in closed containers or pipes; and

5) Minimize VOM emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 219.902 Testing Requirements

a) Testing to demonstrate compliance with the requirements of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise provided in this Subpart. ~~Such~~The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting ~~such~~the testing to allow the Agency to be present during testing~~.~~.

b) Testing to demonstrate compliance with the VOM content limitations in Section 219.901(b) of this Subpart shall be conducted as follows~~:~~.

1) Method 24, incorporated by reference in Section 219.112 of this Part, shall be used for non-reactive adhesives;

2) Appendix A of 40 CFR ~~Part~~ 63, Subpart PPPP, incorporated by reference in Section 219.112 of this Part, shall be used for reactive adhesives;

3) The manufacturer's specifications for VOM content for adhesives may be used if ~~such~~the specifications are based on results of tests of the VOM content conducted in accordance with methods specified in subsections (b)(1) and (b)(2) of this Section, as applicable~~.~~.

c) For afterburners and carbon adsorbers, the methods and procedures of Section 219.105(d) through (f) of this Part shall be used for testing to demonstrate compliance with the requirements of Section 219.901(d) of this Subpart, as follows:

1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part;

2) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part;

3) To determine the VOM concentration of the exhaust stream entering and exiting the emissions control system, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used, except under the following circumstances, in which case Method 25A must be used:

A) The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;

B) The VOM concentration at the inlet of the emissions control system and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; ~~and~~

C) Due to the high efficiency of the emissions control system, the anticipated VOM concentration at the emissions control system exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

D) During testing, the cleaning equipment shall be operated at representative operating conditions and flow rates~~.~~

d) An owner or operator using an emissions control system other than an afterburner or carbon adsorber shall conduct testing to demonstrate compliance with the requirements of Section 219.901(d) as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.901(d)(3).

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.903 Monitoring Requirements

a) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.901(d) of this Subpart shall:

1) Install, calibrate, operate, and maintain temperature monitoring ~~device(s)~~devices with an accuracy of 3~~o~~ ?C or 5~~o~~ ?F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and

2) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature

monitoring ~~device(s)~~devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor;

b) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.901(d) of this Subpart shall install, maintain, calibrate, and operate ~~such~~the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.901(d)(3).

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.904 Recordkeeping and Reporting Requirements

a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 219.900(a) of this Subpart shall comply with the following:

1) By May 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:

A) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 219.900(a);

B) Calculations ~~which~~that demonstrate that combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from miscellaneous industrial adhesive application operations at the source (including related cleaning activities) and divide this amount by the number of days during that calendar month that miscellaneous industrial adhesive application operations at the source were in operation;

2) Notify the Agency of any record that shows that the combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of ~~such record(s)~~those records upon request by the Agency.

b) All sources subject to the requirements of this Subpart shall:

1) By May 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:

A) Identification of each subject adhesive application operation as of the date of certification;

B) A declaration that all subject adhesive application operations are in compliance with the requirements of this Subpart;

C) The limitation with which each subject adhesive application operation will comply (i.e., the VOM content limitation, the daily weighted averaging alternative, or the emissions control system alternative);

D) Initial documentation that each subject adhesive application operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;

E) Identification of the ~~method(s)~~methods that will be used to demonstrate continuing compliance with the applicable limitations;

F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 219.901(f) of this Subpart;

G) A description of each adhesive application operation exempt pursuant to Section 219.900(b)(2) of this Subpart, if any; and

H) The application ~~method(s)~~methods used by each subject adhesive application operation~~.~~:

2) At least 30 calendar days before changing the method of compliance ~~between Sections~~in accordance with Section 219.901(b), (c), and (d), notify the Agency in writing of ~~such~~the change. ~~Such~~The notification shall include a demonstration of compliance with the newly applicable subsection;

3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;

4) Retain all records required by this Section for at least three years and make ~~such~~those records available to the Agency upon request.

c) The owner or operator of an adhesive application operation subject to the limitations of Section 219.901 of this Subpart and complying by means of Section 219.901(b) shall comply with the following~~.~~:

1) By May 1, 2011, or upon the initial start-up date, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;

2) Collect and record the name, identification number, and VOM content of each adhesive as applied each day by each adhesive application operation complying with Section 219.901(b).

d) The owner or operator of an adhesive application operation subject to the limitations of Section 219.901 of this Subpart and complying by means of Section 219.901(c) shall comply with the following~~.~~:

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;

2) Collect and record the following information each day for each adhesive application operation complying by means of Section 219.901(c):

A) The name, identification number, and VOM content of each adhesive as applied each day by each subject adhesive application operation;

B) The daily weighted average VOM content of all adhesives as applied by each subject adhesive application operation.

e) The owner or operator of an adhesive application operation subject to the requirements of Section 219.901 of this Subpart and complying by means of Section 219.901(d) shall:

1) By May 1, 2011, or upon the initial start-up date, whichever is later, and upon initial start-up of a new control device, submit a certification to the Agency that includes the following:

A) The type of afterburner or other approved control device used to comply with the requirements of Section 219.901(d);

B) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 219.901(d); and

C) A declaration that the monitoring equipment required under Section 219.903 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

2) Within 90 days after conducting testing pursuant to Section 219.902 of this Subpart, submit to the Agency a copy of all test results, as well as a certification that includes the following:

A) A declaration that all tests and calculations necessary to demonstrate whether the adhesive application ~~operation(s) is~~operations are in compliance with Section 219.901(d) have been properly performed;

B) A statement whether the adhesive application ~~operation(s) is~~operations are or ~~is~~are not in compliance with Section 219.901(d); and

C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 219.903 of this Subpart;

3) Collect and record daily the following information for each adhesive application operation subject to the requirements of Section 219.901(d):

A) Afterburner or other approved control device monitoring data in accordance with Section 219.903 of this Subpart;

B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated application unit; and

C) A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

(Source: Added at 34 Ill. Reg. _____, effective_____)

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~~ILLINOIS REGISTER~~

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

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Insertions	578
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Moved from	11
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Format changed	0
Total changes	1395

JCAR350219-1004475r01

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SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSIONS STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 219
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS FOR THE METRO EAST AREA

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AUTHORITY: Implementing Section 10 and authorized by Sections 27, 28 and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28 and 28.5].

SOURCE: Adopted in R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days; amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. 4242, effective March 3, 1994; amended in R94-12 at 18 Ill. Reg. 14987, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16415, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16980, effective November 15, 1994; emergency amendment in R95-10 at 19 Ill. Reg. 3059, effective February 28, 1995, for a maximum of 150 days; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6958, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7385, effective May 22, 1995; amended in R96-2 at 20 Ill. Reg. 3848, effective February 15, 1996; amended in R96-13 at 20 Ill. Reg. 14462, effective October 28, 1996; amended in R97-24 at 21 Ill. Reg. 7721, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3517, effective February 2, 1998; amended in R04-12/20 at 30 Ill. Reg. 9799, effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. 7110, effective April 30, 2007; amended in R10-20 at 34 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 219.105 Test Methods and Procedures

a) Coatings, Inks and Fountain Solutions
The following test methods and procedures shall be used to determine compliance of as applied coatings, inks, and fountain solutions with the limitations set forth in this Part.

1) Sampling: Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOM added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOM added after the sample is taken must be measured and accounted for in the calculations in subsection (a)(3) of this Section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:

A) ASTM D 3925-81 (1985) standard practice for sampling liquid paints and related pigment coating. This practice is incorporated by reference in Section 219.112 of this Part.

B) ASTM E 300-86 standard practice for sampling industrial chemicals. This practice is incorporated by reference in Section 219.112 of this Part.

2) Analyses: The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.

A) Method 24 of 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part, shall be used to determine the VOM content and density of coatings. If it is demonstrated to the satisfaction of the Agency and the USEPA that plant coating formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.

B) Method 24A of 40 CFR ~~Part~~ 60, Appendix A, incorporated by reference in Section 219.112, shall be used to determine the VOM content and density of rotogravure printing inks and related

coatings. If it is demonstrated to the satisfaction of the Agency and USEPA that the plant coating formulation data are equivalent to Method 24A results, formulation data may be used. In the event of any inconsistency between a Method 24A test and formulation data, the Method 24A test will govern.

C) The following ASTM methods are the analytical procedures for determining VOM:

i) ASTM D 1475-85: Standard test method for density of paint, varnish, lacquer and related products. This test method is incorporated by reference in Section 219.112 of this Part.

ii) ASTM D 2369-87: Standard test method for volatile content of a coating. This test method is incorporated by reference in Section 219.112 of this Part.

iii) ASTM D 3792-86: Standard test method for water content of water-reducible paints by direct injection into a gas chromatograph. This test method is incorporated by reference in Section 219.112 of this Part.

iv) ASTM D 4017-81 (1987): Standard test method for water content in paints and paint materials by the Karl Fischer method. This test method is incorporated by reference in Section 219.112 of this Part.

v) ASTM D 4457-85: Standard test method for determination of dichloromethane and 1,1,1, trichloroethane in paints and coatings by direct injection into a gas chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOM.) This test method is incorporated by reference in Section 219.112 of this Part.

vi) ASTM D 2697-86: Standard test method for volume non-volatile matter in clear or pigmented coatings. This test method is incorporated by reference in Section 219.112 of this Part.

vii) ASTM D 3980-87: Standard practice for interlaboratory testing of paint and related materials. This practice is

incorporated by reference in Section 219.112 of this Part.

viii) ASTM E 180-85: Standard practice for determining the precision of ASTM methods for analysis of and testing of industrial chemicals. This practice is incorporated by reference in Section 219.112 of this Part.

ix) ASTM D 2372-85: Standard method of separation of vehicle from solvent-reducible paints. This method is incorporated by reference in Section 219.112 of this Part.

D) Use of an adaptation to any of the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section may not be used unless approved by the Agency and USEPA. An owner or operator must submit sufficient documentation for the Agency and USEPA to find that the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.

3) Calculations: Calculations for determining the VOM content, water content and the content of any compounds which are specifically exempted from the definition of VOM of coatings, inks and fountain solutions as applied shall follow the guidance provided in the following documents:

A) "A Guide for Surface Coating Calculation", EPA-340/1-86-016, incorporated by reference in Section 219.112 of this Part.

B) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986), EPA-450/3-84-019, incorporated by reference in Section 219.112 of this Part.

C) "A Guide for Graphic Arts Calculations", August 1988, EPA-340/1-88-003, incorporated by reference in Section 219.112 of this Part.

b) Automobile or Light-Duty Truck Test Protocol

1) The protocol for testing, including determining the transfer efficiency~~,~~ of coating applicators, at primer surfacer operations and topcoat operations at an automobile or light-duty truck assembly source shall follow the <u>procedures</u>~~procedure~~ in <u>the following</u>:

A) Prior to May 1, 2011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" ("topcoat protocol"), December 1988, EPA-450/3-88-018, incorporated by reference in Section 219.112 of this Part.

B) On and after May 1, 2011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations" (topcoat protocol), September 2008, EPA-453/R-08-002, incorporated by reference in Section 219.112 of this Part.

2) Prior to testing pursuant to the applicable topcoat protocol, the owner or operator of a coating operation subject to the topcoat or primer surfacer limit in SectionSections 219.204(a)(1)(B),(2) or 219.204 (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(E)(3) shall submit a detailed testing proposal specifying the method by which testing will be conducted and how compliance will be demonstrated consistent with the applicable topcoat protocol. The proposal shall include, at a minimum, a comprehensive plan (including a rationale) for determining the transfer efficiency at each booth through the use of in-plant or pilot testing, the selection of coatings to be tested (for the purpose of determining transfer efficiency) including the rationale for coating groupings, the method for determining the analytic VOM content of as applied coatings and the formulation solvent content of as applied coatings, and a description of the records of coating VOM content as applied and coating's usage thatwhich will be kept to demonstrate compliance. Upon approval of the proposal by the Agency and USEPA, the compliance demonstration for a coating line may proceed.

c) Capture System Efficiency Test Protocols

1) Applicability
The requirements of subsection (c)(2) of this Section shall apply to all VOM emitting process emission units employing capture equipment (e.g., hoods, ducts), except those cases noted in this subsection (c)(1)below.

A) If an emission unit is equipped with (or uses) a permanent total enclosure (PTE) that meets Agency and USEPA specifications, and which directs all VOM to a control device, then the emission unit is exempted from the requirements described in subsection (c)(2) of this Section. The Agency and USEPA specifications to

determine whether a structure is considered a PTE are given in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. In this instance, the capture efficiency is assumed to be 100 percent and the emission unit is still required to measure control efficiency using appropriate test methods as specified in subsection (d) of this Section.

B) If an emission unit is equipped with (or uses) a control device designed to collect and recover VOM (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOM to the recovered liquid VOM. The general procedure for use in this situation is given in 40 CFR 60.433, incorporated by reference in Section 219.112 of this Part, with the following additional restrictions:

i) The source owner or operator shall obtain data each operating day for the solvent usage and solvent recovery to permit the determination of the solvent recovery efficiency of the system each operating day using a 7-day rolling period. The recovery efficiency for each operating day is computed as the ratio of the total recovered solvent for that day and the most recent prior 6 operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433 incorporated by reference in Section 219.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 72 hours following each 7-day period. A source that believes that the 7-day rolling period is not appropriate may use an alternative multi-day rolling period not to exceed 30 days, with the approval of the Agency and USEPA. In addition, the criteria in subsection (c)(1)(B)(ii) or subsection (c)(1)(B)(iii) below must be met.

ii) The solvent recovery system (i.e., capture and control system) must be dedicated to a single coating line, printing line, or other discrete activity that by itself is subject to an applicable VOM emission standard, or

iii) If the solvent recovery system controls more than one coating line, printing line or other discrete activity that by

itself is subject to an applicable VOM emission standard, the overall control (i.e., the total recovered VOM divided by the sum of liquid VOM input from all lines and other activities venting to the control system) must meet or exceed the most stringent standard applicable to any line or other discrete activity venting to the control system.

2) Capture Efficiency Protocols

The capture efficiency of an emission unit shall be measured using one of the protocols given below. Appropriate test methods to be utilized in each of the capture efficiency protocols are described in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. Any error margin associated with a test method or protocol may not be incorporated into the results of a capture efficiency test. If these techniques are not suitable for a particular process, then an alternative capture efficiency protocol may be used, pursuant to the provisions of Section 219.108(b) of this Part.

A) Gas/gas method using temporary total enclosure (TTE). The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{G_w}{G_w + F_w}$$

where:

CE = capture efficiency, decimal fraction;

G_w = mass of VOM captured and delivered to control device using a TTE;

F_w = mass of uncaptured VOM that escapes from a TTE.

Method 204B or 204C contained in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain G_w. Method 204D in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_w.

B) Liquid/gas method using TTE. The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{L - F_W}{L}$$

where:

CE = capture efficiency, decimal fraction;

L = mass of liquid VOM input to process emission unit;

F_w = mass of uncaptured VOM that escapes from a TTE.

Method 204A or 204F contained in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain L. Method 204in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_w.

C) Gas/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure, as determined by~~in~~ Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part and in which "F_B" and "G" are measured while operating only the affected line or emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{G}{G + F_B}$$

where:

CE = capture efficiency, decimal fraction;

G = mass of VOM captured and delivered to control device;

F_B = mass of uncaptured VOM that escapes from building enclosure.

Method 204B or 204C contained in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain G. Method 204E in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_B.

D) Liquid/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure as determined by Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part and in which "F_B" and "L" are measured while operating only the affected line emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{L - F_B}{L}$$

where:

CE = capture efficiency, decimal fraction;

L = mass of liquid VOM input to process emission unit;

F_B = mass of uncaptured VOM that escapes from building enclosure.

Method 204A or 204F contained in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain L. Method 204E in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_B.

E) Mass balance using Data Quality Objective (DQO) or Lower Confidence Limit (LCL) protocol. For a liquid/gas input where an owner or operator is using the DQO/LCL protocol and not using an enclosure as described in Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part, the VOM content of the liquid input (L) must be determined using

Method 204A or 204F in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The VOM content of the captured gas stream (G) to the control device must be determined using Method 204B or 204C in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part. The results of capture efficiency calculations (G/L) must satisfy the DQO or LCL statistical analysis methodology as described in Section 3 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 219.112 of this Part. Where capture efficiency testing is done to determine emission reductions for the purpose of establishing emission credits for offsets, shutdowns, and trading, the LCL protocol cannot be used for these applications. In enforcement cases, the LCL protocol cannot confirm non-compliance; capture efficiency must be determined using a protocol under subsection (c)(2)(A), (B), (C) or (D) of this Section, the DQO protocol of this subsection (c)(2)(E), or an alternative protocol pursuant to Section 219.108(b) of this Part.

BOARD NOTE: Where LCL was used in testing emission units that are the subject of later requests for establishing emission credits for offsets, shutdowns, and trading, prior LCL results may not be relied upon to determine the appropriate amount of credits. Instead, to establish the appropriate amount of credits, additional testing may be required that would satisfy the protocol of Section 219.105(c)(2)(A), (B), (C) or (D), the DQO protocol of Section 219.105(c)(2)(E), or an alternative protocol pursuant to Section 219.108(b) of this Part.

3) Simultaneous testing of multiple lines or emission units with a common control device. If an owner or operator has multiple lines sharing a common control device, the capture efficiency of the lines may be tested simultaneously, subject to the following provisions:

A) Multiple line testing must meet the criteria of Section 4 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 219.112 of this Part;

B) The most stringent capture efficiency required for any individual line or unit must be met by the aggregate of lines or units; and

C) Testing of all the lines of emission units must be performed with the same capture efficiency test protocol.

4) Recordkeeping and Reporting

A) All owners or operators affected by this subsection must maintain a copy of the capture efficiency protocol submitted to the Agency and the USEPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to the Agency within ~~sixty (~~60~~)~~ days after~~of~~ the test date. A copy of the results must be kept on file with the source for a period of ~~three (~~3~~)~~ years.

B) If any changes are made to capture or control equipment, then the source is required to notify the Agency and the USEPA of these changes and a new test may be required by the Agency or the USEPA.

C) The source must notify the Agency 30 days prior to performing any capture efficiency or control test. At that time, the source must notify the Agency which capture efficiency protocol and control device test methods will be used. Notification of the actual date and expected time of testing must be submitted a minimum of 5 working days prior to the actual date of the test. The Agency may at its discretion accept notification with shorter advance notice provided that such arrangements do not interfere with the Agency's ability to review the protocol and/or observe testing.

D) Sources utilizing a PTE must demonstrate that this enclosure meets the requirement given in Method 204 in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part, for a PTE during any testing of their control device.

E) Sources utilizing a TTE must demonstrate that their TTE meets the requirements given in Method 204 in Appendix M or 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part, for a TTE during any testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.

F) Any source utilizing the DQO or LCL protocol must submit the following information to the Agency with each test report:

i) A copy of all test methods, Quality Assurance/Quality Control procedures, and calibration procedures to be used

from those described in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 219.112 of this Part;

ii) A table with information on each sample taken, including the sample identification and the VOM content of the sample;

iii) The quantity of material used for each test run;

iv) The quantity of captured VOM for each test run;

v) The capture efficiency calculations and results for each test run;

vi) The DQO and/or LCL calculations and results; and

vii) The Quality Assurance/Quality Control results, including how often the instruments were calibrated, the calibration results, and the calibration gases used.

d) Control Device Efficiency Testing and Monitoring

1) The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in subsection (f) of this Section.

2) An owner or operator:

A) That uses an afterburner or carbon adsorber to comply with any Section of Part 219 shall use Agency and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in subsection (d)(3) of this Section. The continuous monitoring equipment must monitor the following parameters:

i) For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

ii) For each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration

of exhaust.

iii) For each carbon adsorber, the VOM concentration of each carbon adsorption bed exhaust or the exhaust of the bed next in sequence to be desorbed.

B) Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured, expressed in degrees Celsius or ± 0.5° C, whichever is greater.

C) Of an automobile or light-duty truck primer surfacer operation or topcoat operation subject to subsection (d)(2)(A) ~~above~~, shall keep a separate record of the following data for the control devices, unless alternative provisions are set forth in a permit pursuant to Title V of the Clean Air Act:

i) For thermal afterburners for which combustion chamber temperature is monitored, all 3-hour periods of operation in which the average combustion temperature was more than 28° C (50° F) below the average combustion temperature measured during the most recent performance test that demonstrated that the operation was in compliance.

ii) For catalytic afterburners for which temperature rise is monitored, all 3-hour periods of operation in which the average gas temperature before the catalyst bed is more than 28° C (50° F) below the average gas temperature immediately before the catalyst bed measured during the most recent performance test that demonstrated that the operation was in compliance.

iii) For catalytic afterburners and carbon adsorbers for which VOM concentration is monitored, all 3-hour periods of operation during which the average VOM concentration or the reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organic monitoring device during the most recent determination of the recovery efficiency of a carbon adsorber or performance test for a catalytic afterburner, which determination or test that

demonstrated that the operation was in compliance.

3) An owner or operator that uses a carbon adsorber to comply with Section 219.401 of this Part may operate the adsorber during periods of monitoring equipment malfunction, provided that:

A) The owner or operator notifies in writing the Agency and USEPA, within 10 days after the conclusion of any 72 hour period during which the adsorber is operated and the associated monitoring equipment is not operational, of such monitoring equipment failure and provides the duration of the malfunction, a description of the repairs made to the equipment, and the total to date of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational;

B) During such period of malfunction the adsorber is operated using timed sequences as the basis for periodic regeneration of the adsorber;

C) The period of such adsorber operation does not exceed 360 hours in any calendar year without the approval of the Agency and USEPA; and

D) The total of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational shall be reported, in writing, to the Agency and USEPA by January 31st of the following calendar year.

e) Overall Efficiency

1) The overall efficiency of the emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in 40 CFR 60.433, incorporated by reference in Section 219.112 of this Part, (and revised by subsection (c)(1)(B) of this Section) for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency used to calculate the product of the capture and control efficiency is the total capture efficiency over the entire line.

2) For coating lines which are both chosen by the owner or operator to comply with Section 219.207(a), (d), (e), (f), or (g) of this Part by the alternative in Section 219.207(b)(2) of this Part and meet the criteria

allowing them to comply with Section 219.207 instead of Section 219.204 of this Part, the overall efficiency of the capture system and control device, as determined by the test methods and procedures specified in subsections (c), (d) and (e)(1) of this Section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

$$E = \frac{VOM_a - VOM_l}{VOM_a} \times 100$$

where:

E = Equivalent overall efficiency of the capture system and control device as a percentage;

VOM_a = Actual VOM content of a coating, or the daily-weighted average VOM content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in subsection (a)(4)(i) of this Part in units of kg VOM/1 (lb VOM/gal) of coating solids as applied;

VOM_l = The VOM emission limit specified in Sections 219.204 or 219.205 of this Part in units of kg VOM/1 (lb VOM/gal) of coating solids as applied.

f) Volatile Organic Material Gas Phase Source Test Methods
The methods in 40 CFR ~~Part~~ 60, Appendix A, incorporated by reference in Section 219.112 of this Part delineated below shall be used to determine control device efficiencies.

1) 40 CFR ~~Part~~ 60, Appendix A, Method 18, 25 or 25A, incorporated by reference in Section 219.112 of this Part as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in subsections (f)(1)(A) and (B) below, the test shall consist of three separate runs, each lasting a minimum of 60 min, unless the Agency and the USEPA determine that process variables dictate shorter sampling times.

A) When the method is to be used to determine the efficiency of a carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual adsorber vessels.

B) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

2) 40 CFR ~~Part~~ 60, Appendix A, Method 1 or 1A, incorporated by reference in Section 219.112 of this Part, shall be used for sample and velocity traverses.

3) 40 CFR ~~Part~~ 60, Appendix A, Method 2, 2A, 2C or 2D, incorporated by reference in Section 219.112 of this Part, shall be used for velocity and volumetric flow rates.

4) 40 CFR ~~Part~~ 60, Appendix A, Method 3, incorporated by reference in Section 219.112 of this Part, shall be used for gas analysis.

5) 40 CFR ~~Part~~ 60, Appendix A, Method 4, incorporated by reference in Section 219.112 of this Part, shall be used for stack gas moisture.

6) 40 CFR ~~Part~~ 60, Appendix A, Methods 2, 2A, 2C, 2D, 3 and 4, incorporated by reference in Section 219.112 of this Part, shall be performed, as applicable, at least twice during each test run.

7) Use of an adaptation to any of the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section may not be used unless approved by the Agency and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Agency and the USEPA to find that the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.

g) Leak Detection Methods for Volatile Organic Material

Owners or operators required by this Part to carry out a leak detection monitoring program shall comply with the following requirements:

1) Leak Detection Monitoring

A) Monitoring shall comply with 40 CFR 60, Appendix A, Method 21, incorporated by reference in Section 219.112 of this Part.

B) The detection instrument shall meet the performance criteria of Method 21.

C) The instrument shall be calibrated before use on each day of its use by the methods specified in Method 21.

D) Calibration gases shall be:

i) Zero air (less than 10 ppm of hydrocarbon in air); and

ii) A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.

E) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

2) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:

A) The requirements of subsections (g)(1)(A) through (g)(1)(E) of this Section ~~above~~ shall apply.

B) The background level shall be determined as set forth in Method 21.

3) Leak detection tests shall be performed consistent with:

A) "APTI Course SI 417 controlling Volatile Organic Compound Emissions from Leaking Process Equipment", EPA-450/2-82-015, incorporated by reference in Section 219.112 of this Part.

B) "Portable Instrument User's Manual for Monitoring VOM Sources", EPA-340/1-86-015, incorporated by reference in Section 219.112 of this Part.

C) "Protocols for Generating Unit-Specific Emission Estimates for

Equipment Leaks of VOM and VHAP", EPA-450/3-88-010, incorporated by reference in Section 219.112 of this Part.

D) "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008, incorporated by reference in Section 219.112 of this Part.

h) Bulk Gasoline Delivery System Test Protocol

1) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR 60, Subpart XX, Section 60.503, incorporated by reference in Section 219.112 of this Part.

2) Other tests shall be performed consistent with:

A) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", EPA-340/1-80-012, incorporated by reference in Section 219.112 of this Part.

B) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", EPA-450/2-77-026, incorporated by reference in Section 219.112 of this Part.

i) Notwithstanding other requirements of this Part, upon request of the Agency where it is necessary to demonstrate compliance, an owner or operator of an emission unit which is subject to this Part shall, at his own expense, conduct tests in accordance with the applicable test methods and procedures specific in this Part. Nothing in this Section shall limit the authority of the USEPA pursuant to the Clean Air Act, as amended, to require testing.

j) Stage II Gasoline Vapor Recovery Test Methods
The methods for determining the acceptable performance of Stage II Gasoline Vapor Recovery System are delineated in "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities," found at EPA 450/3-91-022b and incorporated by reference in Section 219.112 of this Part. Specifically, the test methods are as follows:

1) Dynamic Backpressure Test is a test procedure used to determine the pressure drop (flow resistance) through balance vapor collection and control systems (including nozzles, vapor hoses, swivels, dispenser piping and underground piping) at prescribed flow rates.

2) Pressure Decay/Leak Test is a test procedure used to quantify the vapor

tightness of a vapor collection and control system installed at gasoline dispensing facilities.

3) Liquid Blockage Test is a test procedure used to detect low points in any vapor collection and control system where condensate may accumulate.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.106 Compliance Dates

a) Except as provided in subsections~~subsection~~ (b) and (c)~~below~~, compliance with the requirements of this Part is required by May 15, 1992, consistent with the provisions of Section 219.103 of this Part.

b) As this Part is amended from time to time, compliance dates included in the specific Subparts supersede the requirements of this Section except as limited by Section 219.101(b) of this Subpart.

c) Any owner or operator of a source subject to the requirements of Section 219.204(a)(2) or 219.204(q) of this Part shall comply with the applicable requirements in those Sections, as well as all applicable requirements in Sections 219.205 through 219.214 and 219.219, by May 1, 2011.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.112 Incorporations by Reference

The following materials are incorporated by reference and do not contain any subsequent additions or amendments:

a) American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken~~1916 Race Street, Philadelphia,~~ PA 19428-9555~~19103~~

1) ASTM D 2879-86

2) ASTM D 323-82

3) ASTM D 86-82

4) ASTM D 369-69 (1971)

5) ASTM D 396-69

6) ASTM D 2880-71

7) ASTM D 975-68

8) ASTM D 3925-81 (1985)

9) ASTM E 300-86

10) ASTM D 1475-85

11) ASTM D 2369-87

12) ASTM D 3792-86

13) ASTM D 4017-81 (1987)

14) ASTM D 4457-85

15) ASTM D 2697-86

16) ASTM D 3980-87

17) ASTM E 180-85

18) ASTM D 2372-85

19) ASTM D 97-66

20) ASTM E 168-87 (1977)

21) ASTM E 169-87

22) ASTM E 260-91

23) ASTM D 2504-83

24) ASTM D 2382-83

25) ASTM D 323-82 (approved 1982)

b) Standard Industrial Classification Manual, published by Executive Office of the President, Office of Management and Budget, Washington, D.C., 1987.

c) American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks", Second ed., February~~,~~ 1980.

d) 40 CFR ~~Part~~ 60 (July 1, 1991).

e) 40 CFR ~~Part~~ 61 (July 1, 1991).

f) 40 CFR ~~Part~~ 50 (July 1, 1991).

g) 40 CFR ~~Part~~ 51 (July 1, 1991) and 40 CFR ~~Part~~ 51, Appendix M, Methods 204-204F (July 1, 1999).

h) 40 CFR ~~Part~~ 52 (July 1, 1991).

i) 40 CFR ~~Part~~ 80 (July 1, 1991) and 40 CFR ~~Part~~ 80, Appendixes D, E, and F (July 1, 1993).

j) "A Guide for Surface Coating Calculation", July 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-016.

k) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coating", (revised June 1986), United States Environmental Protection Agency, Washington D.C., EPA-450/3-84-019.

l) "A Guide for Graphic Arts Calculations", August 1988, United States Environmental Protection Agency, Washington D.C., EPA-340/1-88-003.

m) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", December 1988, United States Environmental Protection Agency, Washington D.C., EPA-450/3-88-018.

n) "Control of Volatile Organic Emissions from Manufacturing of Synthesized Pharmaceutical Products", December 1978, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-029.

o) "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", December 1978, Appendix B, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-051.

p) "Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners", September 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-82-009.

q) "APTI Course SI417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment", 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-82-015.

r) "Portable Instrument User's Manual for Monitoring VOM Sources", June 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-015.

s) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOM and VHAP", October 1988, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-88-010.

t) "Petroleum Refinery Enforcement Manual", March 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-008.

u) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-012.

v) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", December 1977, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-77-026.

w) "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities", November 1991, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-91-022b.

x) California Air Resources Board, Compliance Division. Compliance Assistance Program: Gasoline Marketing and Distribution: Gasoline Facilities Phase I & II (October 1988, rev. November 1993) (CARB Manual).

y) "Guidelines for Determining Capture Efficiency~~,~~", January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency, Research Triangle Park~~,~~ NC.

z) Memorandum "Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emissions~~,~~", February~~,~~1995, John S. Seitz, Director, Office of Air Quality Planning and Standards, United States Environmental Protection Agency.

aa) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations",

September 2008, United States Environmental Protection Agency, Washington, D.C., EPA-453/R-08-002.

bb) 40 CFR 63 Subpart PPPP, Appendix A (2008).

cc) 46 CFR Subchapter Q (2007).

dd) 46 CFR Subchapter T (2008).

(Source: Amended at 34 Ill. Reg. _____, effective _____)

SUBPART F: COATING OPERATIONS

Section 219.204 Emission Limitations

Except as provided in Sections 219.205, 219.207, 219.208, 219.212, 219.215 and 219.216 of this Subpart, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. Except as otherwise provided in Section 219.204(a), (j), (l), (n), and (q), compliance with the emission limitations marked with an asterisk in this Section is required on and after March 15, 1996, and compliance with emission limitations not marked with an asterisk is required until March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with this Subpart must be demonstrated through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(c) of this Subpart except where noted. (Note: The equation presented in Section 219.206 of this Part shall be used to calculate emission limitations for determining compliance by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.) The emission limitations are as follows:

			kg/l	lb/gal
a)	Automobile or Light-Duty Truck Coating			
	1) Prior to May 1, 2011:			
	A~~1~~)	Prime coat	0.14 0.14*	(1.2) (1.2)*
	B~~2~~)	Primer surface coat	1.81 1.81*	(15.1) (15.1)*

BOARD NOTE:~~(Note:~~ The primer surface coat limitation is in units of kg (lbs) of VOM per l (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire primer surface operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the primer surface limitation.~~)~~

C~~3~~)	Topcoat	kg/l	lb/gal
		1.81	(15.1)
		1.81*	(15.1)*

BOARD NOTE:~~(Note:~~ The topcoat limitation is in units of kg (lbs) of VOM per 1 (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 of this Part does not apply to the topcoat limitation.~~)~~

D4)	Final repair coat	kg/l	lb/gal
		0.58	(4.8)
		0.58*	(4.8)*

2) On and after May 1, 2011, subject automobile and light-duty truck coating lines shall comply with the following limitations. These limitations shall not apply to materials supplied in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less:

A) Electrodeposition primer (EDP) operations. For purposes of this subsection (a)(2)(A), "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created.

		kg VOM/l coating solids applied	lb VOM/gal coating solids applied
i)	When solids turnover ratio (R_T) is greater than or equal to 0.160	0.084	(0.7)
ii)	When R_T is greater than or equal to 0.040 and less than 0.160	$0.084 \times 350^{0.160-R_T}$	$(0.084 \times 350^{0.160-R_T} \times 8.34)$

B) Primer surfacer operations

		kg VOM/l coating solids deposited	lb VOM/gal coating solids deposited
i)	VOM content limitation	1.44	(12.0)

ii) Compliance with the limitation set forth in subsection (a)(2)(B)(i) shall be based on the daily-weighted average from an entire primer surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the primer surfacer limitation.

C) Topcoat operations

		kg VOM/l coating solids deposited	lb VOM/gal coating solids deposited
i)	VOM content limitation	1.44	(12.0)

ii) Compliance with the limitation set forth in subsection (a)(2)(C)(i) shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the topcoat limitation.

D) Combined primer surfacer and topcoat operations

		kg VOM/l coating solids deposited	lb VOM/gal coating solids deposited
i)	VOM content limitation	1.44	(12.0)

ii) Compliance with the limitation set forth in subsection (a)(2)(D)(i) shall be based on the daily-weighted average from the combined primer surfacer and topcoat operations. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the combined primer surfacer and topcoat limitation.

E) Final repair coat operations

		kg/l coatings	lb/gal coatings
i)	VOM content limitation	0.58	(4.8)

ii) Compliance with the final repair operations limitation set forth in subsection (a)(2)(E)(i) shall be on an occurrence-weighted average basis, calculated in accordance with the

equation below, in which clear coatings shall have a weighting factor of 2 and all other coatings shall have a weighting factor of 1.

$$VOM_{tot} = \frac{2VOM_{cc} + \sum_{i=1}^{n} VOM_i}{n+2}$$

where:

VOM_{to} = Total VOM content of all coatings, as applied, on an occurrence weighted average basis, and used to determine compliance with this subsection (a)(2)(E).

i = Subscript denoting a specific coating applied.

n = Total number of coatings applied in the final repair operation, other than clear coatings.

VOM_c = The VOM content, as applied, of the clear coat used in the final repair operation.

VOM_i = The VOM content of each coating used in the final repair operation, as applied, other than clear coatings.

F) Miscellaneous Materials. For reactive adhesives subject to this subsection (a)(2)(F), compliance shall be demonstrated in accordance with the methods and procedures set forth in Appendix A to Subpart PPPP of 40 CFR 63, incorporated by reference in Section 219.112 of this Part.

		kg/l	lb/gal
i)	Glass bonding primer	0.90	(7.51)
ii)	Adhesive	0.25	(2.09)
iii)	Cavity wax	0.65	(5.42)
iv)	Trunk sealer	0.65	(5.42)
v)	Deadener	0.65	(5.42)

vi) Gasket/gasket sealing material	0.20	(1.67)
vii) Underbody coating	0.65	(5.42)
viii) Trunk interior coating	0.65	(5.42)
ix) Bedliner	0.20	(1.67)
x) Weatherstrip adhesive	0.75	(6.26)
xi) Lubricating wax/compound	0.70	(5.84)

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b)	Can Coating		kg/l	lb/gal
	1)	Sheet basecoat and overvarnish		
		A) Sheet basecoat	0.34 0.26*	(2.8) (2.2)*
		B) Overvarnish	0.34 0.34	(2.8) (2.8)*
	2)	Exterior basecoat and overvarnish	0.34 0.25*	(2.8) (2.1)*
	3)	Interior body spray coat		
		A) Two piece	0.51 0.44*	(4.2) (3.7)*
		B) Three piece	0.51 0.51*	(4.2) (4.2)*
	4)	Exterior end coat	0.51 0.51*	(4.2) (4.2)*
	5)	Side seam spray coat	0.66 0.66*	(5.5) (5.5)*
	6)	End sealing compound coat	0.44 0.44*	(3.7) (3.7)*

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c) Paper Coating	kg/l	lb/gal

		kg/l	lb/gal
		0.35	(2.9)
		0.28*	(2.3)*

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1334 BOARD NOTE~~(Note~~: The paper coating limitation shall not apply to any owner
1335 or operator of any paper coating line on which flexographic or rotogravure
1336 printing is performed if the paper coating line complies with the emissions
1337 limitations in Section 219.401 of this Part. In addition, screen printing on paper is
1338 not regulated as paper coating, but is regulated under Subpart TT of this Part.~~)~~
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		kg/l	lb/gal
d)	Coil Coating		
		0.31	(2.6)
		0.20*	(1.7)*
e)	Fabric Coating	0.35	(2.9)
		0.28*	(2.3)*
f)	Vinyl Coating	0.45	(3.8)
		0.28*	(2.3)*
g)	Metal Furniture Coating		
	1) Air dried	0.36	(3.0)
		0.34*	(2.8)*
	2) Baked	0.36	(3.0)
		0.28*	(2.3)*
h)	Large Appliance Coating		
	1) Air dried	0.34	(2.8)
		0.34*	(2.8)*
	2) Baked	0.34	(2.8)
		0.28*	(2.3)*

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1345 BOARD NOTE~~(Note~~: The limitation shall not apply to the use of quick-drying
1346 lacquers for repair of scratches and nicks that occur during assembly, provided
1347 that the volume of coating does not exceed 0.95 1 (1 quart) in any one rolling
1348 eight-hour period.~~)~~
1349

		kg/l	lb/gal
i)	Magnet Wire Coating		
		0.20	(1.7)

			0.20*	(1.7)*

j) Prior to May 1, 2011: Miscellaneous Metal Parts and Products Coating

1)	Clear coating		0.52 0.52*	(4.3) (4.3)*
2)	Extreme performance coating			
	A)	Air dried	0.42 0.42*	(3.5) (3.5)*
	B)	Baked	0.42 0.40*	(3.5) (3.3)*
3)	Steel pail and drum interior coating		0.52 0.52*	(4.3) (4.3)*
4)	All other coatings			
	A)	Air dried~~Dried~~	0.42 0.40*	(3.5) (3.3)*
	B)	Baked	0.36 0.34*	(3.0) (2.8)*
5)	Metallic Coating			
	A)	Air dried~~Dried~~	0.42 0.42*	(3.5) (3.5)*
	B)	Baked	0.36 0.36	(3.0) (3.0)*

6) For purposes of subsection 219.204(j)(5) of this Section, "metallic coating" means a coating which contains more than ¼ lb/gal of metal particles, as applied.

BOARD NOTE: On and after May 1, 2011, the limitations in Section 219.204(q) shall apply to this category of coating.

k) Heavy Off-Highway Vehicle Products Coating		kg/l	lb/gal
1)	Extreme performance prime coat	0.42 0.42*	(3.5) (3.5)*

2)	Extreme performance topcoat (air dried)	0.42 0.42*	(3.5) (3.5)*
3)	Final repair coat (air dried)	0.42 0.42*	(3.5) (3.5)*

4) All other coatings are subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j) ~~above~~.

l) Wood Furniture Coating

1)	Limitations before March 15, 1998:		kg/l	lb/gal
	A)	Clear topcoat	0.67	(5.6)
	B)	Opaque stain	0.56	(4.7)
	C)	Pigmented coat	0.60	(5.0)
	D)	Repair coat	0.67	(5.6)
	E)	Sealer	0.67	(5.6)
	F)	Semi-transparent stain	0.79	(6.6)
	G)	Wash coat	0.73	(6.1)

BOARD NOTE:~~(Note:~~ Prior to March 15, 1998, an owner or operator of a wood furniture coating operation subject to this Section shall apply all coatings, with the exception of no more than 37.8 l (10 gal) of coating per day used for touch-up and repair operations, using one or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc spray application system, heated airless spray application system, roller coating, brush or wipe coating application system, dip coating application system or high volume low pressure (HVLP) application system.~~)~~

2) On and after March 15, 1998, wood furniture sealers and topcoats must comply with one of the limitations specified in subsections (el)(2)(A) through (E)~~, below~~:

	kg VOM/kg solids	lb VOM/lb solids

A)	Topcoat	0.8	(0.8)
B)	Sealers and topcoats with the following limits:		
	i) Sealer other than acid-cured alkyd amino vinyl sealer	1.9	(1.9)
	ii) Topcoat other than acid-cured alkyd amino conversion varnish topcoat	1.8	(1.8)
	iii) Acid-cured alkyd amino vinyl sealer	2.3	(2.3)
	iv) Acid-cured alkyd amino conversion varnish topcoat	2.0	(2.0)

C) Meet the provisions of Section 219.215 of this Subpart for use of an averaging approach;

D) Achieve a reduction in emissions equivalent to the requirements of Section 219.204(l)(2)(A) or (B) of this Subpart, as calculated using Section 219.216 of this Subpart; or

E) Use a combination of the methods specified in Section 219.204(l)(2)(A) through (D) of this Subpart.

3) Other wood furniture coating limitations on and after March 15, 1998:

		kg/l	lb/gal
A)	Opaque stain	0.56	(4.7)
B)	Non-topcoat pigmented coat	0.60	(5.0)
C)	Repair coat	0.67	(5.6)
D)	Semi-transparent stain	0.79	(6.6)
E)	Wash coat	0.73	(6.1)

4) Other wood furniture coating requirements on and after March 15, 1998:

A) No source subject to the limitations of subsection (l)(2) or (3) of this Section and utilizing one or more wood furniture coating spray booths shall use strippable spray booth coatings containing

more than 0.8 kg VOM/kg solids (0.8 lb VOM/lb solids), as applied.

B) Any source subject to the limitations of subsection (l)(2) or (3) of this Section shall comply with the requirements of Section 219.217 of this Subpart.

C) Any source subject to the limitations of subsection (el)(2)(A) or (B) of this Section and utilizing one or more continuous coaters, shall for each continuous coater, use an initial coating which complies with the limitations of subsection (l)(2)(A) or (B) of this Section. The viscosity of the coating in each reservoir shall always be greater than or equal to the viscosity of the initial coating in the reservoir. The owner or operator shall:

i) Monitor the viscosity of the coating in the reservoir with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added;

ii) Collect and record the reservoir viscosity and the amount and weight of VOM per weight of solids of coating and solvent each time coating or solvent is added; and

iii) Maintain these records at the source for a period of three years.

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m) Prior to May 1, 2011: Plastic Parts Coating: Automotive/Transportation

			kg/l	lb/gal
1)	Interiors			
	A)	Baked		
		i) Color coat	0.49*	(4.1)*
		ii) Primer	0.46*	(3.8)*
	B)	Air Dried		
		i) Color coat	0.38*	(3.2)*
		ii) Primer	0.42*	(3.5)*
2)	Exteriors (flexible and non-flexible)			

A)	Baked			
	i)	Primer	0.60*	(5.0)*
	ii)	Primer non-flexible	0.54*	(4.5)*
	iii)	Clear coat	0.52*	(4.3)*
	iv)	Color coat	0.55*	(4.6)*
B)	Air Dried			
	i)	Primer	0.66*	(5.5)*
	ii)	Clear coat	0.54*	(4.5)*
	iii)	Color coat (red & black)	0.67*	(5.6)*
	iv)	Color coat (others)	0.61*	(5.1)*

3) Specialty

A)	Vacuum metallizing basecoats, texture basecoats	0.66*	(5.5)*
B)	Black coatings, reflective argent coatings, air bag cover coatings, and soft coatings	0.71*	(5.9)*
C)	Gloss reducers, vacuum metallizing topcoats, and texture topcoats	0.77*	(6.4)*
D)	Stencil coatings, adhesion primers, ink pad coatings, electrostatic prep coatings, and resist coatings	0.82*	(6.8)*
E)	Head lamp lens coatings	0.89*	(7.4)*

BOARD NOTE: On and after May 1, 2011, the limitations in Section 219.204(q) shall apply to this category of coating.

n)	Prior to May 1, 2011: Plastic Parts Coating: Business Machine	kg/l	lb/gal
1)	Primer	0.14*	(1.2)*
2)	Color coat (non-texture coat)	0.28*	(2.3)*

3)	Color coat (texture coat)		0.28*	(2.3)*
4)	Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings		0.48*	(4.0)*
5)	Specialty Coatings			
	A)	Soft coat	0.52*	(4.3)*
	B)	Plating resist	0.71*	(5.9)*
	C)	Plating sensitizer	0.85*	(7.1)*

BOARD NOTE: On and after May 1, 2011, the limitations in Section 219.204(q) shall apply to this category of coating.

q) Miscellaneous Metal Parts and Products Coatings and Plastic Parts and Products Coatings On and After May 1, 2011. On and after May 1, 2011, the owner or operator of a miscellaneous metal or plastic parts coating line shall comply with the limitations in this subsection (q). The limitations in this subsection (q) shall not apply to aerosol coating products or powder coatings.

1) Metal Parts and Products. For purposes of this subsection (q)(1), "corrosion resistant basecoat" means a water-borne epoxy coating applied via an electrodeposition process to a metal surface prior to spray coating, for the purpose of enhancing corrosion resistance. Also for purposes of subsection (q)(1), "marine engine coating" means any extreme performance protective, decorative, or functional coating applied to an engine that is used to propel watercraft. The limitations in subsection (q)(1) shall not apply to stencil coats, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating. The limitations in Section 219.219, however, shall apply to these coatings unless specifically excluded in Section 219.219.

			kg VOM/l coating solids applied	lb VOM/gal coating solids applied
A)	General one component coating			
	i)	Air dried	0.34 (2.8)	0.54 (4.52)

ii) Baked		0.28 (2.3)	0.40 (3.35)
B)	General multi-component coating		
i) Air dried		0.34 (2.8)	0.54 (4.52)
ii) Baked		0.28 (2.3)	0.40 (3.35)
C)	Camouflage coating	0.42 (3.5)	0.80 (6.67)
D)	Electric-insulating varnish	0.42 (3.5)	0.80 (6.67)
E)	Etching filler	0.42 (3.5)	0.80 (6.67)
F)	Extreme high-gloss coating		
i) Air dried		0.42 (3.5)	0.80 (6.67)
ii) Baked		0.36 (3.0)	0.61 (5.06)
G)	Extreme performance coating		
i) Air dried		0.42 (3.5)	0.80 (6.67)
ii) Baked		0.36 (3.0)	0.61 (5.06)
H)	Heat-resistant coating		
i) Air dried		0.42 (3.5)	0.80 (6.67)
ii) Baked		0.36	0.61

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		(3.0)	(5.06)
I)	High performance architectural coating	0.74 (6.2)	4.56 (38.0)
J)	High temperature coating	0.42 (3.5)	0.80 (6.67)
K)	Metallic coating		
	i) Air dried	0.42 (3.5)	0.80 (6.67)
	ii) Baked	0.36 (3.0)	0.61 (5.06)
L)	Military specification coating		
	i) Air dried	0.34 (2.8)	0.54 (4.52)
	ii) Baked	0.28 (2.3)	0.40 (3.35)
M)	Mold-seal coating	0.42 (3.5)	0.80 (6.67)
N)	Pan backing coating	0.42 (3.5)	0.80 (6.67)
O)	Prefabricated architectural coating: multi-component		
	i) Air dried	0.42 (3.5)	0.80 (6.67)
	ii) Baked	0.28 (2.3)	0.40 (3.35)
P)	Prefabricated architectural coating: one-component		
	i) Air dried	0.42	0.80

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		(3.5)	(6.67)
	ii) Baked	0.28 (2.3)	0.40 (3.35)
Q)	Pretreatment coating	0.42 (3.5)	0.80 (6.67)
R)	Repair coats and touch-up coatings		
	i) Air dried	0.42 (3.5)	
	ii) Baked	0.36 (3.01)	
S)	Silicone release coating	0.42 (3.5)	0.80 (6.67)
T)	Solar-absorbent coating		
	i) Air dried	0.42 (3.5)	0.80 (6.67)
	ii) Baked	0.36 (3.0)	0.61 (5.06)
U)	Vacuum-metalizing coating	0.42 (3.5)	0.80 (6.67)
V)	Drum coating, new, exterior	0.34 (2.8)	0.54 (4.52)
W)	Drum coating, new, interior	0.42 (3.5)	0.80 (6.67)
X)	Drum coating, reconditioned, exterior	0.42 (3.5)	0.80 (6.67)
Y)	Drum coating, reconditioned, interior	0.50 (4.2)	1.17 (9.78)
Z)	Steel pail and drum interior coating	0.52	1.24

			(4.3)	(10.34)
AA)	Marine engine coating			
	i)	Air dried	0.42 (3.5)	0.80 (6.67)
	ii)	Baked: primer/topcoat	0.42 (3.5)	0.80 (6.67)
	iii)	Baked: corrosion resistant basecoat	0.28 (2.3)	0.40 (3.35)
	iv)	Clear coating	0.52 (4.3)	1.24 (10.34)
BB)	All other coatings			
	i)	Air dried	0.40 (3.3)	0.73 (5.98)
	ii)	Baked: primer/topcoat	0.34 (2.8)	0.54 (4.52)

2) Plastic Parts and Products: Miscellaneous. For purposes of this subsection (q)(2), miscellaneous plastic parts and products are plastic parts and products that are not subject to subsection (q)(3), (q)(4), (q)(5), or (q)(6) of this Section. The limitations in subsection (q)(2) shall not apply to touch-up and repair coatings; stencil coats applied on clear or transparent substrates; clear or translucent coatings; coatings applied at a paint manufacturing facility while conducting performance tests on the coatings; any individual coating category used in volumes less than 189.2 liters (50 gallons) in any one calendar year, if the total usage of all such coatings does not exceed 756.9 liters (200 gallons) per calendar year per source and substitute compliant coatings are not available; reflective coatings applied to highway cones; mask coatings that are less than 0.5 mm thick (dried) if the area coated is less than 25 square inches; electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings; and heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices if the total usage of all such coatings does not exceed 378.4 liters (100 gallons) per calendar year per source. The limitations in Section 219.219, however, shall apply to such coatings unless specifically excluded in Section 219.219.)

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
A)	General one component coating	0.28 (2.3)	0.40 (3.35)
B)	General multi-component	0.42 (3.5)	0.80 (6.67)
C)	Electric dissipating coatings and shock-free coatings	0.80 (6.7)	8.96 (74.7)
D)	Extreme performance (2-pack coatings)	0.42 (3.5)	0.80 (6.67)
E)	Metallic coating	0.42 (3.5)	0.80 (6.67)
F)	Military specification coating		
	i) 1-pack coatings	0.28 (2.3)	0.54 (4.52)
	ii) 2-pack coatings	0.42 (3.5)	0.80 (6.67)
G)	Mold-seal coating	0.76 (6.3)	5.24 (43.7)
H)	Multi-colored coating	0.68 (5.7)	3.04 (25.3)
I)	Optical coating	0.80 (6.7)	8.96 (74.7)
J)	Vacuum-metalizing coating	0.80 (6.7)	8.96 (74.7)

3) Plastic Parts and Products Automotive/Transportation

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
A)	High bake coatings – interior and exterior parts		
	i) Flexible primer	0.54 (4.5)	1.39 (11.58)
	ii) Non-flexible primer	0.42 (3.5)	0.80 (6.67)
	iii) Basecoats	0.52 (4.3)	1.24 (10.34)
	iv) Clear coat	0.48 (4.0)	1.05 (8.76)
	v) Non-basecoat/clear coat	0.52 (4.3)	1.24 (10.34)
B)	Low bake/air dried coatings – exterior parts		
	i) Primers	0.58 (4.8)	1.66 (13.80)
	ii) Basecoat	0.60 (5.0)	1.87 (15.59)
	iii) Clear coats	0.54 (4.5)	1.39 (11.58)
	iv) Non-basecoat/clear coat	0.60 (5.0)	1.87 (15.59)
C)	Low bake/air dried coatings – interior parts		
	i) Color coat	0.38 (3.2)	0.67 (5.66)

	ii)	Primer	0.42 (3.5)	0.80 (6.67)
D)		Touchup and repair coatings	0.62 (5.2)	2.13 (17.72)
E)		Specialty		
	i)	Vacuum metallizing basecoats, texture basecoats	0.66 (5.5)	2.62 (21.8)
	ii)	Reflective argent coatings, air bag cover coatings, and soft coatings	0.71 (5.9)	3.64 (29.7)
	iii)	Gloss reducers, vacuum metallizing topcoats, and texture topcoats	0.77 (6.4)	6.06 (49.1)
	iv)	Stencil coats, adhesion primers, ink pad coatings, electrostatic prep coats, and resist coats	0.82 (6.8)	(11.67) (89.4)
	v)	Head lamp lens coating	0.89 (7.4)	

F) Red, yellow, and black coatings Subject coating lines shall comply with a limit determined by multiplying the appropriate limit in subsections (q)(3)(A) through (q)(3)(E) of this Section by 1.15.

4) Plastic Parts and Products: Business Machine. The limitations of this subsection (q)(4) shall not apply to vacuum metallizing coatings, gloss reducers, texture topcoats, adhesion primers, electrostatic preparation coatings, stencil coats, and resist coats other than plating resist coats. The limitations in Section 219.219, however, shall apply to such coatings unless specifically excluded in Section 219.219.

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
A)	Primers	0.14	0.17

		(1.2)	(1.4)
B)	Topcoat	0.35 (2.9)	0.57 (4.80)
C)	Color coat (texture coat)	0.28 (2.3)	0.40 (4.80)
D)	Color coat (non-texture coat)	0.28 (2.3)	0.40 (4.80)
E)	Texture coats other than color texture coats	0.35 (2.9)	0.57 (4.80)
F)	EMI/RFI shielding coatings	0.48 (4.0)	1.05 (8.76)
G)	Fog coat	0.26 (2.2)	0.38 (3.14)
H)	Touchup and repair	0.35 (2.9)	0.57 (4.80)
I)	Specialty coatings		
i)	Soft coat	0.52 (4.3)	1.24 (10.34)
ii)	Plating resist	0.71 (5.9)	3.64 (29.7)
iii)	Plating sensitizer	0.85 (7.1)	(23.4) (201.0)

5) Pleasure Craft Surface Coatings

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
A)	Extreme high gloss coating – topcoat	0.49 (4.1)	1.10 (9.2)
B)	High gloss coating – topcoat	0.42	0.80

		(3.5)	(6.7)
C)	Pretreatment wash primer	0.78 (6.5)	6.67 (55.6)
D)	Finish primer surfacer	0.42 (3.5)	0.80 (6.7)
E)	High build primer/surfacer	0.34 (2.8)	0.55 (4.6)
F)	Aluminum substrate antifoulant coating	0.56 (4.7)	1.53 (12.8)
G)	Other substrate antifoulant coating	0.33 (2.8)	0.53 (4.4)
H)	All other pleasure craft surface coatings for metal or plastic	0.42 (3.5)	0.80 (6.7)

6) Motor Vehicle Materials

		kg/l (lb/gal) coatings
A)	Cavity wax	0.65 (5.42)
B)	Sealer	0.65 (5.42)
C)	Deadener	0.65 (5.42)
D)	Gasket/gasket sealing material	0.20 (1.67)
E)	Underbody coating	0.65 (5.42)
F)	Trunk interior coating	0.65 (5.42)

G)	Bedliner	0.20 (1.67)
H)	Lubricating wax/compound	0.70 (5.84)

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.205 Daily-Weighted Average Limitations

No owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of this Section shall operate the subject coating line unless the owner or operator has demonstrated compliance with subsection (a), (b), (c), (d), (e), (f), (g), ~~or~~ (h), or (i) of this Section (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(d) of this Subpart:

a) No owner or operator of a coating line subject to only one of the limitations from among Section 219.204(a)(1)(A), (a)(1)(D)~~(4)~~, (a)(2)(A), (a)(2)(E), (a)(2)(F), (c), (d), (e), (f), or (i) of this Subpart shall apply coatings on any such coating line, during any day, whose daily-weighted average VOM content exceeds the emission limitation to which the coatings are subject.

b) Prior to May 1, 2011, no~~No~~ owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of Section 219.204(j) of this Subpart shall apply coatings to miscellaneous metal parts or products on the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(j) of this Subpart during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used;~~,~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(j) of this Subpart, during the same day, the owner or operator shall have a site-specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

c) No owner or operator of a can coating line subject to the limitations of Section 219.204(b) of this Subpart shall operate the subject coating line using a coating with a VOM content in excess of the limitations specified in Section 219.204(b) of this Subpart unless all of the following requirements are met:

1) An alternative daily emission limitation for the can coating operation, i.e., for all of the can coating lines at the source, shall be determined according to subsection (c)(2) of this Section. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation.

$$E_d = \sum_{i=1}^{n} V_i C_i$$

where:

E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied in the can coating operation, i.e. all can coating lines at the source;

V_i = Volume of each coating applied for the day in units of l/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (A_d) shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, on a daily basis as follows:

$$A_d = \sum_{i=1}^{n} V_i L_i \frac{D_i - C_i}{D_i - L_i}$$

where:

A_d = The VOM emissions allowed for the day in units of

kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of surface coatings applied in the can coating operation;

C_i = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

D_i = The density of VOM in each coating applied. For the purposes of calculating A_d, the density is 0.882kg VOM/l VOM (7.36 lbs VOM/gal VOM);

V_i = Volume of each surface coating applied for the day in units of l (gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

L_i = The VOM emission limitation for each surface coating applied as specified in Section 219.204(b) of this Subpart in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

d) No owner or operator of a heavy off-highway vehicle products coating line subject to the limitations of Section 219.204(k) of this Subpart shall apply coatings to heavy off-highway vehicle products on the subject coating line unless the requirements of subsection (d)(1) or (d)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(k) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(k) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP

revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

e) No owner or operator of a wood furniture coating line subject to the limitations of Section 219.204(l)(1) or (l)(3) of this Subpart shall apply coatings to wood furniture on the subject coating line unless the requirements of subsection (e)(1) or (e)(2) of this Section, in addition to the requirements specified in the note to Section 219.204(l)(1) of this Subpart, are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(l)(1) or (l)(3) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used;~~,~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(l)(1) or (l)(3) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

f) Prior to May 1, 2011, no~~No~~ owner or operator of a plastic parts coating line subject to the limitations of Section 219.204(m) or (n) of this Subpart shall apply coatings to business machine or automotive/transportation plastic parts on the subject coating line unless the requirements of subsection (f)(1) or (f)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used;~~,~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(m) or (n) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading

Policy Statement (and related policy) must be satisfied.

g) No owner or operator of a metal furniture coating line subject to the limitations of Section 219.204(g) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (g)(1) or (g)(2) of this Section are met:

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used;~~,~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(g) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

h) No owner or operator of a large appliance coating line subject to the limitations of Section 219.204(h) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met.

1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used;~~,~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(h) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

i) On and after May 1, 2011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts or products coating line, pleasure craft surface coating line, or motor vehicle materials coating line subject to the limitations of Section 219.204(q) of this Subpart shall apply coatings on the

subject coating line unless the requirements of subsection (i)(1) or (i)(2) of this Section are met:

1) For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(q) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

2) For each coating line that applies coatings subject to more than one numerical emission limitation in Section 219.204(q) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.207 Alternative Emission Limitations

a) Any owner or operator of a coating line subject to Section 219.204 of this Subpart, except coating lines subject to Section 219.204(q)(6), may comply with this Section, rather than with Section 219.204 of this Subpart, if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with subsection (c), (d), (e), (f), (g), (h), (i), ~~or~~ (j), or (k) of this Section (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Section 219.105 of this Part and the recordkeeping and reporting requirements specified in Section 219.211(e) of this Subpart; and the control device is equipped with the applicable monitoring equipment specified in Section 219.105(d) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with subsection (c), (d), (e), (f), (g), (h), (i), (j), or (k) of this Section may be used as an alternative to compliance with Section 219.204 of this Subpart only if the alternative is approved by the Agency and approved by the USEPA as a SIP revision.

b) Alternative Add-On Control Methodologies

1) The coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the

coating line and the control device has a 90 percent efficiency, or

2) The system used to control VOM from the coating line is demonstrated to have an overall efficiency sufficient to limit VOM emissions to no more than what is allowed under Section 219.204 of this Subpart. Use of any control system other than an afterburner, carbon adsorption, condensation, or absorption scrubber system can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. The use of transfer efficiency credits can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. Baseline transfer efficiencies and transfer efficiency test methods must be approved by the Agency and the USEPA. Such overall efficiency is to be determined as follows:

A) Obtain the emission limitation from the appropriate subsection in Section 219.204 of this Subpart;

B) Unless complying with an emission limitation in Section 219.204 that is already expressed in terms of weight of VOM per volume of solids, calculate~~Calculate~~ "S" according to the equation in Section 219.206 of this Subpart;

C) Calculate the overall efficiency required according to Section 219.105(e) of this Part. For the purposes of calculating this value, according to the equation in Section 219.105(e)(2) of this Part, VOM_1 is equal to the value of "S" as determined above in subsection (b)(2)(B) of this Section. If the coating line is complying with an emission limitation in Section 219.204 of this Subpart that is already expressed in terms of weight of VOM per volume of solids, VOM_1 is equal to that emission limitation.

c) No owner or operator of a coating line subject to only one of the emission limitations from among Section 219.204(a)(1)(A), (a)(1)(D)~~(4)~~, (a)(2)(A),(a)(2)(E), (a)(2)(F), (c), (d), (e), (f) or (i) of this Subpart and equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. No owner or operator of a coating line subject to Section 219.204(a)(1)(B),~~(2) or~~ (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(3) of this Part~~ and equipped with a capture system and control device shall operate the coating line unless the owner or operator demonstrates compliance with such limitation in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) or (b)(1)(B)~~ of this Part~~, as applicable.

d) No owner or operator of a miscellaneous metal parts and products coating line

that~~which~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l ~~(~~3.5 lbs/gal)~~)~~, and that~~which~~ is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

e) No owner or operator of a heavy off-highway vehicle products coating line that~~which~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(k) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l ~~(~~3.5 lbs/gal)~~)~~, and that~~which~~ is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

f) No owner or operator of a wood furniture coating line that~~which~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/l ~~(~~5.6 lbs/gal)~~)~~, and that~~which~~ is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. If compliance is achieved by meeting the requirements in subsection (b)(2) of this Section, then the provisions in the note to Section 219.204(l) of this Subpart must also be met.

g) No owner or operator of a can coating line equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (g)(1) or (g)(2) of this Section are met.

1) An alternative daily emission limitation for the can coating operation, i.e., for all of the can coating lines at the source, shall be determined according to Section 219.205(c)(2) of this Subpart. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^{n} V_i C_i (1 - F_i)$$

where:

E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);

i = Subscript denoting the specific coating applied;

n = Total number of surface coatings as applied in the can coating operation;

V_i = Volume of each coating as applied for the day in units of 1/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

F_i = Fraction, by weight, of VOM emissions from the surface coating, reduced or prevented from being emitted to the ambient air. This is the overall efficiency of the capture system and control device.

2) The coating line is equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.

h) No owner or operator of a plastic parts coating line that~~which~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l ({3.5 lbs/gal)}), and that~~which~~ is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

i) No owner or operator of a metal furniture coating line that~~which~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l ({2.8 lbs/gal)}), and that~~which~~ is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

j) No owner or operator of a large appliance coating line that~~which~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l ({2.8 lbs/gal)}), and that~~which~~ is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

k) On and after May 1, 2011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts and products coating line, or pleasure craft surface coating line that is equipped with a capture system and control device shall operate the subject coating line unless:

1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or

2) The owner or operator of the coating line complies with all requirements set forth in subsection (b)(2) of this Section.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.208 Exemptions From Emission Limitations

a) Exemptions for all coating categories except wood furniture coating. The limitations of this Subpart shall not apply to coating lines within a source, that otherwise would be subject to the same subsection of Section 219.204 (because they belong to the same coating category, e.g., can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices. (For example, can coating lines within a source would not be subject to the limitations of Section 219.204(b) of this Subpart if the combined actual emissions of VOM from the can coating lines never exceed 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices.) Prior to May 2011, volatile~~Volatile~~ organic material emissions from heavy off-highway vehicle products coating lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. On and after May 1, 2011, VOM emissions from heavy off-highway vehicle products coating lines shall be combined with VOM emissions from miscellaneous metal parts and products coating lines and plastic parts and products coating lines to determine applicability. Any owner or operator of a coating source shall comply with the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(a) of this Subpart if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices and, therefore, are not subject to the limitations of Section 219.204 of this Subpart. Once a category of coating lines at a source is subject to the limitations in Section 219.204 of this Part the coating lines are always subject to the limitations in Section 219.204 of this Subpart.

b) Applicability for wood furniture coating

1) The limitations of this Subpart shall apply to a source's wood furniture coating lines if the source contains process emission units, not regulated by Subparts B, E, F (excluding Section 219.204(l) of this Subpart), H (excluding Section 219.405 of this Part), Q, R, S, T (excluding Section 219.486 of this Part), V, X, Y, Z or BB of this Part, which as a group both:

A) Have a maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used, and

B) Are not limited to less than 91 Mg (100 tons) of VOM per calendar year if no air pollution control equipment were used, through production or capacity limitations contained in a federally enforceable permit or SIP revision.

2) The limitations of this Subpart shall apply to a source's wood furniture coating lines, on and after March 15, 1996, if the source contains process emission units, which as a group, have a potential to emit 22.7 Mg (25 tons) or more of VOM per calendar year and have not limited emissions to less than 22.7 Mg (25 tons) of VOM per calendar year through production or capacity limitations contained in a federally enforceable operating permit or SIP revision, and that~~which~~:

A) Are not regulated by Subparts B, E, F (excluding Section 219.204(l) of this Subpart), H, Q, R, S, T (excluding Section 219.486 of this Part), V, X, Y, Z or BB of this Part; and

B) Are not included in any of the following categories: synthetic organic chemical manufacturing industry (SOCMI) distillation, SOCMI reactors, plastic parts coating (business machines), plastic parts coating (other), offset lithography, industrial wastewater, autobody refinishing, SOCMI batch processing, volatile organic liquid storage tanks and clean-up solvents operations.

3) If a source ceases to fulfill the criteria of subsection (b)(1) or (b)(2) of this Section, the limitations of Section 219.204(l) of this Subpart shall continue to apply to any wood furniture coating line which was ever subject to the limitations of Section 219.204(l) of this Subpart.

4) For the purposes of subsection (b) of this Section, an emission unit shall be considered to be regulated by a Subpart if it is subject to the limitations

of that Subpart. An emission unit is not considered regulated by a Subpart if it is not subject to the limits of that Subpart, e.g., the emission unit is covered by an exemption in the Subpart or the applicability criteria of the Subpart are not met.

5) Any owner or operator of a wood furniture coating line to which the limitations of this Subpart are not applicable due to the criteria in subsection (b) of this Section shall, upon request by the Agency or the USEPA, submit records to the Agency and the USEPA within 30 calendar days from the date of the request that document that the coating line is exempt from the limitations of this Subpart.

c) On and after March 15, 1996, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by subsections 219.204(b), (d), (f), (g), and (i)~~, (j), (m) and (n)~~ of this Subpart; provided that the source-wide volume of such coatings used does not exceed 0.95 1 (1 quart) per eight-hour period or exceed 209 1/yr (55 gal/yr) for any rolling twelve month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (d) of this Section.

d) Prior to May 1, 2011, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by subsections 219.204(j), (m), and (n) of this Subpart, provided that the source-wide volume of the coatings used does not exceed 0.95 l (1 quart) per eight-hour period or exceed 209 l/yr (55 gal/yr) for any rolling twelve month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (e) of this Section.

e~~d~~) On and after March 15, 1996, the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of Section 219.204(b), (d), (f), (g), (i), (j), (m) and (n) of this Subpart because of the provisions of Section 219.208(c) or (d) of this Subpart shall:

1) Collect and record the name, identification number, and volume used of each touch-up and repair coating, as applied on each coating line, per eight-hour period and per month;

2) Perform calculations on a daily basis, and maintain at the source records of such calculations of the combined volume of touch-up and repair coatings used source-wide for each eight-hour period;

3) Perform calculations on a monthly basis, and maintain at the source records of such calculations of the combined volume of touch-up and

repair coatings used source-wide for the month and the rolling twelve month period;

4) Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to subsections (ed)(1) and (ed)(2) of this Section on or before January 31 of the following year;

5) Maintain at the source for a minimum period of three years all records required to be kept under this subsection and make such records available to the Agency upon request;

6) Notify the Agency in writing if the use of touch-up and repair coatings at the source ever exceeds a volume of 0.95 L~~l~~ (1 quart) per eight-hour period or exceeds 209 1/yr (55 gal/yr) for any rolling twelve month period within 30 days after any such exceedance. Such notification shall include a copy of any records of such exceedance; and

7) "Touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 219.208, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.210 Compliance Schedule

Every owner or operator of a coating line (of a type included within Section 219.204 of this Subpart) shall comply with the requirements of Section 219.204, 219.205, 219.207 or 219.208 and Section 219.211 or Sections 219.212 and 219.213 of this Subpart in accordance with the appropriate compliance schedule as specified in subsection (a), (b), (c), (d), (e), ~~or~~ (f), or (g) below:

a) No owner or operator of a coating line thatwhich is exempt from the limitations of Section 219.204 of this Subpart because of the criteria in Section 219.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.211(b) of this Subpart.

b) No owner or operator of a coating line complying by means of Section 219.204 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.204 and 219.211(c) of this Subpart.

c) No owner or operator of a coating line complying by means of Section 219.205 of

this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.205 and 219.211(d) of this Subpart.

d) No owner or operator of a coating line complying by means of Section 219.207 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.207 and 219.211(e) of this Subpart.

e) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.204, 219.205 or 219.207 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with, respectively, the applicable requirements in Section 219.204, or the alternative control options in Sections 219.205 or 219.207 and the requirements of Section 219.211.

f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.212 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with the requirements of Sections 219.212 and 219.213 of this Subpart.

g) No owner or operator of a coating line subject to the emission limitations in Section 219.204(a)(2) or (q) of this Subpart, or subject to the limitations in Section 219.219 of this Subpart, shall operate the coating line on or after a date consistent with Section 219.106(c) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.204(a)(2) or (q), if applicable, or the alternative control options in Section 219.205 or 219.207, and all applicable requirements in Sections 219.211 and 219.219 of this Subpart.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.211 Recordkeeping and Reporting

a) The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in Section 219.105 of this Part to establish the records required under this Section.

b) Any owner or operator of a coating line thatwhich is exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) or (b) of this Subpart shall comply with the following:

1) For sources exempt from Section 219.208(a) of this Subpart, by a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the coating line or group of coating lines is exempt under the provisions of Section 219.208(a) of this Subpart. Such certification shall include:

A) A declaration that the coating line is exempt from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart; and

B) Calculations thatwhich demonstrate that the combined VOM emissions from the coating line and all other coating lines in the same category never exceed 6.8 kg (15 lbs) per day before the application of capture systems and control devices. The following equation shall be used to calculate total VOM emissions:

$$T_e = \sum_{j=1}^{m} \sum_{i=1}^{n} (A_i B_i)_j$$

where:

T_e = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);

m = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 219.104 of this Part (because they belong to the same category, e.g., can coating);

j = Subscript denoting an individual coating line;

n = Number of different coatings as applied each day on each coating line;

i = Subscript denoting an individual coating;

A_i = Weight of VOM per volume of each coating (minus

water and any compounds that~~which~~ are specifically exempted from the definition of VOM) as applied each day on each coating line in units of kg VOM/l (lbs VOM/gal); and

B_i = Volume of each coating (minus water and any compounds that~~which~~ are specifically exempted from the definition of VOM) as applied each day on each coating line in units of l/day (gal/day). The instrument or method by which the owner or operator accurately measured or calculated the volume of each coating as applied on each coating line each day shall be described in the certification to the Agency.

2) For sources exempt under Section 219.208(b) of this Subpart, by March 15, 1998, or upon initial start-up, the owner or operator of a coating line or a group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the source is exempt under the provisions of Section 219.208(b) of this Subpart. Such certification shall include:

A) A declaration that the source is exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart; and

B) Calculations that~~which~~ demonstrate that the source meets the criteria of exemption because of Section 219.208(b) of this Subpart.

3) For sources exempt under Section 219.208(a) of this Subpart, on and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of lines referenced in this subsection (b) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line; and

B) The weight of VOM per volume and the volume of each coating (minus water and any compounds that~~which~~ are specifically exempted from the definition of VOM) as applied each day on each coating line.

4) For sources exempt under Section 219.208(b) of this Subpart, on and after March 15, 1998, the owner or operator of a coating line or group of coating lines referenced in this subsection (b) shall collect and record all of the following information for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line; and

B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line on a monthly basis.

5) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart shall notify the Agency of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by sending a copy of such record to the Agency within 30 days after the exceedance occurs.

6) On and after March 15, 1998, any owner or operator of a source exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart shall notify the Agency if the source's VOM emissions exceed the limitations of Section 219.208(b) of this Subpart by sending a copy of calculations showing such an exceedance within 30 days after the change occurs.

c) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart other than Section 219.204(a)(1)(B),~~(2) and~~ (a)(1)(C),(a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(3)~~ of this Subpart and complying by means of Section 219.204 of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from Section 219.205, Section 219.207, Section 219.215, or Section 219.216 of this Subpart to Section 219.204 of this Subpart; the owner or operator of a subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section

219.106 of this Part, or on and after the initial start-up date. The~~Such~~ certification shall include:

A) The name and identification number of each coating as applied on each coating line;

B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line; ~~and~~

C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line; ~~.~~

D) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line, and the solids turnover ratio of the EDP operation, with supporting calculations;

E) For coating lines subject to the limitations of Section 219.204(a)(2)(E), the weight of VOM per volume of each coating as applied each day on each coating line, calculated on an occurrence weighted average basis;

F) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line;

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line;

B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;

C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line and certified product data sheets for each coating; ~~and~~

D) On and after March 15, 1998, for wood furniture coating spray booths subject to the limitation of Section 219.204(l)(4)(A) of this Subpart, the weight of VOM per weight of solids in each strippable spray booth coating as applied each day on each spray booth and certified product data sheets for each coating;~~.~~

E) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line, certified product data sheets for each coating, and the solid turnover ratio for the EDP operation, calculated on a calendar monthly basis, with supporting calculations;

F) For coating lines subject to the limitations of Section 219.204(a)(2)(E), the weight of VOM per volume of each coating as applied each day on each coating line, calculated on an occurrence weighted average basis, and certified product data sheets for each coating;

G) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line, and certified product data sheets for each coating;

3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:

A) Any record showing violation of Section 219.204 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with

all requirements of subsection (d)(1) or (e)(1) ~~below~~, respectively. Upon changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d) or (e) of this Section, respectively.

d) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of Section 219.205 of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing subject coating line from Section 219.204 or Section 219.207 to Section 219.205 of this Subpart; the owner or operator of the subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.205 on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. The~~Such~~ certification shall include:

A) The name and identification number of each coating line which will comply by means of Section 219.205 of this Subpart.

B) The name and identification number of each coating as applied on each coating line.

C) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

D) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.

E) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line.

F) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.

GE) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.

HF) The method by which the owner or operator will create and maintain records each day as required in subsection (d)(2) of this Section.

IG) An example of the format in which the records required in subsection (d)(2) of this Section will be kept.

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

A) The name and identification number of each coating as applied on each coating line.

B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.

D) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line.

E) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.

FD) The daily-weighted average VOM content of all coatings as applied on each coating line as defined in Section 219.104 of this Part.

3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:

A) Any record showing violation of Section 219.205 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (e)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (e) of this Section, respectively.

e) Any owner or operator of a coating line subject to the limitations of Section 219.207 and complying by means of Section 219.207(c), (d), (e), (f), (g), ~~or~~ (h), or (k) of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing coating line from Section 219.204 or Section 219.205 to Section 219.207 of this Subpart, the owner or operator of the subject coating line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 219.207 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

A) The weight of VOM per volume of coating solids as applied each day on each coating line, if complying pursuant to Section 219.207(b)(2) of this Subpart.

B) Control device monitoring data.

C) A log of operating time for the capture system, control device, monitoring equipment and the associated coating line.

D) A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:

A) Any record showing violation of Section 219.207 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (d)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart ~~Part~~ from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.

f) Any owner or operator of a primer surfacer operation or topcoat operation, or combined primer surfacer and topcoat operation, subject to the limitations of Section 219.204(a)(1)(B),~~(2) or~~ (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(3)~~ of this Subpart shall comply with the following:

1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating operation, the owner or operator of a subject coating operation shall certify to the Agency that the operation will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. The~~Such~~ certification shall include:

A) The name and identification number of each coating operation which will comply by means of Section 219.204(a)(1)(B),~~(2) and~~ (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(3)~~ of this Subpart and

the name and identification number of each coating line in each coating operation.

B) The name and identification number of each coating as applied on each coating line in the coating operation.

C) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

D) The transfer efficiency and control efficiency measured for each coating line.

E) Test reports, including raw data and calculations documenting the testing performed to measure transfer efficiency and control efficiency.

F) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.

G) The method by which the owner or operator will create and maintain records each day as required in subsection (f)(2) ~~below~~.

H) An example format for presenting the records required in subsection (f)(2) ~~below~~.

2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating operation shall collect and record all of the following information each day for each topcoat or primer surfacer coating operation and maintain the information at the source for a period of three years:

A) All information necessary to calculate the daily-weighted average VOM emissions from the coating operations in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted, and approved pursuant to Section 219.204(a)(1)(B), ~~(2) or~~ (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) ~~(3)~~ of this Subpart including:

i) The name and identification number of each coating as applied on each coating operation.

ii) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating operation.

B) If a control device or devices are~~device(s) is~~ used to control VOM emissions, control device monitoring data; a log of operating time for the capture system, control device, monitoring equipment and the associated coating operation; and a maintenance log for the capture system, control device and monitoring equipment, detailing all routine and non-routine maintenance performed including dates and duration of any outages.

3) On and after a date consistent with Section 219.106 of this Part or on and after the initial start-up date, the owner or operator of a subject coating operation shall determine and record the daily VOM emissions in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted and approved pursuant to Section 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(a)(2) or (a)(3)~~ of this Subpart within 10 days from the end of the month and maintain this information at the source for a period of three years.

4) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating operation shall notify the Agency in the following instances:

A) Any record showing a violation of Section 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~(a)(2) or (a)(3)~~ of this Subpart shall be reported by sending a copy of such record to the Agency within 15 days from the end of the month in which the violation occurred.

B) The owner or operator shall notify the Agency of any change to the operation at least 30 days before the change is effected. The Agency shall determine whether or not compliance testing is required. If the Agency determines that compliance testing is required, then the owner or operator shall submit a testing proposal to the Agency within 30 days and test within 30 days of the approval of the proposal by the Agency and USEPA.

g) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line

subject to the requirements of Section 219.219 of this Subpart shall comply with the following:

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes:

A) A description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 219.219 of this Subpart;

B) For sources subject to Section 219.219(a)(6), the work practices plan specified in that Section;

C) For sources subject to Section 219.219(b)(6), the application methods used to apply coatings on the subject coating line;

2) Notify the Agency of any violation of Section 219.219 of this Subpart by providing a description of the violation and copies of records documenting the violation to the Agency within 30 days following the occurrence of the violation; and

3) Maintain at the source all records required by this subsection (g) for a minimum of three years from the date the document was created and make those records available to the Agency upon request.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.212 Cross-Line Averaging to Establish Compliance for Coating Lines

a) On and after March 15, 1996, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart, except coating lines subject to the limitations in Section 219.204(a)(2) or (q) of this Subpart, and with coating lines in operation prior to January 1, 1991 ("pre-existing coating lines"), may, for pre-existing coating lines only, elect to comply with the requirements of this Section, rather than complying with the applicable emission limitations set forth in Section 219.204, if an operational change of the type described below has been made after January 1, 1991, to one or more pre-existing coating lines at the source. An operational change occurs when a pre-existing coating line is replaced with a line using lower VOM coating for the same purpose as the replaced line ("replacement line"). A source electing to rely on this Section to demonstrate compliance with the requirements of this Subpart shall operate pursuant to federally enforceable permit conditions approved by the Agency and USEPA.

b) An owner or operator of pre-existing coating lines subject to a VOM content limitation in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart must establish, by use of the equations in subsection (d) of this Section, that the calculated actual daily VOM emissions from all participating coating lines, as defined in this subsection~~below~~, are less than the calculated daily allowable VOM emissions from the same group of coating lines. For any pre-existing coating line to be aggregated for the purposes of Section 219.212, 219.213, or 219.214 of this Subpart ("participating coating lines"), the source must establish that:

1) All coatings applied on the participating coating line shall, at all times, have a VOM content less than or equal to the applicable VOM content limitation for such coating listed in Appendix H of this Part; and

2) On the date the source elects to rely on this Section to demonstrate compliance with this Subpart, all coatings applied on the participating coating line are not already in compliance with the VOM content limitation for such coating effective on or after March 15, 1996; or the participating coating line is a replacement line, as defined in subsection (a) of this Section with an operational change occurring on or after January 1, 1991.

c) Notwithstanding subsection (a) of this Section, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart, may also include as a participating coating line, until December 31, 1999, only, any replacement line that satisfies all of the following conditions:

1) The replacement line is operated as a powder coating line;

2) The replacement line was added after July 1, 1988; and

3) The owner or operator also includes as a participating coating line one or more coating lines that satisfy the criteria of a replacement line, as described in subsection (a) of this Section.

d) To demonstrate compliance with this Section, a source shall establish the following:

1) An alternative daily emission limitation shall be determined for all participating coating lines at the source according to subsection (d)(2) of this Section. All participating coating lines shall be factored in each day to demonstrate compliance. Provided compliance is established pursuant

to the requirements in this subsection, nothing in this Section requires daily operation of each participating line. Actual daily emissions from all participating coating lines (E_d) shall never exceed the alternative daily emission limitation (A_d) and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^{n} V_i C_i$$

where:

E_d = Actual daily VOM emissions from participating coating lines in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied by all participating coating lines at the source;

V_i = Volume of each coating applied for the day in units of 1/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

C_i = The VOM content of each coating as applied in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (A_d) shall be determined for all participating coating lines at the source on a daily basis as follows:

$$A_d = A_l + A_p$$

where:

A_l and A_p are defined in subsections (d)~~(a)~~(2)(A) and (d)~~(a)~~(2)(B) of this Section~~subsection~~.

A) The portion of the alternative daily emissions limitation for coating operations at a source using non-powder coating (A_l) shall be determined for all such participating non-powder coating lines on a daily basis as follows:

$$A_l = \sum_{i=1}^{n} V_i L_i \frac{D_i - C_i}{D_i - L_i}$$

where:

A_l = The VOM emissions allowed for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied by all participating coating lines at the source;

C_i = The VOM content of each coating as applied in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

D_i = The density of VOM in each coating applied. For the purposes of calculating A_i, the density is 0.882 kg VOM/1 VOM (7.36 lbs VOM/gal VOM);

V_i = Volume of each coating applied for the day in units of 1 (gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

L_i = The VOM emission limitation for each coating applied, as specified in Section 219.204 of this Subpart, in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

B) The portion of the alternative daily emissions limitation for coating operations at a source using powdered coating (A_p) shall be determined for all such participating powder coating lines on a daily basis as follows:

$$A_p = \sum_{h=1}^{m} \sum_{j=1}^{n} \frac{V_j L_j D_j K_h}{D_j - L_j}$$

where:

A_p = The VOM emissions allowed for the day in units of kg/day (lbs/day);

h = Subscript denoting a specific powder coating line;

j = Subscript denoting a specific powder coating applied;~~.~~

m = Total number of participating powder coating lines;

n = Total number of powder coatings applied in the participating coating lines;

D_j = The assumed density of VOM in liquid coating, 0.882 kg VOM/1 VOM (7.36 lbs VOM/gal VOM);

V_j = Volume of each powder coating consumed for the day in units of 1 (gal) of coating;

L_j = The VOM emission limitation for each coating applied, as specified in Section 219.204 of this Subpart, in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

K = A constant for each individual coating line representing the ratio of the volume of coating solids consumed on the liquid coating system which has been replaced to the volume of powder coating consumed on the replacement line to accomplish the same coating job. This value shall be determined by the source based on tests conducted and records maintained pursuant to the requirements of Section 219.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid and powder. Tests methods and recordkeeping requirements shall be approved by the Agency and USEPA and contained in the source's operating permit as federally enforceable permit conditions, subject to the following restrictions:

~~i)~~ K cannot exceed 0.9 for non-recycled powder coating systems; or

~~•ii)~~ K cannot exceed 2.0 for recycled powder coating systems.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly Coatings and Miscellaneous Metal and Plastic Parts Coatings

a) Every owner or operator of a coating line subject to the requirements of Section 219.204(a)(2) of this Subpart shall:

1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;

2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing those materials;

3) Minimize spills of VOM-containing coatings, thinners, and coating-related waste materials;

4) Convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes;

5) Minimize VOM emissions from cleaning of storage, mixing, and conveying equipment;

6) Develop and implement a work practice plan to minimize VOM emissions from cleaning and from purging of equipment associated with coating lines subject to the limitations in Section 219.204(a)(2). The plan shall specify practices and procedures that the source will follow to ensure that VOM emissions from the operations listed in this subsection (a)(6) are minimized. If the owner or operator of the subject coating line has already implemented a work practice plan for the coating line pursuant to Subpart IIII of 40 CFR 63, incorporated by reference in Section 219.112 of this Part, the owner or operator may revise the plan as necessary to comply with this Section.

A) Vehicle body wiping;

B) Coating line purging;

C) Flushing of coating systems;

D) Cleaning of spray booth grates, walls, and equipment; and

F) Cleaning of external spray booth areas.

b) Except as provided in subsection (c) of this Section, every owner or operator of a coating line described in Section 219.204(q) of this Subpart shall:

1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;

2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing these materials;

3) Minimize spills of VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials;

4) Convey VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials from one location to another in closed containers or pipes;

5) Minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers; and

6) Apply all coatings using one or more of the following application methods:

A) Electrostatic spray;

B) High volume low pressure (HVLP) spray;

C) Flow coating. For the purposes of this subsection (b)(6)(C), flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;

D) Roll coating;

E) Dip coating, including electrodeposition. For purposes of this subsection (b)(6)(E), electrodeposition means a water-borne dip

coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;

F) Airless spray;

G) Air-assisted airless spray; or

H) Another coating application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Agency.

c) Notwithstanding subsection (b) of this Section, the application method limitations in subsection (b)(6) shall not apply to the following:

1) Coating lines complying with Section 219.207(k)(1);

2) For metal parts and products coating operations: touch-up coatings, repair coatings, textured finishes, stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating;

3) For pleasure craft surface coating operations: extreme high gloss coatings;

4) For plastic parts and products coating operations: airbrush operations using 18.9 liters (5 gallons) or less of coating per year.

(Source: Added at 34 Ill. Reg. _____, effective _____)

SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS

Section 219.890 Applicability

a) Except as provided in subsection (b) of this Section, on and after May 1, 2011, the requirements of this Subpart shall apply to the owners or operators of sources that manufacture hulls or decks of boats from fiberglass, or that build molds to make hulls or decks of boats from fiberglass, and that emit 6.8 kg/day (15 lbs/day) or more of VOM, calculated in accordance with Section 219.894(a)(1)(B), from open molding resin and gel coat operations, resin and gel coat mixing operations, and resin and gel coat application equipment cleaning operations, in the absence of air pollution control equipment. If a source is subject to this Subpart based

upon such criteria, the limitations of this Subpart shall apply to the manufacture of all fiberglass boat parts at the source.

b) Notwithstanding subsection (a) of this Section, the requirements of this Subpart shall not apply to the following:

1) Surface coatings applied to fiberglass boats;

2) Industrial adhesives used in the assembly of fiberglass boats. Polyester resin putties used to assemble fiberglass parts shall not be considered industrial adhesives for purposes of this exclusion;

3) Closed molding operations.

c) If a source is or becomes subject to one or more of the limitations in this Subpart, the source is always subject to the applicable provisions of this Subpart.

d) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 219.894(a) of this Subpart.

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.891 Emission Limitations and Control Requirements

a) Except as provided in subsection (f) of this Section, no owner or operator of a source subject to the requirements of this Subpart shall use a subject resin or gel coat at the source unless the resin and gel coat comply with subsection (b)(1) or (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of this Section. For sources complying pursuant to subsection (b) or (c) of this Section, if the non-monomer VOM content of a resin or gel coat exceeds 5 percent, by weight, the excess non-monomer VOM shall be added to the monomer VOM content of the resin or gel coat in accordance with the equation below:

$$\text{Weighted Average Monomer VOM Content} = \frac{\sum_{i=1}^{n} M_i VOM_i}{\sum_{i=1}^{n} M_i} + \frac{\sum_{i=1}^{n} M_i VOM_{nm} - \sum_{i=1}^{n} 0.05 * M_i}{\sum_{i=1}^{n} M_i}$$

where:

M_i = Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams.

VOM_i = Monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation.

i = Subscript denoting a specific open molding resin or gel coat applied.

n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

VOM_{nm} = Non-monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation.

b) VOM Content Limitations

1) Except as provided in subsection (e) of this Section, the monomer VOM content of a subject resin or gel coat shall not exceed the following limitations:

		Weighted average monomer VOM content (weight percent)
A)	Production resin	
i)	Atomized spray	28
ii)	Non-atomized	35
B)	Pigmented gel coat	33
C)	Clear gel coat	48
D)	Tooling resin	

	i)	Atomized	30
	ii)	Non-atomized	39
E)		Tooling gel coat	40

2) Except as provided in subsection (e) of this Section, the weighted average monomer VOM content of a subject resin or gel coat shall not exceed the applicable limitation set forth in subsection (b)(1) of this Section on a 12-month rolling average basis. Equation 1 shall be used to determine the weighted average monomer VOM content for resin and gel coat materials.

Equation 1:

$$\text{Weighted Average Monomer VOM Content} = \frac{\sum_{i=1}^{n} M_i VOM_i}{\sum_{i=1}^{n} M_i}$$

where:

M_i = Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams;

VOM_i = Monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation;

n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

c) Emissions Averaging Alternative. The owner or operator of a source subject to the requirements of this Subpart may elect to include some or all of the subject resin and gel coat operations at the source in the emissions averaging alternative. Resin and gel coat operations utilizing the emissions averaging alternative shall comply with a source-specific monomer VOM mass emission limit on a 12-month rolling average basis, calculated at the end of each calendar month. All subject resin and gel coat operations that do not utilize the emissions averaging alternative shall comply with the requirements in subsection (b) or (d) of this Section, as well as with all other applicable requirements in this Section.

1) The owner or operator of a source subject to this subsection (c) shall use Equation 2 to determine the source-specific monomer VOM mass emission limit for resin and gel coats included in the emissions average:

Equation 2:

$$\text{Monomer VOM Limit} = \frac{46(M_R)+159(M_{PG})+291(M_{CG})+54(M_{TR})+214(M_{TG})}{}$$

where:

Monomer VOM Content = Total allowable monomer VOM that can be emitted from the open molding operations included in the average, expressed in kilograms per 12-month period;

M_R = Mass of production resin used in the past 12 months, excluding any materials that are exempt, expressed in megagrams (Mg);

M_{PG} = Mass of pigmented gel coat used in the past 12 months, excluding any materials that are exempt, expressed in Mg;

M_{CG} = Mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, expressed in Mg;

M_{TR} = Mass of tooling resin used in the past 12 months, excluding any materials that are exempt, expressed in Mg;

M_{TG} = Mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, expressed in Mg.

The numerical coefficients associated with each term on the right hand side of Equation 2 are the allowable monomer VOM emission rates for that particular material in units of kg VOM/Mg of material used.

2) At the end of the first 12-month averaging period, and at the end of each subsequent month, the owner or operator of a source subject to this subsection (c) shall use Equation 3 to calculate the monomer VOM

emissions from the resin and gel coat operations included in the emissions average to determine whether the emissions exceed the limitation calculated using Equation 2.

Equation 3:

$$\text{Monomer VOM Emissions} = \frac{(PV_R)(M_R)+(PV_{PG})(M_{PG})+(PV_{CG})(M_{CG})+}{(PV_{TR})(M_{TR})+(PV_{TG})(M_{TG})}$$

where:

Monomer VOM Emissions = Monomer VOM emissions calculated using the monomer VOM emission equations for each operation included in the average, expressed in kg;

PV_R = Weighted-average monomer VOM emission rate for production resin used in the past 12 months, expressed in kg/Mg, calculated in accordance with Equation 4 in subsection (c)(3);

M_R = Mass of production resin used in the past 12 months, expressed in Mg;

PV_{PG} = Weighted-average monomer VOM emission rate for pigmented gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

M_{PG} = Mass of pigmented gel coat used in the past 12 months, expressed in Mg;

PV_{CG} = Weighted-average monomer VOM emission rate for clear gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

M_{CG} = Mass of clear gel coat used in the past 12 months, expressed in Mg;

PV_{TR} = Weighted-average monomer VOM emission rate for tooling resin used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

M_{TR} = Mass of tooling resin used in the past 12 months,

expressed in Mg;

PV_{TG} = Weighted-average monomer VOM emission rate for tooling gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

M_{TG} = Mass of tooling gel coat used in the past 12 months, expressed in Mg.

3) For purposes of Equation 3, the owner or operator of a source subject to this subsection (c) shall use Equation 4 below to calculate the weighted-average monomer VOM emission rate for the previous 12 months for each resin and gel coat operation included in the emissions average, except as provided in subsection (e) of this Section.

Equation 4:

$$PV_{OP} = \frac{\sum_{i=1}^{n} M_i PV_i}{\sum_{i=1}^{n} M_i}$$

where:

PV_{OP} = Weighted-average monomer VOM emission rate for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, and PV_{TG}) included in the average, expressed in kg of monomer VOM per Mg of material applied;

M_i = Mass of resin or gel coat (i) used within an operation in the past 12 months, expressed in Mg;

n = Number of different open molding resins and gel coats used within an operation in the past 12 months;

PV_i = The monomer VOM emission rate for resin or gel coat (i) used within an operation in the past 12 months, expressed in kg of monomer VOM per Mg of material applied. The monomer VOM emission rate formulas in subsection (c)(4) of this Section shall be used to compute PV_i. If a source includes filled resins in the emissions average, the source shall use the value of PV_F, calculated using Equation 5 in

subsection (e)(3) of this Section, as the value of PV_i for those resins;

i = Subscript denoting a specific open molding resin or gel coat applied.

4) For purposes of Equation 4 and subsection (e)(3) of this Section, the following monomer VOM emission rate formulas shall apply:

A) Production resin, tooling resin:

i) Atomized: $0.014 \times (\text{Resin VOM\%})^{2.425}$

ii) Atomized, plus vacuum bagging with roll-out: $0.01185 \times (\text{Resin VOM\%})^{2.425}$

iii) Atomized, plus vacuum bagging without roll-out: $0.00945 \times (\text{Resin VOM\%})^{2.425}$

iv) Nonatomized: $0.014 \times (\text{Resin VOM\%})^{2.275}$

v) Nonatomized, plus vacuum bagging with roll-out: $0.0110 \times (\text{Resin VOM\%})^{2.275}$

vi) Nonatomized, plus vacuum bagging without roll-out: $0.0076 \times (\text{Resin VOM\%})^{2.275}$

B) Pigmented gel coat, clear gel coat, tooling gel coat: $0.445 \times (\text{Gel Coat VOM\%})^{1.675}$.

d) Capture System and Control Device Requirements. No owner or operator of a source subject to the requirements of this Subpart that is utilizing a capture system and control device for a subject resin or gel coat operation shall conduct that operation unless the following requirements are satisfied:

1) An afterburner or carbon adsorber is installed and operated that meets the limitations set forth in this subsection (d). The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if that device complies with all limitations in this subsection (d), the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device, and the plan is approved by the Agency and USEPA within federally enforceable permit conditions;

2) The VOM emissions at the outlet of the control device meet an emissions limitation determined using Equation 2 in subsection (c)(1) of this Section. In Equation 2, however, instead of using the mass of each material used over the past 12 months to determine the emission limitation, the owner or operator shall use the mass of each material used during the applicable control device performance test;

3) The owner or operator complies with all testing and monitoring requirements set forth in Section 219.892 of this Subpart.

e) Filled Resins. For all filled production and tooling resins, the owner or operator of a source subject to this Subpart shall adjust the monomer VOM emission rates determined pursuant to Section 219.891(b) and (c) of this Subpart using Equation 5 in subsection (e)(3). If complying pursuant to Section 219.891(b), the emission rate determined using Equation 5 shall not exceed the limitations set forth in subsections (e)(1) and (e)(2) of this Section. If the non-monomer VOM content of a filled resin exceeds 5 percent, by weight, based on the unfilled resin, the excess non-monomer VOM shall be added to the monomer VOM content in accordance with the equation set forth in Section 219.891(a).

1) Tooling Resin: 54 kg (119.1 lbs) monomer VOM/Mg filled resin applied;

2) Production Resin: 46 kg (101.4 lbs) monomer VOM/Mg filled resin applied;

3) Equation 5:

$$PV_F = PV_U \times \frac{(100 - \%Filler)}{100}$$

where:

PV_F = The as-applied monomer VOM emission rate for the filled production resin or tooling resin, expressed in kg monomer VOM per Mg of filled material;

PV_U = The monomer VOM emission rate for the unfilled resin, before filler is added, calculated using the formulas in Section 219.891(b)(4) of this Subpart;

% Filler = The weight-percent of filler in the as-applied filled resin system.

f) The limitations in subsections (a) through (e) of this Section shall not apply to the following materials. These materials shall instead comply with the applicable requirements set forth in subsections (f)(1) through (f)(3).

1) Production resins, including skin coat resins, that must meet specifications for use in military vessels or must be approved by the United States Coast Guard for use in the construction of lifeboats, rescue boats, and other life-saving appliances approved under 46 CFR Subchapter Q, incorporated by reference in Section 219.112 of this Part, or for use in the construction of small passenger vessels regulated by 40 CFR Subchapter T, incorporated by reference in Section 219.112 of this Part. The owner or operator of a source subject to this Subpart shall apply all such resins with nonatomizing resin application equipment;

2) Production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch ups. These materials shall not exceed 1 percent, by weight, of all resins and gel coats used at a subject source on a 12-month rolling average basis;

3) Pure, 100 percent vinylester resins used for skin coats. The owner or operator of a source subject to this Subpart shall apply these resins with non-atomizing resin application equipment, and the total amount of the resins shall not exceed 5 percent, by weight, of all resins used at the subject source on a 12-month rolling-average basis.

g) No owner or operator of a source subject to this Subpart shall use VOM-containing cleaning solutions to remove cured resins and gel coats from fiberglass boat manufacturing application equipment. Additionally, no owner or operator shall use VOM-containing cleaning solutions for routine cleaning of application equipment unless:

1) The VOM content of the cleaning solution is less than or equal to 5 percent, by weight; or

2) The composite vapor pressure of the cleaning solution is less than or equal to 0.50 mmHg at 68°F.

h) No owner or operator of a source subject to this Subpart shall use resin or gel coat mixing containers with a capacity equal to or greater than 208 liters (55 gallons), including those used for on-site mixing of putties and polyputties, unless such containers have covers with no visible gaps in place at all times, except when

material is being manually added to or removed from a container or when mixing or pumping equipment is being placed in or removed from a container.

(Source: Added at 34 Ill. Reg. _____, effective _____)`

Section 219.892 Testing and Monitoring Requirements

a) Testing to demonstrate compliance with the requirements of Section 219.891 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise specified in this Subpart. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during testing.

b) Testing to demonstrate compliance with the monomer VOM content limitations for resin and gel coat materials in Section 219.891(b) of this Subpart shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, in accordance with SCAQMD 312-91, incorporated by reference in Section 219.112 of this Part.

c) The owner or operator of a source complying with this Subpart pursuant to Section 219.891(d) shall comply with the following:

1) By May 1, 2011, or upon initial start-up, whichever is later, and upon start-up of a new control device, conduct an initial performance test of the control device in accordance with this subsection (c) that demonstrates compliance with the emission limitation determined pursuant to Section 219.891(d).

2) Subsequent to the initial performance test described in subsection (c)(1) of this Section, conduct at least one performance test per calendar year. Performance tests used to demonstrate compliance with Section 219.891(d) shall be conducted at least six months apart, unless the performance test is being conducted following an exceedance of operating parameters as described in subsection (c)(3) of this Section, or per a request by the Agency.

3) Monitor and record relevant operating parameters, including the control efficiency of the control device and the amount of materials used in the fiberglass boat manufacturing process, during each control device performance test used to demonstrate compliance with Section 219.891(d). The owner or operator shall continue to operate the fiberglass boat manufacturing process within the parameters until another performance

test is conducted that demonstrates compliance with Section 219.891(d). The owner or operator shall monitor the parameters at all times when the control device is in operation. If the fiberglass boat manufacturing process exceeds any operating parameter by more than 10 percent, the owner or operator shall conduct additional performance testing in accordance with this Section within 10 operating days after the exceedance;

4) The methods and procedures of Section 219.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.891(d) of this Subpart, as follows:

A) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;

B) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part;

C) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:

i) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;

ii) The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and

iii) Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated

compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest again using Method 25.

D) Notwithstanding the criteria or requirements in Method 25, which specifies a minimum probe temperature of 129°C (265°F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7°C (350°F); and

E) During testing, the fiberglass boat manufacturing operation shall be operated at representative operating conditions and flow rates.

5) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall:

A) Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and

B) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.

6) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall install, maintain, calibrate, and operate the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.891(d).

d) Testing to demonstrate compliance with the VOM content limitations for cleaning solutions in Section 219.891(g) of this Subpart, and with the non-monomer VOM content limitations for resin and gel coat materials in Section 219.891(a) of this

Subpart, shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, as follows:

1) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 219.112 of this Part, shall be used to demonstrate compliance; or

2) For cleaning solvents, the manufacturer's specifications for VOM content may be used if the manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 219.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.

e) The owner or operator of a source subject to this Subpart and relying on the VOM content of the cleaning solution to comply with Section 219.891(g)(1) of this Subpart shall:

1) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):

A) Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and

B) Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with Section 219.891(g)(1);

2) For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in Section 219.894(g) of this Subpart.

f) Testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents set forth in Section 219.891(g) of this Subpart shall be conducted in accordance with the applicable methods and procedures set forth in Section 219.110 of this Part.

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.894 Recordkeeping and Reporting Requirements

a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 219.890(a) of this Subpart shall:

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the following:

A) A declaration that the source is exempt from the requirements in this Subpart because of the criteria in Section 219.890(a);

B) Calculations that demonstrate that combined emissions of VOM from all subject fiberglass boat manufacturing operations (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operation) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from fiberglass boat manufacturing operations at the source (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operations) and divide the amount by the number of days during that calendar month that the fiberglass boat manufacturing operations were in operation;

2) Notify the Agency of any record that shows that the combined emissions of VOM from subject fiberglass boat manufacturing operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of the record upon request by the Agency.

b) All sources subject to the requirements of this Subpart shall:

1) By May 1, 2011, or upon initial start-up of the source, whichever is later, and upon start-up of a new fiberglass boat manufacturing operation at the source, submit a certification to the Agency that includes:

A) Identification of each subject fiberglass boat manufacturing operation as of the date of certification;

B) A declaration that all subject fiberglass boat manufacturing operations, including related cleaning operations, are in compliance with the requirements of this Subpart;

C) The limitation with which each subject fiberglass boat manufacturing operation will comply (i.e., the VOM content limitation, the emissions averaging alternative, or the emissions control system alternative);

D) Initial documentation that each subject fiberglass boat manufacturing operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;

E) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;

F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 219.891(h) of this Subpart;

G) A description of each fiberglass boat manufacturing operation exempt pursuant to Section 219.890(b) of this Subpart, if any;

H) A description of materials subject to Section 219.891(f) of this Subpart, if any, used in each fiberglass boat manufacturing operation;

2) At least 30 calendar days before changing the method of compliance in accordance with Section 219.891(b), (c), and (d), notify the Agency in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;

3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;

4) Retain all records required by this Section for at least three years and make those records available to the Agency upon request.

c) The owner or operator of a fiberglass boat manufacturing operation subject to the limitations of Section 219.891 of this Subpart and complying by means of Section 219.891(b) shall comply with the following.

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number,

and VOM content of each subject resin and gel coat as applied each day by each subject fiberglass boat manufacturing operation;

2) Collect and record the following information each day for each fiberglass boat manufacturing operation complying with Section 219.891(b):

A) The name, identification number, and VOM content of each subject resin and gel coat as applied each day by each fiberglass boat manufacturing operation; and

B) If complying with Section 219.891(b)(2), the daily weighted average VOM content of all subject resins and gel coats as applied by each subject fiberglass boat manufacturing operation.

d) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 219.891 of this Subpart and complying by means of Section 219.891(c) shall:

1) On and after May 1, 2011, collect and record the following information each month:

A) The amount of production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;

B) The VOM content of each production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;

C) Total monthly VOM emissions for all subject fiberglass boat manufacturing operations;

2) At the end of the first 12-month averaging period, and at the end of each subsequent month, collect and record the following information:

A) The monomer VOM mass emission limit for all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period, with supporting calculations;

B) The total actual emissions of VOM from all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period.

e) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 219.891 of this Subpart and complying by means of Section 219.891(d) shall:

1) By May 1, 2011, or upon initial start-up, whichever is later, and upon start-up of a new control device, submit a certification to the Agency that includes the following:

A) The type of control device used to comply with the requirements of Section 219.891(d);

B) The results of all tests and calculations necessary to demonstrate compliance with the requirements of Section 219.891(d); and

C) A declaration that the monitoring equipment required under Section 219.892 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

2) Within 90 days after conducting testing pursuant to Section 219.892, submit to the Agency a copy of all test results, as well as a certification that includes the following:

A) A declaration that all tests and calculations necessary to demonstrate whether the fiberglass boat manufacturing operation is in compliance with Section 219.891(d) have been properly performed;

B) A statement whether the fiberglass boat manufacturing operations are or are not in compliance with Section 219.891(d);

C) The emissions limitation applicable during the control device performance test, with supporting calculations;

D) The operating parameters of the fiberglass boat manufacturing process during testing, as monitored in accordance with Section 219.892;

3) Collect and record daily the following information for each fiberglass boat manufacturing operation subject to the requirements of Section 219.891(d), and submit that information to the Agency upon request:

A) Afterburner or other approved control device monitoring data in accordance with Section 219.892 of this Subpart;

B) A log of operating time for the control device and monitoring equipment;

C) A maintenance log for the control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages;

D) Information to substantiate that the fiberglass boat manufacturing operation is operating in compliance with the parameters determined pursuant to Section 219.892.

f) The owner or operator of a source subject to the requirements in Section 219.891(f) of this Subpart shall collect and record the following information for each fiberglass boat manufacturing operation:

1) The name and identification number of each material subject to Section 219.891(f) as applied each day by each subject fiberglass boat manufacturing operation;

2) If subject to Section 219.891(f)(2), the amount of production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch-ups, used each month at the subject source, and the total amount of all resins and gel coats used each month at the subject source;

3) If subject to Section 219.891(f)(3), the amount of pure, 100 percent vinylester resins used for skin coats each month at the subject source, and the total amount of all resins used each month at the subject source.

g) The owner or operator of a source subject to the requirements of Section 219.891 of this Subpart shall collect and record the following information for each cleaning solution used in each fiberglass boat manufacturing operation:

1) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.891(g) of this Subpart and that is prepared at the source with automatic equipment:

A) The name and identification of each cleaning solution;

B) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.892(d) of this Subpart;

C) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);

D) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;

E) The VOM content of the as-used cleaning solution, with supporting calculations; and

F) A calibration log for the automatic equipment, detailing periodic checks;

2) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.891(g), and that is not prepared at the source with automatic equipment:

A) The name and identification of each cleaning solution;

B) Date and time of preparation, and each subsequent modification, of the batch;

C) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.892(d);

D) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

E) The VOM content of the as-used cleaning solution, with supporting calculations;

3) For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with Section 219.891(g):

A) The name and identification of each cleaning solution;

B) Date and time of preparation, and each subsequent modification, of the batch;

C) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 219.892(f) of this Subpart;

D) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

E) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 219.110 of this Part.

(Source: Added at 34 Ill. Reg. _____, effective _____)

SUBPART JJ: MISCELLANEOUS INDUSTRIAL ADHESIVES

Section 219.900 Applicability

a) Except as provided in subsection (b) of this Section, on and after May 1, 2011, the requirements of this Subpart shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with Section 219.904(a)(1)(B), in the absence of air pollution control equipment.

b) Notwithstanding subsection (a) of this Section:

1) The requirements of this Subpart shall not apply to miscellaneous industrial adhesive application operations associated with the following:

A) Aerospace coatings;

B) Metal furniture coatings;

C) Large appliance coatings;

D) Flat wood paneling coatings;

E) Paper, film, and foil coatings;

F) Lithographic printing;

G) Letterpress printing;

H) Flexible package printing;

I) Coil coating;

J) Fabric coating;

K) Rubber tire manufacturing.

2) The requirements of Section 219.901(b) through (e) of this Subpart shall not apply to the following:

A) Adhesives or adhesive primers being tested or evaluated in any research and development operation or quality assurance or analytical laboratory;

B) Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems;

C) Adhesives or adhesive primers used in medical equipment manufacturing operations;

D) Cyanoacrylate adhesive application operations;

E) Aerosol adhesive and aerosol adhesive primer application operations;

F) Operations using polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities;

G) Operations using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less.

c) If a miscellaneous industrial adhesive application operation at a source is or becomes subject to one or more of the limitations in this Subpart, the miscellaneous industrial adhesive application operation is always subject to the applicable provisions of this Subpart.

d) The owner or operator of a source exempt from the emission limitations and control requirements of this Subpart because of the criteria in subsection (a) of this Section is subject to the recordkeeping and reporting requirements specified in Section 219.904(a) of this Subpart.

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.901 Emission Limitations and Control Requirements

a) The owner or operator of a source subject to the requirements of this Subpart shall comply with the limitations in subsection (b), (c), or (d) of this Section, as well as with the limitations in subsections (e) and (f) of this Section. Notwithstanding this requirement, sources subject to Section 219.900(b)(2) shall comply with the limitations in subsection (f) of this Section only.

b) The owner or operator of adhesive application operations listed in this subsection (b) shall comply with the following VOM emission limitations. If an adhesive is used to bond dissimilar substrates together, the substrate category with the highest VOM emission limitation shall apply:

			kg VOM/l adhesive or adhesive primer applied	lb VOM/gal adhesive or adhesive primer applied
1)	General adhesive application operations			
	A)	Reinforced plastic composite	0.200	(1.7)
	B)	Flexible vinyl	0.250	(2.1)
	C)	Metal	0.030	(0.3)
	D)	Porous material (except wood)	0.120	(1.0)
	E)	Rubber	0.250	(2.1)
	F)	Wood	0.030	(0.3)
	G)	Other substrates	0.250	(2.1)
2)	Specialty adhesive application operations			
	A)	Ceramic tile installation	0.130	(1.1)
	B)	Contact adhesive	0.250	(2.1)
	C)	Cove base installation	0.150	(1.3)

D)	Indoor floor covering installation	0.150	(1.3)
E)	Outdoor floor covering installation	0.250	(2.1)
F)	Installation of perimeter bonded sheet flooring	0.660	(5.5)
G)	Metal to urethane/rubber molding or casting	0.850	(7.1)
H)	Motor vehicle adhesive	0.250	(2.1)
I)	Motor vehicle weatherstrip adhesive	0.750	(6.3)
J)	Multipurpose construction	0.200	(1.7)
K)	Plastic solvent welding (acrylonitrile butadiene styrene (ABS) welding)	0.400	(3.3)
L)	Plastic solvent welding (except ABS welding)	0.500	(4.2)
M)	Sheet rubber lining installation	0.850	(7.1)
N)	Single-ply roof membrane installation/repair (except ethylene propylenediene monomer (EPDM) roof membrane)	0.250	(2.1)
O)	Structural glazing	0.100	(0.8)
P)	Thin metal laminate	0.780	(6.5)
Q)	Tire repair	0.100	(0.8)
R)	Waterproof resorcinol glue	0.170	(1.4)

3) Adhesive primer application operations

A)	Motor vehicle glass bonding primer	0.900	(7.5)
B)	Plastic solvent welding adhesive primer	0.650	(5.4)

C)	Single-ply roof membrane adhesive primer	0.250	(2.1)
D)	Other adhesive primer	0.250	(2.1)

c) No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation unless the daily-weighted average VOM content of subject adhesives as applied each day by the operation, calculated in accordance with subsection (c)(1) of this Section, is less than or equal to the emissions limitation calculated in accordance with subsection (c)(2) of this Section.

1) Weighted Average of VOM Content of Adhesives Applied Each Day

$$VOM_{WA} = \frac{\sum_{i=1}^{n} M_i VOM_i}{\sum_{i=1}^{n} M_1}$$

where:

VOM_{WA} = The weighted average VOM content in units of kg (lbs) VOM per volume in l (gal) of all subject adhesives as applied each day;

i = Subscript denoting a specific adhesive as applied;

n = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation;

M_i = The mass of each adhesive, as applied, in units of kg/l (lb/gal);

VOM_i = The VOM content in units of kg (lbs) VOM per volume in l (gal) of each adhesive as applied;

2) Mass Weighted Average VOM Limit for an Averaging Operation

$$Limit_{WA} = \frac{\sum_{i=1}^{n} M_i Limit_i}{\sum_{i=1}^{n} M_i}$$

where:

$Limit_{WA}$ = The mass weighted average VOM limit in units of kg (lbs) VOM per volume in l (gal) of all subject adhesives as applied each day in a single operation;

i = Subscript denoting a specific adhesive as applied;

n = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation;

M_i = The mass of each adhesive, as applied, in units of kg/l (lb/gal);

$Limit_i$ = The VOM limit, taken from subsection (b) of this Section, in units of kg (lbs) VOM per volume in l (gal) of each adhesive as applied.

d) No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation employing a capture system and control device unless either:

1) An afterburner or carbon adsorption system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation;

2) An alternative capture and control system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation and is approved by the Agency and USEPA within federally enforceable permit conditions. The owner or operator shall submit a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; or

3) The owner or operator complies with the applicable limitation set forth in subsection (b) of this Section by utilizing a combination of low-VOM

adhesives and an afterburner or carbon adsorption system. The owner or operator may use an alternative capture and control system if the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the capture and control system and the system is approved by the Agency and USEPA within federally enforceable permit conditions.

e) The owner or operator of a source subject to this Subpart shall apply all miscellaneous industrial adhesives using one or more of the following methods:

1) Electrostatic spray;

2) High volume low pressure (HVLP) spray;

3) Flow coating. For the purposes of this Subpart, flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;

4) Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;

5) Dip coating, including electrodeposition. For purposes of this Subpart, "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;

6) Airless spray;

7) Air-assisted airless spray; or

8) Another adhesive application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Agency.

f) The owner or operator of a source subject to this Subpart shall comply with the following work practices for each subject miscellaneous adhesive application operation at the source:

1) Store all VOM-containing adhesives, adhesive primers, process-related waste materials, cleaning materials, and used shop towels in closed containers;

2) Ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing those materials;

3) Minimize spills of VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials;

4) Convey VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials from one location to another in closed containers or pipes; and

5) Minimize VOM emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.902 Testing Requirements

a) Testing to demonstrate compliance with the requirements of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise provided in this Subpart. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during testing.

b) Testing to demonstrate compliance with the VOM content limitations in Section 219.901(b) of this Subpart shall be conducted as follows:

1) Method 24, incorporated by reference in Section 219.112 of this Part, shall be used for non-reactive adhesives;

2) Appendix A of 40 CFR 63, Subpart PPPP, incorporated by reference in Section 219.112 of this Part, shall be used for reactive adhesives;

3) The manufacturer's specifications for VOM content for adhesives may be used if the specifications are based on results of tests of the VOM content conducted in accordance with methods specified in subsections (b)(1) and (b)(2) of this Section, as applicable.

c) For afterburners and carbon adsorbers, the methods and procedures of Section 219.105(d) through (f) of this Part shall be used for testing to demonstrate compliance with the requirements of Section 219.901(d) of this Subpart, as follows:

1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part;

2) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part;

3) To determine the VOM concentration of the exhaust stream entering and exiting the emissions control system, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used, except under the following circumstances, in which case Method 25A must be used:

A) The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;

B) The VOM concentration at the inlet of the emissions control system and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon;

C) Due to the high efficiency of the emissions control system, the anticipated VOM concentration at the emissions control system exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

D) During testing, the cleaning equipment shall be operated at representative operating conditions and flow rates.

d) An owner or operator using an emissions control system other than an afterburner or carbon adsorber shall conduct testing to demonstrate compliance with the requirements of Section 219.901(d) as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.901(d)(3).

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.903 Monitoring Requirements

a) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.901(d) of this Subpart shall:

1) Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and

2) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor;

b) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.901(d) of this Subpart shall install, maintain, calibrate, and operate the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.901(d)(3).

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 219.904 Recordkeeping and Reporting Requirements

a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 219.900(a) of this Subpart shall comply with the following:

1) By May 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:

A) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 219.900(a);

B) Calculations that demonstrate that combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from miscellaneous industrial adhesive application operations at the source (including related cleaning activities) and divide this amount by the number of days during that calendar month that miscellaneous industrial adhesive application operations at the source were in operation;

2) Notify the Agency of any record that shows that the combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of those records upon request by the Agency.

b) All sources subject to the requirements of this Subpart shall:

1) By May 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:

A) Identification of each subject adhesive application operation as of the date of certification;

B) A declaration that all subject adhesive application operations are in compliance with the requirements of this Subpart;

C) The limitation with which each subject adhesive application operation will comply (i.e., the VOM content limitation, the daily weighted averaging alternative, or the emissions control system alternative);

D) Initial documentation that each subject adhesive application operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;

E) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;

F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 219.901(f) of this Subpart;

G) A description of each adhesive application operation exempt pursuant to Section 219.900(b)(2) of this Subpart, if any; and

H) The application methods used by each subject adhesive application operation;

2) At least 30 calendar days before changing the method of compliance in accordance with Section 219.901(b), (c), and (d), notify the Agency in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;

3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;

4) Retain all records required by this Section for at least three years and make those records available to the Agency upon request.

c) The owner or operator of an adhesive application operation subject to the limitations of Section 219.901 of this Subpart and complying by means of Section 219.901(b) shall comply with the following:

1) By May 1, 2011, or upon the initial start-up date, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;

2) Collect and record the name, identification number, and VOM content of each adhesive as applied each day by each adhesive application operation complying with Section 219.901(b).

d) The owner or operator of an adhesive application operation subject to the limitations of Section 219.901 of this Subpart and complying by means of Section 219.901(c) shall comply with the following:

1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;

2) Collect and record the following information each day for each adhesive application operation complying by means of Section 219.901(c):

A) The name, identification number, and VOM content of each adhesive as applied each day by each subject adhesive application operation;

B) The daily weighted average VOM content of all adhesives as applied by each subject adhesive application operation.

e) The owner or operator of an adhesive application operation subject to the requirements of Section 219.901 of this Subpart and complying by means of Section 219.901(d) shall:

1) By May 1, 2011, or upon the initial start-up date, whichever is later, and upon initial start-up of a new control device, submit a certification to the Agency that includes the following:

A) The type of afterburner or other approved control device used to comply with the requirements of Section 219.901(d);

B) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 219.901(d); and

C) A declaration that the monitoring equipment required under Section 219.903 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

2) Within 90 days after conducting testing pursuant to Section 219.902 of this Subpart, submit to the Agency a copy of all test results, as well as a certification that includes the following:

A) A declaration that all tests and calculations necessary to demonstrate whether the adhesive application operations are in compliance with Section 219.901(d) have been properly performed;

B) A statement whether the adhesive application operations are or are not in compliance with Section 219.901(d); and

C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 219.903 of this Subpart;

3) Collect and record daily the following information for each adhesive application operation subject to the requirements of Section 219.901(d):

A) Afterburner or other approved control device monitoring data in accordance with Section 219.903 of this Subpart;

B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated application unit; and

C) A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

(Source: Added at 34 Ill. Reg. _____, effective _____)