

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

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

2) Code Citation: 35 Ill. Adm. Code 218

<u>Section Numbers:</u>	<u>Proposed Action:</u>
218.105	Amended
218.106	Amended
218.112	Amended
218.204	Amended
218.205	Amended
218.207	Amended
218.208	Amended
218.210	Amended
218.211	Amended
218.212	Amended
218.219	New
218.890	New
218.891	New
218.892	New
218.894	New
218.900	New
218.901	New
218.902	New
218.903	New
218.904	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

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

The Illinois EPA proposes amending Parts 218 to implement such recommendations for the Chicago nonattainment area. Generally, the proposal amends Subpart F of Part 218 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 218, which set forth new VOM limitations and requirements 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 rulemakings pending on this Part? Yes

<u>Section Numbers:</u>	<u>Proposed Action:</u>	<u>Illinois Register Citation:</u>
218.106	Amend	33 Ill. Reg. 16399; November 20, 2009
218.204	Amend	33 Ill. Reg. 16399; November 20, 2009
218.205	Amend	33 Ill. Reg. 16399; November 20, 2009
218.207	Amend	33 Ill. Reg. 16399; November 20, 2009
218.210	Amend	33 Ill. Reg. 16399; November 20, 2009
218.211	Amend	33 Ill. Reg. 16399; November 20, 2009
218.212	Amend	33 Ill. Reg. 16399; November 20, 2009
218.218	New	33 Ill. Reg. 16399; November 20, 2009
218.106	Amend	34 Ill. Reg. 1791; February 5, 2010
218.181	Amend	34 Ill. Reg. 1791; February 5, 2010
218.187	New	34 Ill. Reg. 1791; February 5, 2010
218.204	Amend	34 Ill. Reg. 1791; February 5, 2010
218.205	Amend	34 Ill. Reg. 1791; February 5, 2010
218.207	Amend	34 Ill. Reg. 1791; February 5, 2010
218.210	Amend	34 Ill. Reg. 1791; February 5, 2010
218.211	Amend	34 Ill. Reg. 1791; February 5, 2010
218.212	Amend	34 Ill. Reg. 1791; February 5, 2010
218.217	Amend	34 Ill. Reg. 1791; February 5, 2010
218.401	Amend	34 Ill. Reg. 1791; February 5, 2010
218.402	Amend	34 Ill. Reg. 1791; February 5, 2010
218.403	Amend	34 Ill. Reg. 1791; February 5, 2010
218.404	Amend	34 Ill. Reg. 1791; February 5, 2010
218.405	Amend	34 Ill. Reg. 1791; February 5, 2010
218.406	Repeal	34 Ill. Reg. 1791; February 5, 2010
218.407	Amend	34 Ill. Reg. 1791; February 5, 2010
218.408	Repeal	34 Ill. Reg. 1791; February 5, 2010
218.409	Amend	34 Ill. Reg. 1791; February 5, 2010
218.411	Amend	34 Ill. Reg. 1791; February 5, 2010

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218.412	New	34 Ill. Reg. 1791; February 5, 2010
218.413	New	34 Ill. Reg. 1791; February 5, 2010
218.415	New	34 Ill. Reg. 1791; February 5, 2010
218.416	New	34 Ill. Reg. 1791; February 5, 2010
218.417	New	34 Ill. Reg. 1791; February 5, 2010

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

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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 218
ORGANIC MATERIAL EMISSION STANDARDS AND
LIMITATIONS FOR THE CHICAGO AREA

SUBPART A: GENERAL PROVISIONS

Section
218.100 Introduction
218.101 Savings Clause
218.102 Abbreviations and Conversion Factors
218.103 Applicability
218.104 Definitions
218.105 Test Methods and Procedures
218.106 Compliance Dates
218.107 Operation of Afterburners
218.108 Exemptions, Variations, and Alternative Means of Control or
Compliance Determinations
218.109 Vapor Pressure of Volatile Organic Liquids
218.110 Vapor Pressure of Organic Material or Solvent
218.111 Vapor Pressure of Volatile Organic Material
218.112 Incorporations by Reference
218.113 Monitoring for Negligibly-Reactive Compounds
218.114 Compliance with Permit Conditions

SUBPART B: ORGANIC EMISSIONS FROM STORAGE
AND LOADING OPERATIONS

Section
218.119 Applicability for VOL
218.120 Control Requirements for Storage Containers of VOL
218.121 Storage Containers of VPL
218.122 Loading Operations
218.123 Petroleum Liquid Storage Tanks
218.124 External Floating Roofs
218.125 Compliance Dates
218.126 Compliance Plan (Repealed)
218.127 Testing VOL Operations
218.128 Monitoring VOL Operations
218.129 Recordkeeping and Reporting for VOL Operations

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section
218.141 Separation Operations
218.142 Pumps and Compressors
218.143 Vapor Blowdown
218.144 Safety Relief Valves

SUBPART E: SOLVENT CLEANING

Section

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218.181 Solvent Cleaning in General
218.182 Cold Cleaning
218.183 Open Top Vapor Degreasing
218.184 Conveyorized Degreasing
218.185 Compliance Schedule (Repealed)
218.186 Test Methods

SUBPART F: COATING OPERATIONS

Section

218.204 Emission Limitations
218.205 Daily-Weighted Average Limitations
218.206 Solids Basis Calculation
218.207 Alternative Emission Limitations
218.208 Exemptions from Emission Limitations
218.209 Exemption from General Rule on Use of Organic Material
218.210 Compliance Schedule
218.211 Recordkeeping and Reporting
218.212 Cross-Line Averaging to Establish Compliance for Coating Lines
218.213 Recordkeeping and Reporting for Cross-Line Averaging Participating
Coating Lines
218.214 Changing Compliance Methods
218.215 Wood Furniture Coating Averaging Approach
218.216 Wood Furniture Coating Add-On Control Use
218.217 Wood Furniture Coating Work Practice Standards
218.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly
Coatings and Miscellaneous Metal and Plastic Parts Coatings

SUBPART G: USE OF ORGANIC MATERIAL

Section

218.301 Use of Organic Material
218.302 Alternative Standard
218.303 Fuel Combustion Emission Units
218.304 Operations with Compliance Program

SUBPART H: PRINTING AND PUBLISHING

Section

218.401 Flexographic and Rotogravure Printing
218.402 Applicability
218.403 Compliance Schedule
218.404 Recordkeeping and Reporting
218.405 Lithographic Printing: Applicability
218.406 Provisions Applying to Heatset Web Offset Lithographic Printing
Prior to March 15, 1996
218.407 Emission Limitations and Control Requirements for Lithographic
Printing Lines On and After March 15, 1996
218.408 Compliance Schedule for Lithographic Printing On and After March 15,
1996
218.409 Testing for Lithographic Printing On and After March 15, 1996
218.410 Monitoring Requirements for Lithographic Printing
218.411 Recordkeeping and Reporting for Lithographic Printing

SUBPART Q: SYNTHETIC ORGANIC CHEMICAL
AND POLYMER MANUFACTURING PLANT

Section
218.421 General Requirements
218.422 Inspection Program Plan for Leaks
218.423 Inspection Program for Leaks
218.424 Repairing Leaks
218.425 Recordkeeping for Leaks
218.426 Report for Leaks
218.427 Alternative Program for Leaks
218.428 Open-Ended Valves
218.429 Standards for Control Devices
218.430 Compliance Date (Repealed)
218.431 Applicability
218.432 Control Requirements
218.433 Performance and Testing Requirements
218.434 Monitoring Requirements
218.435 Recordkeeping and Reporting Requirements
218.436 Compliance Date

SUBPART R: PETROLEUM REFINING AND
RELATED INDUSTRIES; ASPHALT MATERIALS

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218.441 Petroleum Refinery Waste Gas Disposal
218.442 Vacuum Producing Systems
218.443 Wastewater (Oil/Water) Separator
218.444 Process Unit Turnarounds
218.445 Leaks: General Requirements
218.446 Monitoring Program Plan for Leaks
218.447 Monitoring Program for Leaks
218.448 Recordkeeping for Leaks
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218.450 Alternative Program for Leaks
218.451 Sealing Device Requirements
218.452 Compliance Schedule for Leaks
218.453 Compliance Dates (Repealed)

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

Section
218.461 Manufacture of Pneumatic Rubber Tires
218.462 Green Tire Spraying Operations
218.463 Alternative Emission Reduction Systems
218.464 Emission Testing
218.465 Compliance Dates (Repealed)
218.466 Compliance Plan (Repealed)

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section
218.480 Applicability
218.481 Control of Reactors, Distillation Units, Crystallizers, Centrifuges
and Vacuum Dryers
218.482 Control of Air Dryers, Production Equipment Exhaust Systems and
Filters
218.483 Material Storage and Transfer
218.484 In-Process Tanks

218.485 Leaks
218.486 Other Emission Units
218.487 Testing
218.488 Monitoring for Air Pollution Control Equipment
218.489 Recordkeeping for Air Pollution Control Equipment

SUBPART V: BATCH OPERATIONS AND AIR OXIDATION PROCESSES

Section

218.500 Applicability for Batch Operations
218.501 Control Requirements for Batch Operations
218.502 Determination of Uncontrolled Total Annual Mass Emissions and
Average Flow Rate Values for Batch Operations
218.503 Performance and Testing Requirements for Batch Operations
218.504 Monitoring Requirements for Batch Operations
218.505 Reporting and Recordkeeping for Batch Operations
218.506 Compliance Date
218.520 Emission Limitations for Air Oxidation Processes
218.521 Definitions (Repealed)
218.522 Savings Clause
218.523 Compliance
218.524 Determination of Applicability
218.525 Emission Limitations for Air Oxidation Processes
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218.527 Compliance Date (Repealed)

SUBPART W: AGRICULTURE

Section

218.541 Pesticide Exception

SUBPART X: CONSTRUCTION

Section

218.561 Architectural Coatings
218.562 Paving Operations
218.563 Cutback Asphalt

SUBPART Y: GASOLINE DISTRIBUTION

Section

218.581 Bulk Gasoline Plants
218.582 Bulk Gasoline Terminals
218.583 Gasoline Dispensing Operations - Storage Tank Filling Operations
218.584 Gasoline Delivery Vessels
218.585 Gasoline Volatility Standards
218.586 Gasoline Dispensing Operations - Motor Vehicle Fueling Operations

SUBPART Z: DRY CLEANERS

Section

218.601 Perchloroethylene Dry Cleaners (Repealed)
218.602 Applicability (Repealed)
218.603 Leaks (Repealed)
218.604 Compliance Dates (Repealed)
218.605 Compliance Plan (Repealed)
218.606 Exception to Compliance Plan (Repealed)

218.607 Standards for Petroleum Solvent Dry Cleaners
218.608 Operating Practices for Petroleum Solvent Dry Cleaners
218.609 Program for Inspection and Repair of Leaks
218.610 Testing and Monitoring
218.611 Applicability for Petroleum Solvent Dry Cleaners
218.612 Compliance Dates (Repealed)
218.613 Compliance Plan (Repealed)

SUBPART AA: PAINT AND INK MANUFACTURING

Section

218.620 Applicability
218.621 Exemption for Waterbase Material and Heatset Offset Ink
218.623 Permit Conditions (Repealed)
218.624 Open Top Mills, Tanks, Vats or Vessels
218.625 Grinding Mills
218.626 Storage Tanks
218.628 Leaks
218.630 Clean Up
218.636 Compliance Schedule
218.637 Recordkeeping and Reporting

SUBPART BB: POLYSTYRENE PLANTS

Section

218.640 Applicability
218.642 Emissions Limitation at Polystyrene Plants
218.644 Emissions Testing

SUBPART CC: POLYESTER RESIN PRODUCT MANUFACTURING PROCESS

Section

218.660 Applicability
218.666 Control Requirements
218.667 Compliance Schedule
218.668 Testing
218.670 Recordkeeping and Reporting for Exempt Emission Units
218.672 Recordkeeping and Reporting for Subject Emission Units

SUBPART DD: AEROSOL CAN FILLING

Section

218.680 Applicability
218.686 Control Requirements
218.688 Testing
218.690 Recordkeeping and Reporting for Exempt Emission Units
218.692 Recordkeeping and Reporting for Subject Emission Units

SUBPART FF: BAKERY OVENS (REPEALED)

Section

218.720 Applicability (Repealed)
218.722 Control Requirements (Repealed)
218.726 Testing (Repealed)
218.727 Monitoring (Repealed)
218.728 Recordkeeping and Reporting (Repealed)
218.729 Compliance Date (Repealed)

218.730 Certification (Repealed)

SUBPART GG: MARINE TERMINALS

Section

218.760 Applicability
218.762 Control Requirements
218.764 Compliance Certification
218.766 Leaks
218.768 Testing and Monitoring
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SUBPART HH: MOTOR VEHICLE REFINISHING

Section

218.780 Emission Limitations
218.782 Alternative Control Requirements
218.784 Equipment Specifications
218.786 Surface Preparation Materials
218.787 Work Practices
218.788 Testing
218.789 Monitoring and Recordkeeping for Control Devices
218.790 General Recordkeeping and Reporting (Repealed)
218.791 Compliance Date
218.792 Registration
218.875 Applicability of Subpart BB (Renumbered)
218.877 Emissions Limitation at Polystyrene Plants (Renumbered)
218.879 Compliance Date (Repealed)
218.881 Compliance Plan (Repealed)
218.883 Special Requirements for Compliance Plan (Repealed)
218.886 Emissions Testing (Renumbered)

SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS

Section

218.890 Applicability
218.891 Emission Limitations and Control Requirements
218.892 Testing and Monitoring Requirements
218.894 Recordkeeping and Reporting Requirements

SUBPART JJ: MISCELLANEOUS INDUSTRIAL ADHESIVES

Section

218.900 Applicability
218.901 Emission Limitations and Control Requirements
218.902 Testing Requirements
218.903 Monitoring Requirements
218.904 Recordkeeping and Reporting Requirements

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT
MANUFACTURING PROCESSES

Section

218.920 Applicability
218.923 Permit Conditions (Repealed)
218.926 Control Requirements
218.927 Compliance Schedule

218.928 Testing
218.929 Cementable and Dress or Performance Shoe Leather

SUBPART QQ: MISCELLANEOUS FORMULATION
MANUFACTURING PROCESSES

Section
218.940 Applicability
218.943 Permit Conditions (Repealed)
218.946 Control Requirements
218.947 Compliance Schedule
218.948 Testing

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL
MANUFACTURING PROCESSES

Section
218.960 Applicability
218.963 Permit Conditions (Repealed)
218.966 Control Requirements
218.967 Compliance Schedule
218.968 Testing

SUBPART TT: OTHER EMISSION UNITS

Section
218.980 Applicability
218.983 Permit Conditions (Repealed)
218.986 Control Requirements
218.987 Compliance Schedule
218.988 Testing

SUBPART UU: RECORDKEEPING AND REPORTING

Section
218.990 Exempt Emission Units
218.991 Subject Emission Units

218.APPENDIX A+ List of Chemicals Defining Synthetic Organic Chemical and
Polymer Manufacturing
218.APPENDIX B+ VOM Measurement Techniques for Capture Efficiency (Repealed)
218.APPENDIX C+ Reference Methods and Procedures
218.APPENDIX D+ Coefficients for the Total Resource Effectiveness Index (TRE)
Equation
218.APPENDIX E+ List of Affected Marine Terminals
218.APPENDIX G+ TRE Index Measurements for SOCMR Reactors and Distillation
Units
218.APPENDIX H+ Baseline VOM Content Limitations for Subpart F, Section
218.212 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 at R91-7 at 15 Ill. Reg. 12231, effective August 16, 1991;
amended in R91-24 at 16 Ill. Reg. 13564, effective August 24, 1992; amended in
R91-28 and R91-30 at 16 Ill. Reg. 13864, effective August 24, 1992; amended in
R93-9 at 17 Ill. Reg. 16636, effective September 27, 1993; amended in R93-14 at

18 Ill. Reg. ~~at~~-1945, effective January 24, 1994; amended in R94-12 at 18 Ill. Reg. 14973, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16392, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16950, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6848, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7359, effective May 22, 1995; amended in R96-13 at 20 Ill. Reg. 14428, effective October 17, 1996; amended in R97-24 at 21 Ill. Reg. 7708, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3556, effective February 2, 1998; amended in R98-16 at 22 Ill. Reg. 14282, effective July 16, 1998; amended in R02-20 at 27 Ill. Reg. 7283, effective April 8, 2003; amended in R04-12/20 at 30 Ill. Reg. 9684, effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. 7086, effective April 30, 2007; amended in R08-~~088~~ at 32 Ill. Reg. 14874, effective August 26, 2008; amended in R10-20 at 34 Ill. Reg. _____ effective _____.

SUBPART A: GENERAL PROVISIONS

Section 218.105 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 218.112 of this Part.

B) ASTM E 300-86 standard practice for sampling industrial chemicals. This practice is incorporated by reference in Section 218.112 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 218.112 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 218.112 of this Part, 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 218.112 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 218.112 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 218.112 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 218.112 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 218.112 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 218.112 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 218.112 of this Part.

viii) ASTM E 180-85: Standard practice for determining the precision data of ASTM methods for analysis of and testing of industrial chemicals. This practice is incorporated by reference in Section 218.112 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 218.112 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 218.112 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 218.112 of this Part.

C) "A Guide for Graphic Arts Calculations", August 1988, EPA-340/1-88-003, incorporated by reference in Section 218.112 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 218.112 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 218.112 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 218.204(a)(1)(B) ~~(2)~~, ~~or 218.204(a)(1)(C) (3)~~, ~~218.204(a)(2)(B)~~, ~~218.204(a)(2)(C)~~, or ~~218.204(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 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

218.112 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 218.112 of this Part, with the following additional restrictions:

i) Unless otherwise specified in subsection (c)(1)(B)(ii)-~~below~~, the 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 at Section 218.112 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)(iii) or subsection (c)(1)(B)(iv) ~~below~~ must be met.

ii) The owner or operator of the source engaged in printing located at 350 E. 22nd Street, Chicago, Illinois, 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 14-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 13 operating days to the total solvent usage for the same 14-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 218.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 17 days following each 14-day period. In addition, the criteria in subsection (c)(1)(B)(iii) or subsection (c)(1)(B)(iv) ~~below~~ must be met.

iii) 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

iv) 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 at Section 218.112 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 218.108(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 218.112 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 = Mass of VOM captured and delivered to control device using a TTE; 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 218.112 of this Part, is used to obtain Gw. Method 204D in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 218.112 of this Part ~~of this Part~~, is used to obtain 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 218.112 of this Part. The capture efficiency equation to be used for this protocol is:

$$CE = (L - Fw) / L$$

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 ~~Part~~ 51, incorporated by reference in Section 218.112 of this Part, is used to obtain L. Method 204 D in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 218.112 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 ~~Part~~ 51, incorporated by reference in Section 218.112 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:

$$CE = G / (G + FB)$$

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 218.112 of this Part is used to obtain G. Method 204E in Appendix M of 40 CFR ~~Part~~-51, incorporated by reference in Section 218.112 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 218.112 of this Part, and in which "FB" and "L" 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:

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

where:

CE = Capture efficiency, decimal fraction; 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 218.112 of this Part is used to obtain L. Method 204E in Appendix M of 40 CFR ~~Part~~-51, incorporated by reference in Section 218.112 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 218.112 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 218.112 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 218.112 of this Part. The results of capture efficiency calculations (G/L) must satisfy the DQO or LCL statistical analysis protocol as described in Section 3 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 218.112 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 218.108(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 218.105(c)(2)(A), (B), (C) or (D), the DQO protocol of Section 218.105(c)(2)(E), or an alternative protocol pursuant to Section 218.108(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 218.112 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 60 days ~~of~~after the test date. A copy of the results must be kept on file with the source for a period of 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 or observe testing.

D) Sources utilizing a PTE must demonstrate that this enclosure meets the requirements given in Method 204 in Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in Section 218.112 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 of 40 CFR ~~Part~~ 51, incorporated by reference in Section 218.112 of this Part, for a TTE during 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 218.112 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 218 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 in degrees Celsius or ± 0.50 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 demonstrated that the operation was in compliance.

3) An owner or operator that uses a carbon adsorber to comply with Section 218.401 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 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 218.112 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 218.207(c), (d), (e), (f), or (g) of this Part by the alternative

in Section 218.207(b)(2) of this Part and meet the criteria allowing them to comply with Section 218.207 of this Part instead of Section 218.204 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:

$$E = \left(\frac{VOMa - VOM1}{VOMa} \right) \times 100$$

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) of this Section in units of kg VOM/l (lb VOM/gal) of coating solids as applied; ~~VOM1-VOM1~~ = The VOM emission limit specified in Section 218.204 or 218.205 of this Part in units of kg VOM/l (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 218.112 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 218.112 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 minutes, 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 218.112 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 218.112 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 218.112 of this Part, shall be used for gas analysis.

5) 40 CFR ~~Part~~ 60, Appendix A, Method 4, incorporated by reference in Section 218.112 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 218.112 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 218.112 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 218.112 of this Part.

B) "Portable Instrument User's Manual for Monitoring VOC Sources", EPA-340/1-86-015, incorporated by reference in Section 218.112 of this Part.

C) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP", EPA-450/3-88-010, incorporated by reference in Section 218.112 of this Part.

D) "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008, incorporated by reference in Section 218.112 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 218.112 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 218.112 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 218.112 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 218.112 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 218.106 Compliance Dates

a) Except as otherwise provided in this Section or as otherwise provided in a specific Subpart of this Part, compliance with the requirements of all rules is required by July 1, 1991, or September 1, 1991, for all sources located in Cook,

DuPage, Kane, Lake, McHenry, or Will Counties, consistent with the appropriate provisions of Section 218.103 of this Subpart.

b) Except as otherwise provided in this Section or as otherwise provided in a specific Subpart of this Part, compliance with the requirements of this Part is required by November 15, 1993, for all sources located in Aux Sable Township or Goose Lake Township in Grundy County, or in Oswego Township in Kendall County.

c) All emission units which meet the applicability requirements of Sections 218.402(a)(2), 218.611(b), 218.620(b), 218.660(a), 218.680(a), 218.920(b), 218.940(b), 218.960(b) or 218.980(b) of this Part, including emission units at sources which are excluded from the applicability criteria of Sections 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a), or 218.980(a) of this Part by virtue of permit conditions or other enforceable means, must comply with the requirements of Subparts H, Z, AA, CC, DD, PP, QQ, RR or TT of this Part, respectively, by March 15, 1995. Any owner or operator of an emission unit which has already met the applicability requirements of Sections 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a) 218.980(a) of this Part on or by the effective date of this subsection is required to comply with all compliance dates or schedules found in Sections 218.106(a) or 218.106(b), as applicable.

d) Any owner or operator of a source with an emission unit subject to the requirements of Section 218.204(m)(2) or (m)(3) of this Part shall comply with those requirements by March 25, 1995.

e) Any owner or operator of a source subject to the requirements of Section 218.204(a)(2) or 218.204(q) of this Part shall comply with the applicable requirements in ~~such Section(s)~~those Sections, as well as all applicable requirements in Sections 218.205 through 218.214 and 218.219, by May 1, 2011.

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

Section 218.112 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, 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- 168-67 (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)

26) ASTM D 2099-00

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 60 (July 1, 1991) and 40 CFR 60, Appendix A, Method 24 (57 FR 30654, July 10, 1992).

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

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

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

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

i) 40 CFR 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/-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 VOC 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 VOC 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) South Coast Air Quality Management District (SCAQMD), Applied Science & Technology Division, Laboratory Services Branch, SCAQMD Method 309-91, Determination of Static Volatile Emissions (February 1993).

z) South Coast Air Quality Management District (SCAQMD), Applied Science & Technology Division, Laboratory Services Branch, SCAQMD Method 312-91, Determination of Percent Monomer in Polyester Resins (April 1996).

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

bb) 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.

cc) "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.

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

ee) 46 CFR Subchapter Q (2007).

ff) 46 CFR Subchapter T (2008).

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

SUBPART F: COATING OPERATIONS

Section 218.204 Emission Limitations

Except as provided in Sections 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216 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 218.204(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 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(c) of this Subpart except where noted. (Note: The equation presented in Section 218.206 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	
	Coating kg/l/gal		
	1) Prior to May 1, 2011:	A±)	Prime Coat
<u>coat</u> 0.14	(1.2)		0.14*
(1.2)*			
	B2) B) Primer surface coat	1.81	(15.1)
		1.81*	(15.1)*

~~(Note BOARD NOTE: The primer surface coat 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 primer surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(A) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the primer surfacer limitation.)~~

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 218.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the primer surfacer 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 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 218.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 of this Part does not apply to the topcoat limitation.)~~

		kg/l	lb/gal	<u>of this</u>
<u>Part does not apply to the topcoat limitation.</u>	D4)		Final repair coat	
<u>coat</u> kg/l/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. ~~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~~ applied) When solids turnover ratio (RT) is greater than or equal to ~~0.160~~ - ~~0.084~~ - ~~0.160~~ 0.084 (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~~ 0.160 0.084 x
~~3500.160-RT~~ ~~x~~ ~~(0.084 x 3500.160-RT x 8.34)~~

B) ~~Primer-surfacer operations~~
~~kg VOM/l~~ ~~lb operations~~ kg VOM/l coating solids deposited lb VOM/gal coating solids
~~solids~~ ~~deposited~~ ~~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 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the primer surfacer limitation. C) ~~Topcoat operations~~ ~~kg VOM/l~~ ~~lb operations~~ kg VOM/l coating solids deposited lb VOM/gal coating solids

~~coating solids~~ ~~deposited~~ ~~deposited~~ i) deposited deposited 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 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the topcoat limitation. D) ~~Combined primer-surfacer and topcoat operations~~ ~~kg VOM/l~~ ~~lb operations~~ kg VOM/l coating solids deposited lb VOM/gal coating solids

~~coating solids~~ ~~deposited~~ ~~deposited~~ i) deposited deposited 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 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the combined primer-surfacer and topcoat limitation.

E) Final repair coat operations

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

~~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.

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

Where:

where:

VOM_{tot} = 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_{cc} = 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 218.112 of this Part.

~~kg/l~~ ~~lb/gal~~

i) kg/llb/gal Glass bonding primer	0.90	(7.51)
ii) Adhesive	0.25	(2.09)
0.65 (5.42)	iii) Cavity wax	0.65
v) Deadener	0.65	(5.42)
iv) Trunk sealer	0.65	(5.42)
Gasket/gasket sealing material	0.20 (1.67)	
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)
b) Can Coating	kg/llb/gal	
1) Sheet basecoat and overvarnish overvarnish A) Sheet basecoat	0.34 (2.8)	0.26 * (2.2) * B) Overvarnish 0.34 (2.8)
0.34 (2.8)	0.25 * (2.1) * 3) Interior body spray coat coat A) Two piece	0.51 (4.2)
0.44 * (3.7) * B) Three piece	0.51 (4.2)	0.51 * (4.2) * 4) Exterior end coat
0.51 (4.2)	0.51 * (4.2) * 5) Side seam spray coat	0.66 (5.5)
0.66 * (5.5) * 6) End sealing compound	0.44 (3.7)	0.44 * (3.7) *
kg/llb/gal c) Paper Coating Coating kg/llb/gal	0.35 (2.9)	0.28 * (2.3) * (Note <u>BOARD NOTE</u> : 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 218.401 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/gal d) Coil Coating Coating kg/llb/gal	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
l) 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) * ~~(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 ± 1 (1 quart) in any one rolling eight-hour period.)~~ kg/llb/gal i) Magnet Wire Coating Coating kg/llb/gal 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 (4.3) 0.52 * (4.3) * 2) Extreme performance coating A coating A) Air dried 0.42 (3.5) 0.42 * (3.5) * B) Baked 0.42 (3.5) 0.40 * (3.3) * 3) Steel pail and drum interior coating 0.52 (4.3) 0.52 * (4.3) * 4) All other coatings A coatings A) Air Dried dried 0.42 (3.5) 0.40 * (3.3) * B) Baked 0.36 (3.0) 0.34 * (2.8) * 5) Marine engine coating A coating A) Air Dried dried 0.42 (3.5) 0.42 * (3.5) * B) Baked i Baked i) Primer/Topcoat 0.42 (3.5) 0.42 * (3.5) * i) Corrosion resistant basecoat 0.42 (3.5) 0.28 * (2.3) * C) Clear Coating 0.52 (4.3) 0.52 * (4.3) * 6) Metallic Coating A Coating A) Air Dried 0.42 (3.5) 0.42 * (3.5) * B) Baked 0.36 (3.0) 0.36 (3.0) *

7) Definitions

A) For purposes of subsection 218.204(j)(5) of this Section, the following terms are defined:

i) "Corrosion resistant basecoat" means, for purposes of subsection 218.204(j)(5)(B)(ii) of this Section, 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.

ii) "Electrodeposition process" means, for purposes of subsection 218.204(j)(5) of this Section, 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.

iii) "Marine engine coating" means, for purposes of subsection 218.204(j)(5) of this Section, any extreme performance protective, decorative or functional coating applied to an engine that is used to propel watercraft.

B) For purposes of subsection 218.204(j)(6) 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 218.204(q) shall apply to this category of coating.)~~

k) Heavy Off-Highway Vehicle Products Coating kg/llb/gal 1) Extreme performance prime coat 0.42 (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 Coating 1) Limitations before March 15, 1998: kg/llb/gal A 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) ~~(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 ± 1 (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 (1)(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 218.215 of this Subpart for use of an averaging approach;

D) Achieve a reduction in emissions equivalent to the requirements of subsection (1)(2)(A) or (B) of this Section, as calculated using Section 218.216 of this Subpart; or

E) Use a combination of the methods specified in subsections (1)(2)(A) through (D) of this Section.

3) Other wood furniture coating limitations on and after March 15, 1998:

kg/1lb/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 (1)(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 (1)(2) or (3) of this Section shall comply with the requirements of Section 218.217 of this Subpart.

C) Any source subject to the limitations of subsection (1)(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 (1)(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.

m) Existing Diesel-Electric Locomotive Coating Lines in Cook County kg/lb/gal) Extreme performance prime coat 0.42(3.5) 0.42*(3.5)*2) Extreme performance top-coat (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) High-temperature aluminum coating 0.72(6.0) 0.72*(6.0)*5) All other coatings 0.36(3.0) 0.36*(3.0)*

n) Prior to May 1, 2011: Plastic Parts Coating:

Automotive/Transportation kg/lb/gal) Interiors

A) Baked Interiors A) Baked Color coat 0.49*(4.1)*ii) Primer 0.46*(3.8)* B) Air Dried Dried Color coat 0.38*(3.2)*ii) Primer 0.42*(3.5)*2) Exteriors (flexible and non-flexible) A) Baked Baked 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 Dried 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 metalizing 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 metalizing 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)* (Note BOARD NOTE: On and after May 1, 2011, the limitations in Section 218.204(q) shall apply to this category of coating.)

o) Prior to May 1, 2011: Plastic Parts Coating: Business

Machine kg/lb/gal) 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) Coatings A) Soft coat 0.52*(4.3)* B) Plating resist 0.71*(5.9)* C) Plating sensitizer 0.85*(7.1)* (Note BOARD NOTE: On and after May 1, 2011, the limitations in Section 218.204(q) shall apply to this category of coating.) 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 218.219, however, shall apply to such these coatings unless specifically excluded in Section 218.219.

kg/l-	kg/l	
(lb/gal)		
coatings		
kg/l		
(lb/gal) -	(lb/gal)	
solids		
coatings	solids	A) General one component coating
coating	Air Dried:	0.34 0.54
0.34 0.54 (2.8)	(4.52) ii) Baked:	0.28 0.28
0.40	0.28 0.40 (2.3)	(3.35)
B)	General multi-component coating	

0.34	0.54		
<u>0.340.54</u> (2.8)	(4.52) ii) Baked:—	0.28	
0.40	<u>0.280.40</u> (2.3)		
(3.35)C) Camouflage coating+	0.42	0.80	
<u>0.420.80</u> (3.5)	(6.67)		
D) Electric-insulating varnish:—	0.42	0.80	
<u>0.420.80</u> (3.5)	(6.67)		
E) Etching filler:—	0.42	0.80	
<u>0.420.80</u> (3.5)	(6.67)		
0.42	F) Extreme high-gloss coating		
<u>0.420.80</u> (3.5)	Air Dried:—	0.42	0.80
0.61	(6.67) ii) Baked:—	0.36	0.36
	<u>0.360.61</u> (3.0)		(5.06)
G) Extreme performance coating <u>coating</u>	Air Dried:—		
0.42	<u>0.420.80</u> (3.5)		
(6.67) ii) Baked:—	0.36	0.61	
<u>0.360.61</u> (3.0)	(5.06)	H) Heat-resistant	
coating <u>0.66*(5.5)*i</u>	Air Dried:—	0.42	0.80
<u>0.420.80</u> (3.5)	(6.67) ii) Baked:—	0.36	0.36
0.61	<u>0.360.61</u> (3.0)		(5.06)
I) High performance architectural coating <u>coating</u>	0.74	4.56	
(38.0)J) High temperature coating+	0.42	0.80	
<u>0.420.80</u> (3.5)	(6.67) K) Metallic coating <u>coating</u>	Air	
Dried:—	0.42	<u>0.420.80</u> (3.5)	
(6.67) ii) Baked:—	0.36	0.61	
<u>0.360.61</u> (3.0)	(5.06)	L) Military	
specification coating <u>coating</u>			
0.34	0.54		
<u>0.340.54</u> (2.8)	(4.52) ii) Baked:—	0.28	
0.40	<u>0.280.40</u> (2.3)		
(3.35)M) Mold-seal coating+	0.42	0.80	
<u>0.420.80</u> (3.5)	(6.67) N) Pan backing coating+		
0.42	0.80	<u>0.420.80</u> (3.5)	(6.67)
O) Prefabricated architectural			
coating: multi- component <u>component</u>			
0.42	0.80		
<u>0.420.80</u> (3.5)	Air Dried:—	0.42	0.80
0.40	(6.67) ii) Baked:—	0.28	
	<u>0.280.40</u> (2.3)		(3.35)
P) Prefabricated architectural <u>architectural</u>			
coating: one-component <u>coating: one-</u>			
component <u>component</u>	Air Dried:—	0.42	0.80
<u>0.420.80</u> (3.5)	(6.67) ii) Baked:—	0.28	
0.40	<u>0.280.40</u> (2.3)		
(3.35)Q) Pretreatment coating:—	0.42	0.80	
<u>0.420.80</u> (3.5)	(6.67)		
touch-up		R) Repair coats and	
coatings			
0.42	0.80		
<u>0.420.80</u> (3.5)	Air Dried:—	<u>0.42</u>	(3.5)
Baked:—	0.36	(3.01) (3.01)	ii)
0.42	0.80	<u>0.420.80</u> (3.5)	S) Silicone release coating+
0.42	0.80	<u>0.420.80</u> (3.5)	(6.67)
T) Solar-absorbent coating <u>coating</u>	Air Dried:—		
0.42	0.80	<u>0.420.80</u> (3.5)	(6.67)
ii) Baked:—	0.36	0.61	
<u>0.360.61</u> (3.0)	(5.06)	U) Vacuum-metalizing coating+	
0.42	0.80	<u>0.420.80</u> (3.5)	(6.67)
V) Drum coating, new, exterior:—	0.34	0.54	
<u>0.340.54</u> (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: ~~0.42~~
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 ~~coatings~~ ~~coatings~~ i) Air Dried: ~~0.42~~
~~0.80~~ ~~dried~~ 0.420.80(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~~ coatings i) ~~Air~~
dried 0.400.73(3.3) (5.98) ii) Baked: ~~0.34~~
~~0.54~~ 0.340.54(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 ~~subsections~~ 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 218.219, however, shall apply to such coatings unless specifically excluded in Section 218.219.

~~kg/l~~ ~~kg/l~~
kg/l (lb/gal) coatings kg/l
 (lb/gal) - ~~(lb/gal)~~
solids A) General one component: ~~0.42~~
~~0.28~~ ~~0.40~~ ~~solids~~ ~~0.42~~ ~~0.80~~
coating 0.280.40(2.3) (3.35) B) General multi component: ~~0.42~~
~~0.42~~ ~~0.80~~ 0.420.80(3.5) (6.67) C)
 Electric dissipating coatings ~~0.80~~
~~0.96~~ 0.808.96 and shock-free coatings: ~~0.80~~ (6.7) (74.7) D)
 Extreme performance ~~0.42~~ ~~0.80~~
 (2-pack coatings): ~~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~~: ~~0.28~~
~~coating~~ i) 1-pack coatings: ~~0.54~~
0.280.54(2.3) (4.52) ii) 2-pack coatings: ~~0.54~~

~~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) coatings/kg/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~~ partsi) Color coat+ ~~0.38~~
~~0.67~~ 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) SpecialtySpecialtyi) 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 218.219, however, shall apply to such coatings unless specifically excluded in Section 218.219.

kg/l		kg/l			
<u>kg/l</u> (lb/gal)	<u>coatings</u>	<u>kg/l</u> (lb/gal)	<u>solids</u>		
<u>solids</u> A)					
	coatings		solids		
	A) Primers:---			0.14	0.17
<u>0.140.17</u> (1.2)		(1.4) B)	Topcoat:---		0.35
	0.57-	<u>0.350.57</u> (2.9)		(4.80)C)	Color coat
(texture coat):+		0.28	0.40-	<u>0.280.40</u> (2.3)	
(4.80)		D) Color coat (non-texture coat):-		0.28	
0.40				<u>0.280.40</u> (2.3)	
(4.80)					
	E) Texture coats other than color				texture coats:+
	0.35		0.57-		
		(2.9)	<u>0.57</u>		
(4.80)F) EMI/RFI shielding coatings:---			0.48		1.05-
<u>0.481.05</u> (4.0)		(8.76)G) Fog coat:---			0.26
	0.38		<u>0.260.38</u> (2.2)		
(3.14)H) Touchup and repair:---			0.35		0.57-
<u>0.350.57</u> (2.9)		(4.80)I) Specialty coatings <u>coatings</u> i) Soft	1.24-	<u>0.521.24</u> (4.3)	
coat:---					
(10.34) ii) Plating resist:---			0.52	0.71	3.64
<u>0.713.64</u> (5.9)		(29.7) iii) Plating sensitizer:---			
0.85	(23.4)	(7.1)		(201.0)	
	5) Pleasure Craft Surface Coatings				
kg/l		kg/l			

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

kg/l	<u>coatings</u> A	<u>coatings</u> 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 218.205 Daily-Weighted Average Limitations

No owner or operator of a coating line subject to the limitations of Section 218.204 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), (h) ~~or (i)~~, or (j) of this Section (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(d) of this Subpart:

a) No owner or operator of a coating line subject to only one of the limitations from among Section 218.204(a)(1)(A), (a)(1)(D) ~~(4)~~, (a)(2)(A), (a)(2)(E), (a)(2)(F), (c), (d), (e) ~~(f)~~, or (i) ~~or (j)~~ 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~~ owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of Section 218.204(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 218.204(j) 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~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(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 218.204(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 218.204(b) of this Subpart unless all of the following requirements are met:

1) An alternative daily emission limitation shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, 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 218.204(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 218.204(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 218.204(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 218.204(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 218.204(l)(1) or (1)(3) of this Subpart shall apply coatings to wood furniture on the subject coating line unless the requirements of subsection (e)(1) or subsection (e)(2) of this Section, in addition to the requirements specified in the note to Section 218.204(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 218.204(l)(1)

or (1)(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 ~~7.1~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(1)(1) or (1)(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) No owner or operator of an existing diesel-electric locomotive coating line in Cook County, subject to the limitations of Section 218.204(m) of this Subpart shall apply coatings to diesel-electric locomotives 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 218.204(m) 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 ~~7.1~~ or

2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(m) 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.

g) Prior to May 1, 2011, ~~no~~no owner or operator of a plastic parts coating line, subject to the limitations of Section 218.204(n) or (o) of this Subpart shall apply coatings to business machine or automotive/transportation plastic parts 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 218.204(n) or (o) 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 218.204(n) or (o) 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.

h) No owner or operator of a metal furniture coating line, subject to the limitations of Section 218.204(g) 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 218.204(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 218.204(g) 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.

i) No owner or operator of a large appliance coating line, subject to the limitations of Section 218.204(h) 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 applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(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 218.204(h) 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.

j) 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 218.204(q) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (j)(1) or (j)(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 218.204(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 218.204(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 _____)

a) Any owner or operator of a coating line subject to Section 218.204 of this Subpart, except coating lines subject to Section 218.204(q)(6), may comply with this Section, rather than with Section 218.204 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 ~~subsections~~subsection (c), (d), (e), (f), (g), (h), (i), (j), ~~or~~ (k), or (l) 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 218.105 of this Part and the recordkeeping and reporting requirements specified in Section 218.211(e) of this Subpart; and the control device is equipped with the applicable monitoring equipment specified in Section 218.105(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), or (l) of this Section may be used as an alternative to compliance with Section 218.204 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 218.204 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 218.204 of this Subpart;

B) Unless complying with an emission limitation in Section 218.204 that is already expressed in terms of weight of VOM per volume of solids, ~~Calculate~~calculate "S" according to the equation in Section 218.206 of this Subpart;

C) Calculate the overall efficiency required according to Section 218.105(e) of this Part. For the purposes of calculating this value, according to the equation in Section 218.105(e)(2) of this Part, ~~VOM1~~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 218.204 of this Subpart that is already expressed in terms of weight of VOM per volume of solids, VOM1 is equal to ~~such that~~that emission limitation.

c) No owner or operator of a coating line subject to only one of the emission limitations from among Section 218.204(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 218.204(a)(1)(B) ~~(2)~~, ~~or 218.204(a)(1)(C) ~~(3)~~~~, (a)(2)(B), (a)(2)(C), or (a)(2)(D) 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 218.105(b)(1)(A) or (b)(1)(B), 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 218.204(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 ~~f(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 218.204(k) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 ~~f(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 an existing diesel-electric locomotive coating line in Cook County ~~which that~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(m) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 ~~f(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.

g) 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 218.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/1 ~~f(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 218.204(l) of this Subpart must also be met.

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

1) An alternative daily emission limitation shall be determined for the can coating operation, i.e. E_d for all of the can coating lines at the source, according to Section 218.205(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 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); ~~and F_i 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.

i) 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 218.204(n) or (o) 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.

j) 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 218.204(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.

k) 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 218.204(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.

l) 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 _____)

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 218.204 (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 218.204 (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, ~~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 218.105 (a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211 (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 218.204 of this Subpart. Once a category of coating lines at a source is subject to the limitations in Section 218.204 of this Subpart the coating lines are always subject to the limitations in Section 218.204 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 218.204 (1) of this Subpart), H (excluding Section 218.405 of this Part), Q, R, S, T (excluding Section 218.486 of this Part), V, X, Y, 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 218.204 (1) of this Subpart), H, Q, R, S, T (excluding Section 218.486 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, SOCOMI 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 218.204 (1) of this Subpart shall continue to apply to any wood furniture coating line which was ever subject to the limitations of Section 218.204 (1) 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 218.204(b), (d), (f), (g), and (i), ~~(j), (n) and (o)~~ of this Subpart; provided that the source-wide volume of such 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.

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 218.204(j), (n), and (o) 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~~12 month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (e) of this Section.

~~(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 218.204(b), (d), (f), (g), (i), (j), (n) and (o) of this Subpart because of the provisions of Section 218.208 (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 (ede) (1) and (ede) (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 (1 quart) per eight-hour period or exceeds 209 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 218.208, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

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

Section 218.210 Compliance Schedule

Every owner or operator of a coating line (of a type included within Section 218.204 of this Subpart) shall comply with the requirements of Section 218.204, 218.205, 218.207 or 218.208 and Section 218.211 or Sections 218.212 and 218.213 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 218.204 of this Subpart because of the criteria in Section 218.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.211(b) of this Subpart.
- b) No owner or operator of a coating line complying by means of Section 218.204 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.204 and 218.211(c) of this Subpart.
- c) No owner or operator of a coating line complying by means of Section 218.205 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.205 and 218.211(d) of this Subpart.
- d) No owner or operator of a coating line complying by means of Section 218.207 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.207 and 218.211(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 218.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 218.204, 218.205 or

218.207 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 218.204, or the alternative control options in Section 218.205 or 218.207 and the requirements of Section 218.211.

f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 218.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 218.212 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 218.212 and 218.213 of this Subpart.

g) No owner or operator of a coating line subject to the emission limitations in Section 218.204(a)(2) or ~~218.204~~(q) of this Subpart, or subject to the limitations in Section 218.219 of this Subpart, shall operate ~~said~~the coating line on or after a date consistent with Section 218.106(e) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.204(a)(2) or ~~218.204~~(q), if applicable, or the alternative control options in Section 218.205 or 218.207, and all applicable requirements in Sections 218.211 and 218.219 of this Subpart.

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

Section 218.211 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 218.105 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 218.204 of this Subpart because of Section 218.208(a) or (b) of this Subpart shall comply with the following:

1) For sources exempt under Section 218.208(a) of this Subpart, by a date consistent with Section 218.106 of this Part, 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 coating line or group of coating lines is exempt under the provisions of Section 218.208(a) of this Subpart. Such certification shall include:

A) A declaration that the coating line or group of coating lines is exempt from the limitations of Section 218.204 of this Subpart because of Section 218.208(a) of this Subpart; and

B) Calculations ~~which~~that demonstrate that the combined VOM emissions from the coating lines or group of coating lines 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 218.104 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 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); ~~and B_i and B_i~~ = 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 218.208(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 218.208(b) of this Subpart. Such certification shall include:

A) A declaration that the source is exempt from the limitations of Section 218.204(1) of this Subpart because of Section 218.208(b) of this Subpart; and

B) Calculations which that demonstrate that the source meets the criteria for exemption because of Section 218.208(b) of this Subpart.

3) For sources exempt under Section 218.208(a) of this Subpart, on and after a date consistent with Section 218.106 of this Part, 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 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 218.208(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 218.106 of this Part, the owner or operator of a coating line or group of coating lines exempted from the limitations of Section 218.204 of this Subpart because of Section 218.208(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 218.204(1) of this Subpart because of Section 218.208(b) of this Subpart shall notify the Agency if the source's VOM emissions exceed the limitations of Section 218.208(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 218.204 of this Subpart other than Section 218.204(a)(1)(B) ~~(2)~~, ~~or~~ (a)(1)(C) ~~(3)~~, (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and complying by means of Section 218.204 of this Subpart shall comply with the following:

1) By a date consistent with Section 218.106 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 218.205, Section 218.207, Section 218.215, or Section 218.216 of this Subpart to Section 218.204 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 218.204 of this Subpart on and after a date consistent with Section 218.106 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 218.204(1)(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 218.204(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 218.204(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 218.204(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 218.106 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 218.204(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 limitations of Section 218.204(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; ~~and~~

E) For coating lines subject to the limitations of Section 218.204(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 218.204(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 218.204(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 218.106 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 218.204 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the ~~occurrence~~occurrence of the violation.

B) At least 30 calendar days before changing the method of compliance from Section 218.204 of this Subpart to Section 218.205 or Section 218.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d)(1) or (e)(1) of this Section ~~below~~, respectively. Upon changing the method of compliance from Section 218.204 of this Subpart to Section 218.205 of this Subpart or Section 218.207 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 218.204 of this Subpart and complying by means of Section 218.205 of this Subpart shall comply with the following:

1) By a date consistent with Section 218.106 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 218.204 or Section 218.207 of this Subpart to Section 218.205 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 218.205 of this Subpart on and after a date consistent with Section 218.106 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 218.205 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 218.204(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 218.204(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 218.204(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.

~~GEG~~) 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.

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

~~IGI~~) 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 218.106 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 218.204(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 218.204(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 218.204(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.

FDE) The daily-weighted average VOM content of all coatings as applied on each coating line as defined in Section 218.104 of this Part.

3) On and after a date consistent with Section 218.106 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 218.205 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 218.205 of this Subpart to Section 218.204 or Section 218.207 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 218.205 to Section 218.204 or Section 218.207 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 218.207 of this Subpart and complying by means of Section 218.207(c), (d), (e), (f), (g), ~~(h)~~, or (l) of this Subpart shall comply with the following:

1) By a date consistent with Section 218.106 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 218.204 or Section 218.205 of this Subpart to Section 218.207 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 218.207 of this Subpart on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date.

2) On and after a date consistent with Section 218.106 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 218.207(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 218.106 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 218.207 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 218.207 of this Subpart to Section 218.204 or Section 218.205 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~~Subpart from Section 218.207 of this Subpart to Section 218.204 or Section 218.205 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 218.204(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 218.106 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 218.204 of this Subpart on and after a date consistent with Section 218.106 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 218.204(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~~of this Section.

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

2) On and after a date consistent with Section 218.106 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 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 218.204(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 218.106 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 218.204(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 218.106 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 218.204(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 218.106 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 218.219 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 218.219 of this Subpart;

B) For sources subject to Section 218.219(a) (6), the work practices plan specified in ~~such that~~ Section;

C) For sources subject to Section 218.219(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 218.219 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 218.212 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 218.204 of this Subpart, except coating lines subject to the limitations in Section 218.204(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 218.204, 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 218.204 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 218.212, 218.213, or 218.214 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 218.204 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 l/day (gal/day) of coating ~~3~~ (minus water and any compounds which are specifically exempted from the definition of VOM); ~~and C_i and~~ 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 all participating coating lines at the source on a daily basis as follows:

$$A_d = A_l + A_p$$

where:

~~A_d~~, ~~A_l~~ and ~~A_p~~ are defined in subsections (d)(2)(A) and (d)(2)(B) of this Section.

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:

$$A_l = \sum_{i=1}^n \frac{V_i L_i (D_i - C_i)}{D_i - L_i}$$

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 in the participating coating lines; ~~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); ~~D_i~~ = The density of VOM in each coating applied. For the purposes of calculating ~~A_l~~, the density is 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM); ~~V_i~~ = Volume of each 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); ~~and L_i and Li~~ = The VOM emission limitation for each coating applied, as specified in Section 218.204 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).

B) The portion of the alternative daily emission limitation for coating operations at a source using powdered coating (~~A_p~~) shall be determined for all such participating powder coating lines at the source 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/l VOM (7.36 lbs VOM/gal VOM); ~~V_j~~ = Volume of each powder coating consumed for the day in units of l (gal) of coating; ~~and L_j~~ = The VOM emission limitation for each coating applied, as specified in Section 218.204 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); ~~and K_h 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 218.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid and powder. Test methods and recordkeeping requirements shall be approved by the Agency and USEPA and shall be 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 218.219 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 218.204(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 218.204(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 218.112 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 218.204(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 (~~eq~~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 (~~eq~~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 218.207(1)(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 218.890 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 218.894(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 218.894(a) of this Subpart.

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

Section ~~218.891~~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:

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.
 = 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 <u>(resin_i)</u> Atomized spray+		28	
(i) Nonatomized		<u>(i) Non-atomized</u> 35	
B) Pigmented gel coat+		33	C) Clear
gel coat+	48		D) Tooling resin
<u>(resin_i)</u> Atomized+		30	(i)
Nonatomized		<u>(i) Non-atomized</u> 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:~~

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 ~~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-; MPR = 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 ~~such~~ the 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.

~~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 PV_i 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: $0.014 \times (\text{Resin VOM}\%)^{2.425}$

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 ~~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 218.892 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 218.891(b) and (c) of this

Subpart using Equation 5 ~~below~~ subsection (e)(3). If complying pursuant to Section 218.891(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 218.891(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 218.891(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 218.112 of this Part, or for use in the construction of small passenger vessels regulated by 40 CFR Subchapter T, incorporated by reference in Section 218.112 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 vinyl ester 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~~e~~°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 218.892 Testing and Monitoring Requirements

a) Testing to demonstrate compliance with the requirements of Section 218.891 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 218.891(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 218.112 of this Part.

c) The owner or operator of a source complying with this Subpart pursuant to Section 218.891(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 218.891(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 218.891(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 218.891(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 218.891(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 ~~after~~after the exceedance; ~~—~~—

4) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.891(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 218.112 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 218.112 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 218.112 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~~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;

D) Notwithstanding the criteria or requirements in Method ~~25~~25, which specifies a minimum probe temperature of 129° C (265° ~~F~~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~~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 ~~3σ-CoC~~ or ~~5σ-FoF~~ on the emissions control system in accordance with Section 218.105(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~~r~~.

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'sg or operator's plan approved by the Agency and USEPA pursuant to Section 218.891(d).

d) Testing to demonstrate compliance with the VOM content limitations for cleaning solutions in Section 218.891(g) of this Subpart, and with the non-monomer VOM content limitations for resin and gel coat materials in Section 218.891(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 218.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 218.112 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 218.105(a) of this Part~~r~~; 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 218.891(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 218.891(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 218.894(g) of this Subpart.

f) Testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents set forth in Section 218.891(g) of

this Subpart shall be conducted in accordance with the applicable methods and procedures set forth in Section 218.110 of this Part.

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

Section 218.894 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 218.890(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 218.890(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 218.891(h) of this Subpart;

G) A description of each fiberglass boat manufacturing operation exempt pursuant to Section 218.890(b) of this Subpart, if any;

H) A description of materials subject to Section 218.891(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 218.891(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 218.891 of this Subpart and complying by means of Section 218.891(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 218.891(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 218.891(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 218.891 of this Subpart and complying by means of Section 218.891(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 218.891 of this Subpart and complying by means of Section 218.891(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 218.891(d);

B) The results of all tests and calculations necessary to demonstrate compliance with the requirements of Section 218.891(d); and

C) A declaration that the monitoring equipment required under Section 218.892 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

2) Within 90 days after conducting testing pursuant to Section 218.892, 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 218.891(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 218.891(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 218.892;

3) Collect and record daily the following information for each fiberglass boat manufacturing operation subject to the requirements of Section 218.891(d), and submit ~~such~~that information to the Agency upon request:

A) Afterburner or other approved control device monitoring data in accordance with Section 218.892 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 218.892.

f) The owner or operator of a source subject to the requirements in Section 218.891(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 218.891(f) as applied each day by each subject fiberglass boat manufacturing operation;

2) If subject to Section 218.891(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 218.891(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 218.891 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 218.891(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 218.892(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 218.891(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 218.892(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 218.891(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 218.892(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 218.110 of this Part.

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

SUBPART JJ: MISCELLANEOUS INDUSTRIAL ADHESIVES

Section 218.900 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 218.904(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 218.901(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 218.904(a) of this Subpart.

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

Section 218.901 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 218.900(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:

<u>adhesive primer applied</u>	VOM/gal	adhesive	kg VOM/1 lb <u>adhesive or</u> <u>or adhesive</u> or primer applied
adhesive primer applied OperationsA)		1) General adhesive application Reinforced plastic composite	processes 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 tile installation	0.130	processes (1.1)	OperationsA) B) Contact
adhesive	0.250	(2.1)	C) Cove base
installation	0.150	(1.3)	D) Indoor floor
covering	0.150	(1.3)	
installation		<u>0.150 (1.3)</u>	E) Outdoor floor
covering	0.250	(2.1)	installation
	<u>0.660</u>	(5.5)	<u>0.250 (2.1)</u> F) Installation of perimeter bonded
			sheet flooring
<u>0.660 (5.5)</u> G)			0.850 (7.1)
0.250		Metal to urethane/rubber molding or casting	<u>0.850 (7.1)</u> H) Motor vehicle adhesive
<u>adhesive</u> 0.750	(2.1)	(6.3)	I) Motor vehicle weatherstrip
construction	0.200	(1.7)	J) Multipurpose
solvent welding	0.400	(3.3)	K) Plastic
butadiene styrene		(ABS) welding	<u>0.400 (3.3)</u> L) Plastic
solvent welding	0.500	(4.2)	(except ABS
welding) <u>0.500 (4.2)</u> M)			Sheet rubber lining installation
(7.1)			0.850
(2.1)		N) Single-ply roof membrane installation/repair (except	0.250
propylenediene		monomer (EPDM) roof	ethylene
membrane) <u>0.250 (2.1)</u> 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 ~~processes~~ 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 adhesive primer+ membrane 0.250 ~~(2.1)~~ 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

$$VOM(WA) = \frac{\sum_{i=1}^n M_i VOM_i}{\sum_{i=1}^n M_i}$$

~~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; 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)~~ = 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; 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~~Section, in units of kg (lbs) VOM per volume in 1 (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 218.901~~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 218.902 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 218.901(b) of this Subpart shall be conducted as follows~~.~~

1) Method 24, incorporated by reference in Section 218.112 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 218.112 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 218.105(d) through (f) of this Part shall be used for testing to demonstrate compliance with the requirements of Section 218.901(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 218.112 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 218.112 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 218.112 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 218.901(d) as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 218.901(d)(3).

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

Section 218.903 Monitoring Requirements

a) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 218.901(d) of this Subpart shall:

1) Install, calibrate, operate, and maintain temperature monitoring ~~device(s)~~devices with an accuracy of ~~3σ-CoC~~ or ~~5σ-FoF~~ on the emissions control system in accordance with Section 218.105(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 218.901(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 218.901(d)(3).

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

Section 218.904 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 218.900(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 218.900(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 218.901(f) of this Subpart;

G) A description of each adhesive application operation exempt pursuant to Section 218.900(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 218.901(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 218.901 of this Subpart and complying by means of Section 218.901(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 218.901(b).

d) The owner or operator of an adhesive application operation subject to the limitations of Section 218.901 of this Subpart and complying by means of Section 218.901(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 218.901(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 218.901 of this Subpart and complying by means of Section 218.901(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 218.901(d);

B) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 218.901(d); and

C) A declaration that the monitoring equipment required under Section 218.903 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

2) Within 90 days after conducting testing pursuant to Section 218.902 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 218.901(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 218.901(d); and

C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 218.903 of this Subpart;

3) Collect and record daily the following information for each adhesive application operation subject to the requirements of Section 218.901(d):

A) Afterburner or other approved control device monitoring data in accordance with Section 218.903 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 _____)

JCAR350218-1004335r01

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

Document comparison done by DeltaView on Monday, March 29, 2010 9:34:29 AM

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Statistics:	
	Count
Insertions	563
Deletions	763
Moved from	7
Moved to	7
Style change	0
Format changed	0
Total changes	1340

1ST NOTICE VERSION

JCAR350218-1004335r01

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2 SUBTITLE B: AIR POLLUTION
3 CHAPTER I: POLLUTION CONTROL BOARD
4 SUBCHAPTER c: EMISSIONS STANDARDS AND
5 LIMITATIONS FOR STATIONARY SOURCES
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8 ORGANIC MATERIAL EMISSION STANDARDS AND
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24	218.109	Vapor Pressure of Volatile Organic Liquids
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388 AUTHORITY: Implementing Section 10 and authorized by Sections 27, 28, and 28.5 of the
 389 Environmental Protection Act [415 ILCS 5/10, 27, 28, and 28.5].
 390

391 SOURCE: Adopted at R91-7 at 15 Ill. Reg. 12231, effective August 16, 1991; amended in R91-
 392 24 at 16 Ill. Reg. 13564, effective August 24, 1992; amended in R91-28 and R91-30 at 16 Ill.
 393 Reg. 13864, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16636, effective
 394 September 27, 1993; amended in R93-14 at 18 Ill. Reg. 1945, effective January 24, 1994;
 395 amended in R94-12 at 18 Ill. Reg. 14973, effective September 21, 1994; amended in R94-15 at
 396 18 Ill. Reg. 16392, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16950,
 397 effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6848,
 398 effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7359, effective May 22, 1995;
 399 amended in R96-13 at 20 Ill. Reg. 14428, effective October 17, 1996; amended in R97-24 at 21
 400 Ill. Reg. 7708, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3556, effective
 401 February 2, 1998; amended in R98-16 at 22 Ill. Reg. 14282, effective July 16, 1998; amended in
 402 R02-20 at 27 Ill. Reg. 7283, effective April 8, 2003; amended in R04-12/20 at 30 Ill. Reg. 9684,
 403 effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. 7086, effective April 30, 2007;
 404 amended in R08-8 at 32 Ill. Reg. 14874, effective August 26, 2008; amended in R10-20 at 34 Ill.
 405 Reg. _____, effective _____.
 406

407 SUBPART A: GENERAL PROVISIONS
 408

409 **Section 218.105 Test Methods and Procedures**
 410

411 a) Coatings, Inks and Fountain Solutions

412 The following test methods and procedures shall be used to determine
 413 compliance of as applied coatings, inks, and fountain solutions with the
 414 limitations set forth in this Part.
 415

416 1) Sampling: Samples collected for analyses shall be one-liter taken into a
 417 one-liter container at a location and time such that the sample will be
 418 representative of the coating as applied (i.e., the sample shall include any
 419 dilution solvent or other VOM added during the manufacturing process).
 420 The container must be tightly sealed immediately after the sample is taken.
 421 Any solvent or other VOM added after the sample is taken must be
 422 measured and accounted for in the calculations in subsection (a)(3) of this
 423 Section. For multiple package coatings, separate samples of each
 424 component shall be obtained. A mixed sample shall not be obtained as it
 425 will cure in the container. Sampling procedures shall follow the
 426 guidelines presented in:
 427

428 A) ASTM D 3925-81 (1985) standard practice for sampling liquid
 429 paints and related pigment coating. This practice is incorporated
 430 by reference in Section 218.112 of this Part.

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- B) ASTM E 300-86 standard practice for sampling industrial chemicals. This practice is incorporated by reference in Section 218.112 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 218.112 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 218.112 of this Part, 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 218.112 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 218.112 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 218.112 of this Part.

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- 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 218.112 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 218.112 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 218.112 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 218.112 of this Part.
 - viii) ASTM E 180-85: Standard practice for determining the precision data of ASTM methods for analysis of and testing of industrial chemicals. This practice is incorporated by reference in Section 218.112 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 218.112 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

517 solutions as applied shall follow the guidance provided in the following
 518 documents:

- 519
- 520 A) "A Guide for Surface Coating Calculation", EPA-340/1-86-016,
 521 incorporated by reference in Section 218.112 of this Part.
- 522
- 523 B) "Procedures for Certifying Quantity of Volatile Organic
 524 Compounds Emitted by Paint, Ink and Other Coatings" (revised
 525 June 1986), EPA-450/3-84-019, incorporated by reference in
 526 Section 218.112 of this Part.
- 527
- 528 C) "A Guide for Graphic Arts Calculations", August 1988, EPA-
 529 340/1-88-003, incorporated by reference in Section 218.112 of this
 530 Part.
- 531

532 b) Automobile or Light-Duty Truck Test Protocol

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

- 538
- 539 A) Prior to May 1, 2011: "Protocol for Determining the Daily
 540 Volatile Organic Compound Emission Rate of Automobile and
 541 Light-Duty Truck Topcoat Operations" ("topcoat protocol"),
 542 December 1988, EPA-450/3-88-018, incorporated by reference in
 543 Section 218.112 of this Part.
- 544
- 545 B) On and after May 1, 2011: "Protocol for Determining the Daily
 546 Volatile Organic Compound Emission Rate of Automobile and
 547 Light-Duty Truck Primer-Surfacer and Topcoat Operations"
 548 (topcoat protocol), September 2008, EPA-453/R-08-002,
 549 incorporated by reference in Section 218.112 of this Part.
- 550

551 2) Prior to testing pursuant to the applicable topcoat protocol, the owner or
 552 operator of a coating operation subject to the topcoat or primer surfacer
 553 limit in SectionSections 218.204(a)(1)(B),(2) or 218.204 (a)(1)(C)(3),
 554 (a)(2)(B), (a)(2)(C), or (a)(2)(E) shall submit a detailed testing proposal
 555 specifying the method by which testing will be conducted and how
 556 compliance will be demonstrated consistent with the applicable topcoat
 557 protocol. The proposal shall include, at a minimum, a comprehensive plan
 558 (including a rationale) for determining the transfer efficiency at each booth
 559 through the use of in-plant or pilot testing, the selection of coatings to be

560 tested (for the purpose of determining transfer efficiency) including the
 561 rationale for coating groupings, the method for determining the analytic
 562 VOM content of as applied coatings and the formulation solvent content
 563 of as applied coatings, and a description of the records of coating VOM
 564 content as applied and coating's usage ~~that~~ which will be kept to
 565 demonstrate compliance. Upon approval of the proposal by the Agency
 566 and USEPA, the compliance demonstration for a coating line may
 567 proceed.
 568

569 c) Capture System Efficiency Test Protocols

570
 571 1) Applicability

572 The requirements of subsection (c)(2) of this Section shall apply to all
 573 VOM emitting process emission units employing capture equipment (e.g.,
 574 hoods, ducts), except those cases noted in this subsection (c)(1).
 575

576 A) If an emission unit is equipped with (or uses) a permanent total
 577 enclosure (PTE) that meets Agency and USEPA specifications,
 578 and which directs all VOM to a control device, then the emission
 579 unit is exempted from the requirements described in subsection
 580 (c)(2) of this Section. The Agency and USEPA specifications to
 581 determine whether a structure is considered a PTE are given in
 582 Method 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by
 583 reference in Section 218.112 of this Part. In this instance, the
 584 capture efficiency is assumed to be 100 percent and the emission
 585 unit is still required to measure control efficiency using appropriate
 586 test methods as specified in subsection (d) of this Section.
 587

588 B) If an emission unit is equipped with (or uses) a control device
 589 designed to collect and recover VOM (e.g., carbon adsorber), an
 590 explicit measurement of capture efficiency is not necessary
 591 provided that the conditions given below are met. The overall
 592 control of the system can be determined by directly comparing the
 593 input liquid VOM to the recovered liquid VOM. The general
 594 procedure for use in this situation is given in 40 CFR 60.433,
 595 incorporated by reference in Section 218.112 of this Part, with the
 596 following additional restrictions:
 597

598 i) Unless otherwise specified in subsection (c)(1)(B)(ii)
 599 ~~below~~, the owner or operator shall obtain data each
 600 operating day for the solvent usage and solvent recovery to
 601 permit the determination of the solvent recovery efficiency
 602 of the system each operating day using a 7-day rolling

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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 at Section 218.112 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)(iii) or subsection (c)(1)(B)(iv) below must be met.

- ii) The owner or operator of the source engaged in printing located at 350 E. 22nd Street, Chicago, Illinois, 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 14-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 13 operating days to the total solvent usage for the same 14-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 218.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 17 days following each 14-day period. In addition, the criteria in subsection (c)(1)(B)(iii) or subsection (c)(1)(B)(iv) below must be met.
- iii) 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
- iv) 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

646 exceed the most stringent standard applicable to any line or
 647 other discrete activity venting to the control system.
 648

649 2) Capture Efficiency Protocols

650 The capture efficiency of an emission unit shall be measured using one of
 651 the protocols given below. Appropriate test methods to be utilized in
 652 each of the capture efficiency protocols are described in Appendix M of
 653 40 CFR ~~Part~~ 51, incorporated by reference at Section 218.112 of this Part.
 654 Any error margin associated with a test method or protocol may not be
 655 incorporated into the results of a capture efficiency test. If these
 656 techniques are not suitable for a particular process, then an alternative
 657 capture efficiency protocol may be used, pursuant to the provisions of
 658 Section 218.108(b) of this Part.
 659

660 A) Gas/gas method using temporary total enclosure (TTE). The
 661 Agency and USEPA specifications to determine whether a
 662 temporary enclosure is considered a TTE are given in Method 204
 663 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference in
 664 Section 218.112 of this Part. The capture efficiency equation to be
 665 used for this protocol is:
 666

667
$$CE = \frac{G_w}{G_w + F_w}$$

668 where:

- 669 CE = Capture efficiency, decimal fraction;
- 670 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.

671 Method 204B or 204C contained in Appendix M of 40 CFR ~~Part~~
 672 51, incorporated by reference in Section 218.112 of this Part, is
 673 used to obtain G_w . Method 204D in Appendix M of 40 CFR ~~Part~~
 674 51, incorporated by reference in Section 218.112 of this Part ~~of this~~
 675 Part, is used to obtain F_w .
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678 B) Liquid/gas method using TTE. The Agency and USEPA
 679 specifications to determine whether a temporary enclosure is
 680 considered a TTE are given in Method 204 of Appendix M of 40
 681 CFR ~~Part~~ 51, incorporated by reference in Section 218.112 of this
 682 Part. The capture efficiency equation to be used for this protocol
 683 is:

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

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.

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Method 204A or 204F contained in Appendix M of 40 CFR Part 51, incorporated by reference in Section 218.112 of this Part, is used to obtain L. Method 204 D in Appendix M of 40 CFR Part-51, incorporated by reference in Section 218.112 of this Part, is used to obtain F_w.

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- 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 Part-51, incorporated by reference in Section 218.112 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:

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

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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.

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Method 204B or 204C contained in Appendix M of 40 CFR Part 51, incorporated by reference in Section 218.112 of this Part is used to obtain G. Method 204E in Appendix M of 40 CFR Part-51, incorporated by reference in Section 218.112 of this Part is used to obtain F_B.

717 D) Liquid/gas method using the building or room (building or room
 718 enclosure), in which the affected coating line, printing line or other
 719 emission unit is located, as the enclosure as determined by Method
 720 204 of Appendix M of 40 CFR ~~Part~~ 51, incorporated by reference
 721 in Section 218.112 of this Part, and in which "F_B" and "L" are
 722 measured while operating only the affected line or emission unit.
 723 All fans and blowers in the building or room must be operated as
 724 they would under normal production. The capture efficiency
 725 equation to be used for this protocol is:
 726

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

727
 728 where:
 729
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- 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.

731
 732 Method 204A or 204F contained in Appendix M of 40 CFR ~~Part~~
 733 51, incorporated by reference in Section 218.112 of this Part is
 734 used to obtain L. Method 204E in Appendix M of 40 CFR ~~Part~~ 51,
 735 incorporated by reference in Section 218.112 of this Part is used to
 736 obtain F_B.
 737

738 E) Mass balance using Data Quality Objective (DQO) or Lower
 739 Confidence Limit (LCL) protocol. For a liquid/gas input where an
 740 owner or operator is using the DQO/LCL protocol and not using an
 741 enclosure as described in Method 204 of Appendix M of 40 CFR
 742 ~~Part~~ 51, incorporated by reference in Section 218.112 of this Part,
 743 the VOM content of the liquid input (L) must be determined using
 744 Method 204A or 204F in Appendix M of 40 CFR ~~Part~~ 51,
 745 incorporated by reference in Section 218.112 of this Part. The
 746 VOM content of the captured gas stream (G) to the control device
 747 must be determined using Method 204B or 204C in Appendix M
 748 of 40 CFR ~~Part~~ 51, incorporated by reference in Section 218.112 of
 749 this Part. The results of capture efficiency calculations (G/L) must
 750 satisfy the DQO or LCL statistical analysis protocol as described in
 751 Section 3 of USEPA's "Guidelines for Determining Capture
 752 Efficiency," incorporated by reference at ~~Section~~ 218.112 of this
 753 Part. Where capture efficiency testing is done to determine
 754 emission reductions for the purpose of establishing emission

755 credits for offsets, shutdowns, and trading, the LCL protocol
756 cannot be used for these applications. In enforcement cases, the
757 LCL protocol cannot confirm non-compliance; capture efficiency
758 must be determined using a protocol under subsection (c)(2)(A),
759 (B), (C) or (D) of this Section, the DQO protocol of this subsection
760 (c)(2)(E), or an alternative protocol pursuant to Section 218.108(b)
761 of this Part.

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763 BOARD NOTE: Where LCL was used in testing emission units
764 that are the subject of later requests for establishing emission
765 credits for offsets, shutdowns, and trading, prior LCL results may
766 not be relied upon to determine the appropriate amount of credits.
767 Instead, to establish the appropriate amount of credits, additional
768 testing may be required that would satisfy the protocol of Section
769 218.105(c)(2)(A), (B), (C) or (D), the DQO protocol of Section
770 218.105(c)(2)(E), or an alternative protocol pursuant to Section
771 218.108(b) of this Part.
772

773 3) Simultaneous testing of multiple lines or emission units with a common
774 control device. If an owner or operator has multiple lines sharing a
775 common control device, the capture efficiency of the lines may be tested
776 simultaneously, subject to the following provisions:
777

- 778 A) Multiple line testing must meet the criteria of Section 4 of
779 USEPA's "Guidelines for Determining Capture Efficiency, "
780 incorporated by reference at Section 218.112 of this Part;
781
782 B) The most stringent capture efficiency required for any individual
783 line or unit must be met by the aggregate of lines or units; and
784
785 C) Testing of all the lines of emission units must be performed with
786 the same capture efficiency test protocol.
787

788 4) Recordkeeping and Reporting
789

- 790 A) All owners or operators affected by this subsection must maintain a
791 copy of the capture efficiency protocol submitted to the Agency
792 and the USEPA on file. All results of the appropriate test methods
793 and capture efficiency protocols must be reported to the Agency
794 within 60 days ~~after~~ of the test date. A copy of the results must be
795 kept on file with the source for a period of 3 years.
796

797 B) If any changes are made to capture or control equipment, then the

- 798 source is required to notify the Agency and the USEPA of these
 799 changes and a new test may be required by the Agency or the
 800 USEPA.
 801
- 802 C) The source must notify the Agency 30 days prior to performing
 803 any capture efficiency or control test. At that time, the source must
 804 notify the Agency which capture efficiency protocol and control
 805 device test methods will be used. Notification of the actual date
 806 and expected time of testing must be submitted a minimum of 5
 807 working days prior to the actual date of the test. The Agency may
 808 at its discretion accept notification with shorter advance notice
 809 provided that such arrangements do not interfere with the Agency's
 810 ability to review the protocol or observe testing.
 811
- 812 D) Sources utilizing a PTE must demonstrate that this enclosure meets
 813 the requirements given in Method 204 in Appendix M of 40 CFR
 814 ~~Part~~ 51, incorporated by reference in Section 218.112 of this Part,
 815 for a PTE during any testing of their control device.
 816
- 817 E) Sources utilizing a TTE must demonstrate that their TTE meets the
 818 requirements given in Method 204 in Appendix M of 40 CFR ~~Part~~
 819 51, incorporated by reference in Section 218.112 of this Part, for a
 820 TTE during testing of their control device. The source must also
 821 provide documentation that the quality assurance criteria for a TTE
 822 have been achieved.
 823
- 824 F) Any source utilizing the DQO or LCL protocol must submit the
 825 following information to the Agency with each test report:
 826
- 827 i) A copy of all test methods, Quality Assurance/Quality
 828 Control procedures, and calibration procedures to be used
 829 from those described in Appendix M of 40 CFR ~~Part~~ 51,
 830 incorporated by reference in Section 218.112 of this Part;
 831
 - 832 ii) A table with information on each sample taken, including
 833 the sample identification and the VOM content of the
 834 sample;
 835
 - 836 iii) The quantity of material used for each test run;
 837
 - 838 iv) The quantity of captured VOM for each test run;
 839

- 840 v) The capture efficiency calculations and results for each test
841 run;
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- 843 vi) The DQO and/or LCL calculations and results; and
844
- 845 vii) The Quality Assurance/Quality Control results, including
846 how often the instruments were calibrated, the calibration
847 results, and the calibration gases used.
848
- 849 d) Control Device Efficiency Testing and Monitoring
850
- 851 1) The control device efficiency shall be determined by simultaneously
852 measuring the inlet and outlet gas phase VOM concentrations and gas
853 volumetric flow rates in accordance with the gas phase test methods
854 specified in subsection (f) of this Section.
855
- 856 2) An owner or operator:
857
- 858 A) That uses an afterburner or carbon adsorber to comply with any
859 Section of Part 218 shall use Agency and USEPA approved
860 continuous monitoring equipment which is installed, calibrated,
861 maintained, and operated according to vendor specifications at all
862 times the control device is in use except as provided in subsection
863 (d)(3) of this Section. The continuous monitoring equipment must
864 monitor the following parameters:
865
- 866 i) For each afterburner which does not have a catalyst bed,
867 the combustion chamber temperature of each afterburner.
868
- 869 ii) For each afterburner which has a catalyst bed, commonly
870 known as a catalytic afterburner, the temperature rise
871 across each catalytic afterburner bed or VOM concentration
872 of exhaust.
873
- 874 iii) For each carbon adsorber, the VOM concentration of each
875 carbon adsorption bed exhaust or the exhaust of the bed
876 next in sequence to be desorbed.
877
- 878 B) Must install, calibrate, operate and maintain, in accordance with
879 manufacturer's specifications, a continuous recorder on the
880 temperature monitoring device, such as a strip chart, recorder or
881 computer, having an accuracy of ± 1 percent of the temperature
882 measured in degrees Celsius or $\pm 0.5^{\circ}$ C, whichever is greater.

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- 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 demonstrated that the operation was in compliance.

- 3) An owner or operator that uses a carbon adsorber to comply with Section 218.401 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 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

- 926 year during which the adsorber was operated and the associated
 927 monitoring equipment was not operational;
 928
 929 B) During such period of malfunction the adsorber is operated using
 930 timed sequences as the basis for periodic regeneration of the
 931 adsorber;
 932
 933 C) The period of such adsorber operation does not exceed 360 hours
 934 in any calendar year without the approval of the Agency and
 935 USEPA; and
 936
 937 D) The total of all hours in the calendar year during which the
 938 adsorber was operated and the associated monitoring equipment
 939 was not operational shall be reported, in writing, to the Agency and
 940 USEPA by January 31st of the following calendar year.
 941

942 e) Overall Efficiency

- 943
 944 1) The overall efficiency of the emission control system shall be determined
 945 as the product of the capture system efficiency and the control device
 946 efficiency or by the liquid/liquid test protocol as specified in 40 CFR
 947 60.433, incorporated by reference in Section 218.112 of this Part, (and
 948 revised by subsection (c)(1)(B) of this Section) for each solvent recovery
 949 system. In those cases in which the overall efficiency is being determined
 950 for an entire line, the capture efficiency used to calculate the product of
 951 the capture and control efficiency is the total capture efficiency over the
 952 entire line.
 953
 954 2) For coating lines which are both chosen by the owner or operator to
 955 comply with Section 218.207(c), (d), (e), (f), or (g) of this Part by the
 956 alternative in Section 218.207(b)(2) of this Part and meet the criteria
 957 allowing them to comply with Section 218.207 of this Part instead of
 958 Section 218.204 of this Part, the overall efficiency of the capture system
 959 and control device, as determined by the test methods and procedures
 960 specified in subsections (c), (d) and (e)(1) of this Section, shall be no less
 961 than the equivalent overall efficiency which shall be calculated by the
 962 following equation:
 963

$$E = \frac{VOM_a - VOM_l}{VOM_a} \times 100$$

964
 965 where:
 966
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- 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) of this Section in units of kg VOM/l (lb VOM/gal) of coating solids as applied;
- VOM_l = The VOM emission limit specified in Section 218.204 or 218.205 of this Part in units of kg VOM/l (lb VOM/gal) of coating solids as applied.

- 968
- 969 f) Volatile Organic Material Gas Phase Source Test Methods.
- 970 The methods in 40 CFR ~~Part~~ 60, Appendix A, incorporated by reference in
- 971 Section 218.112 of this Part delineated below shall be used to determine control
- 972 device efficiencies.
- 973
- 974 1) 40 CFR ~~Part~~ 60, Appendix A, Method 18, 25 or 25A, incorporated by
- 975 reference in Section 218.112 of this Part as appropriate to the conditions at
- 976 the site, shall be used to determine VOM concentration. Method selection
- 977 shall be based on consideration of the diversity of organic species present
- 978 and their total concentration and on consideration of the potential presence
- 979 of interfering gases. Except as indicated in subsections (f)(1)(A) and (B)
- 980 below, the test shall consist of three separate runs, each lasting a minimum
- 981 of 60 minutes, unless the Agency and the USEPA determine that process
- 982 variables dictate shorter sampling times.
- 983
- 984 A) When the method is to be used to determine the efficiency of a
- 985 carbon adsorption system with a common exhaust stack for all the
- 986 individual adsorber vessels, the test shall consist of three separate
- 987 runs, each coinciding with one or more complete sequences
- 988 through the adsorption cycles of all the individual absorber vessels.
- 989
- 990 B) When the method is to be used to determine the efficiency of a
- 991 carbon adsorption system with individual exhaust stacks for each
- 992 absorber vessel, each adsorber vessel shall be tested individually.
- 993 The test for each absorber vessel shall consist of three separate
- 994 runs. Each run shall coincide with one or more complete
- 995 adsorption cycles.
- 996
- 997 2) 40 CFR ~~Part~~ 60, Appendix A, Method 1 or 1A, incorporated by reference
- 998 in Section 218.112 of this Part, shall be used for sample and velocity

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traverses.

- 3) 40 CFR ~~Part~~ 60, Appendix A, Method 2, 2A, 2C or 2D, incorporated by reference in Section 218.112 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 218.112 of this Part, shall be used for gas analysis.
- 5) 40 CFR ~~Part~~ 60, Appendix A, Method 4, incorporated by reference in Section 218.112 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 218.112 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 218.112 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

- 1042 ii) A mixture of methane or n-hexane and air at a
1043 concentration of approximately, but no less than, 10,000
1044 ppm methane or n-hexane.
1045
- 1046 E) The instrument probe shall be traversed around all potential leak
1047 interfaces as close to the interface as possible as described in
1048 Method 21.
1049
- 1050 2) When equipment is tested for compliance with no detectable emissions as
1051 required, the test shall comply with the following requirements:
1052
- 1053 A) The requirements of subsections (g)(1)(A) through (g)(1)(E) of this
1054 Section ~~above~~ shall apply.
1055
- 1056 B) The background level shall be determined as set forth in Method
1057 21.
1058
- 1059 3) Leak detection tests shall be performed consistent with:
1060
- 1061 A) "APTI Course SI 417 controlling Volatile Organic Compound
1062 Emissions from Leaking Process Equipment", EPA-450/2-82-015,
1063 incorporated by reference in Section 218.112 of this Part.
1064
- 1065 B) "Portable Instrument User's Manual for Monitoring VOC Sources",
1066 EPA-340/1-86-015, incorporated by reference in Section 218.112
1067 of this Part.
1068
- 1069 C) "Protocols for Generating Unit-Specific Emission Estimates for
1070 Equipment Leaks of VOC and VHAP", EPA-450/3-88-010,
1071 incorporated by reference in Section 218.112 of this Part.
1072
- 1073 D) "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008,
1074 incorporated by reference in Section 218.112 of this Part.
1075
- 1076 h) Bulk Gasoline Delivery System Test Protocol
1077
- 1078 1) The method for determining the emissions of gasoline from a vapor
1079 recovery system are delineated in 40 CFR 60, Subpart XX, Section
1080 60.503, incorporated by reference in Section 218.112 of this Part.
1081
- 1082 2) Other tests shall be performed consistent with:
1083
- 1084 A) "Inspection Manual for Control of Volatile Organic Emissions

1085 from Gasoline Marketing Operations: Appendix D", EPA-340/1-
1086 80-012, incorporated by reference in Section 218.112 of this Part.
1087

1088 B) "Control of Hydrocarbons from Tank Truck Gasoline Loading
1089 Terminals: Appendix A", EPA-450/2-77-026, incorporated by
1090 reference in Section 218.112 of this Part.
1091

1092 i) Notwithstanding other requirements of this Part, upon request of the Agency
1093 where it is necessary to demonstrate compliance, an owner or operator of an
1094 emission unit which is subject to this Part shall, at his own expense, conduct tests
1095 in accordance with the applicable test methods and procedures specific in this
1096 Part. Nothing in this Section shall limit the authority of the USEPA pursuant to
1097 the Clean Air Act, as amended, to require testing.
1098

1099 j) Stage II Gasoline Vapor Recovery Test Methods
1100 The methods for determining the acceptable performance of Stage II Gasoline
1101 Vapor Recovery System are delineated in "Technical Guidance-Stage II Vapor
1102 Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline
1103 Dispensing Facilities," found at EPA 450/3-91-022b and incorporated by
1104 reference in Section 218.112 of this Part. Specifically, the test methods are as
1105 follows:
1106

- 1107 1) Dynamic Backpressure Test is a test procedure used to determine the
1108 pressure drop (flow resistance) through balance vapor collection and
1109 control systems (including nozzles, vapor hoses, swivels, dispenser piping
1110 and underground piping) at prescribed flow rates.
1111
- 1112 2) Pressure Decay/Leak Test is a test procedure used to quantify the vapor
1113 tightness of a vapor collection and control system installed at gasoline
1114 dispensing facilities.
1115
- 1116 3) Liquid Blockage Test is a test procedure used to detect low points in any
1117 vapor collection and control system where condensate may accumulate.
1118

1119 (Source: Amended at 34 Ill. Reg. _____, effective _____)
1120

1121 Section 218.106 Compliance Dates

1122

- 1123 a) Except as otherwise provided in this Section or as otherwise provided in a specific
1124 Subpart of this Part, compliance with the requirements of all rules is required by
1125 July 1, 1991, or September 1, 1991, for all sources located in Cook, DuPage,
1126 Kane, Lake, McHenry, or Will Counties, consistent with the appropriate
1127 provisions of Section 218.103 of this Subpart.

- 1128
 1129 b) Except as otherwise provided in this Section or as otherwise provided in a specific
 1130 Subpart of this Part, compliance with the requirements of this Part is required by
 1131 November 15, 1993, for all sources located in Aux Sable Township or Goose
 1132 Lake Township in Grundy County, or in Oswego Township in Kendall County.
 1133
 1134 c) All emission units which meet the applicability requirements of Sections
 1135 218.402(a)(2), 218.611(b), 218.620(b), 218.660(a), 218.680(a), 218.920(b),
 1136 218.940(b), 218.960(b) or 218.980(b) of this Part, including emission units at
 1137 sources which are excluded from the applicability criteria of Sections
 1138 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a), or
 1139 218.980(a) of this Part by virtue of permit conditions or other enforceable means,
 1140 must comply with the requirements of Subparts H, Z, AA, CC, DD, PP, QQ, RR
 1141 or TT of this Part, respectively, by March 15, 1995. Any owner or operator of an
 1142 emission unit which has already met the applicability requirements of Sections
 1143 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a)
 1144 218.980(a) of this Part on or by the effective date of this subsection is required to
 1145 comply with all compliance dates or schedules found in Sections 218.106(a) or
 1146 218.106(b), as applicable.
 1147
 1148 d) Any owner or operator of a source with an emission unit subject to the
 1149 requirements of Section 218.204(m)(2) or (m)(3) of this Part shall comply with
 1150 those requirements by March 25, 1995.
 1151
 1152 e) Any owner or operator of a source subject to the requirements of Section
 1153 218.204(a)(2) or 218.204(q) of this Part shall comply with the applicable
 1154 requirements in those Sections, as well as all applicable requirements in Sections
 1155 218.205 through 218.214 and 218.219, by May 1, 2011.

1156
 1157 (Source: Amended at 34 Ill. Reg. _____, effective _____)
 1158

1159 **Section 218.112 Incorporations by Reference**

1160
 1161 The following materials are incorporated by reference and do not contain any subsequent
 1162 additions or amendments.

- 1163
 1164 a) American Society for Testing and Materials, 100 Barr Harbor Drive, West
 1165 Conshohocken, PA 19428-9555:
 1166
 1167 1) ASTM D 2879-86
 1168
 1169 2) ASTM D 323-82
 1170

- 1171 3) ASTM D 86-82
- 1172
- 1173 4) ASTM D 369-69 (1971)
- 1174
- 1175 5) ASTM D 396-69
- 1176
- 1177 6) ASTM D 2880-71
- 1178
- 1179 7) ASTM D 975-68
- 1180
- 1181 8) ASTM D 3925-81 (1985)
- 1182
- 1183 9) ASTM E 300-86
- 1184
- 1185 10) ASTM D 1475-85
- 1186
- 1187 11) ASTM D 2369-87
- 1188
- 1189 12) ASTM D 3792-86
- 1190
- 1191 13) ASTM D 4017-81 (1987)
- 1192
- 1193 14) ASTM D 4457-85
- 1194
- 1195 15) ASTM D 2697-86
- 1196
- 1197 16) ASTM D 3980-87
- 1198
- 1199 17) ASTM E 180-85
- 1200
- 1201 18) ASTM D 2372-85
- 1202
- 1203 19) ASTM D 97-66
- 1204
- 1205 20) ASTM E 168-67 (1977)
- 1206
- 1207 21) ASTM E 169-87
- 1208
- 1209 22) ASTM E 260-91
- 1210
- 1211 23) ASTM D 2504-83
- 1212
- 1213 24) ASTM D 2382-83

- 1214
 1215 25) ASTM D 323-82 (approved 1982)
 1216
 1217 26) ASTM D 2099-00
 1218
 1219 b) Standard Industrial Classification Manual, published by Executive Office of the
 1220 President, Office of Management and Budget, Washington, D.C., 1987.
 1221
 1222 c) American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating
 1223 Roof Tanks", Second ed., February 1980.
 1224
 1225 d) 40 CFR 60 (July 1, 1991) and 40 CFR 60, Appendix A, Method 24 (57 FR 30654,
 1226 July 10, 1992).
 1227
 1228 e) 40 CFR 61 (July 1, 1991).
 1229
 1230 f) 40 CFR 50 (July 1, 1991).
 1231
 1232 g) 40 CFR ~~Part~~ 51 (July 1, 1991) and 40 CFR ~~Part~~ 51, Appendix M, Methods 204-
 1233 204F (July 1, 1999).
 1234
 1235 h) 40 CFR 52 (July 1, 1991).
 1236
 1237 i) 40 CFR 80 (July 1, 1991) and 40 CFR ~~Part~~ 80, Appendixes D, E, and F (July 1,
 1238 1993).
 1239
 1240 j) "A Guide for Surface Coating Calculation", July 1986, United States
 1241 Environmental Protection Agency, Washington, D.C., EPA-340/1-86-016.
 1242
 1243 k) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by
 1244 Paint, Ink and Other Coating" (revised June 1986), United States Environmental
 1245 Protection Agency, Washington, D.C., EPA-450/3-84-019.
 1246
 1247 l) "A Guide for Graphic Arts Calculations", August 1988, United States
 1248 Environmental Protection Agency, Washington, D.C., EPA-340/1-88-003.
 1249
 1250 m) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of
 1251 Automobile and Light-Duty Truck Topcoat Operations", December 1988, United
 1252 States Environmental Protection Agency, Washington, D.C., EPA-450/3-88-018.
 1253
 1254 n) "Control of Volatile Organic Emissions from Manufacturing of Synthesized
 1255 Pharmaceutical Products", December 1978, United States Environmental
 1256 Protection Agency, Washington, D.C., EPA-450/2-78-029.

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- 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/-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 VOC 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 VOC 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) South Coast Air Quality Management District (SCAQMD), Applied Science & Technology Division, Laboratory Services Branch, SCAQMD Method 309-91, Determination of Static Volatile Emissions (February 1993).

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- z) South Coast Air Quality Management District (SCAQMD), Applied Science & Technology Division, Laboratory Services Branch, SCAQMD Method 312-91, Determination of Percent Monomer in Polyester Resins (April 1996).
- aa) "Guidelines for Determining Capture Efficiency," January, 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency, Research Triangle Park, NC.
- bb) 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.
- cc) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacers and Topcoat Operations", September 2008, United States Environmental Protection Agency, Washington, D.C., EPA-453/R-08-002.
- dd) 40 CFR 63, Subpart P, Appendix A (2008).
- ee) 46 CFR Subchapter Q (2007).
- ff) 46 CFR Subchapter T (2008).

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

SUBPART F: COATING OPERATIONS

Section 218.204 Emission Limitations

Except as provided in Sections 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216 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 218.204(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

1343 Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in
 1344 Section 218.211(c) of this Subpart except where noted. (Note: The equation presented in Section
 1345 218.206 of this Part shall be used to calculate emission limitations for determining compliance
 1346 by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.)
 1347 The emission limitations are as follows:
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a)	Automobile or Light-Duty Truck Coating	kg/l	lb/gal
	1) <u>Prior to May 1, 2011:</u>		
	<u>A1)</u> Prime coat	0.14	(1.2)
		0.14*	(1.2)*
	<u>B2)</u> Primer surface coat	1.81	(15.1)
		1.81*	(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 surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(A) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the primer surfacer limitation.)

<u>C3)</u>	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 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 218.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 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)*

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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.

	<u>kg VOM/l</u> <u>coating</u> <u>solids</u> <u>applied</u>	<u>lb VOM/gal</u> <u>coating solids</u> <u>applied</u>
i) <u>When solids turnover ratio (R_T) is greater than or equal to 0.160</u>	0.084	(0.7)
ii) <u>When R_T is greater than or equal to 0.040 and less than 0.160</u>	$\frac{0.084 \times}{350^{0.160-R_T}}$	$\frac{(0.084 \times)}{350^{0.160-R_T}} \times$ 8.34)

B) Primer surfacer operations

	<u>kg VOM/l</u> <u>coating</u> <u>solids</u> <u>deposited</u>	<u>lb VOM/gal</u> <u>coating solids</u> <u>deposited</u>
i) <u>VOM content limitation</u>	1.44	(12.0)
ii) <u>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</u>		

referenced in Section 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the primer surfacer limitation.

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|-----|--|--|--|
| C) | <u>Topcoat operations</u> | <u>kg VOM/l
coating
solids
deposited</u> | <u>lb VOM/gal
coating solids
deposited</u> |
| i) | <u>VOM content limitation</u> | <u>1.44</u> | <u>(12.0)</u> |
| ii) | <u>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 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the topcoat limitation.</u> | | |
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|-----|---|--|--|
| D) | <u>Combined primer surfacer and topcoat operations</u> | <u>kg VOM/l
coating
solids
deposited</u> | <u>lb VOM/gal
coating solids
deposited</u> |
| i) | <u>VOM content limitation</u> | <u>1.44</u> | <u>(12.0)</u> |
| ii) | <u>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 218.105(b)(1)(B) and</u> | | |

the recordkeeping and reporting requirements specified in Section 218.211(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 218.205 does not apply to the combined primer surfacer and topcoat limitation.

E) Final repair coat operations

	<u>kg/l</u> <u>coatings</u>	<u>lb/gal</u> <u>coatings</u>
i) <u>VOM content limitation</u>	0.58	(4.8)
ii) <u>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.</u>		

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

where:

VOM_{tot} = 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_{cc} = 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.

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1368 F) Miscellaneous Materials. For reactive adhesives subject to this
 1369 subsection (a)(2)(F), compliance shall be demonstrated in
 1370 accordance with the methods and procedures set forth in Appendix
 1371 A to Subpart PPPP of 40 CFR 63, incorporated by reference in
 1372 Section 218.112 of this Part.
 1373

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

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b)	Can Coating	kg/l	lb/gal
1)	Sheet basecoat and overvarnish		
	A) Sheet basecoat	0.34	(2.8)
		0.26*	(2.2)*
	B) Overvarnish	0.34	(2.8)
		0.34	(2.8)*
2)	Exterior basecoat and overvarnish	0.34	(2.8)
		0.25*	(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 0.35 0.28*	lb/gal (2.9) (2.3)*
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BOARD NOTE:(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 218.401 of this Part. In addition, screen printing on paper is not regulated as paper coating, but is regulated under Subpart TT of this Part.)

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d)	Coil Coating	kg/l 0.31 0.20*	lb/gal (2.6) (1.7)*
e)	Fabric Coating	0.35 0.28*	(2.9) (2.3)*
f)	Vinyl Coating	0.45 0.28*	(3.8) (2.3)*
g)	Metal Furniture Coating		
	1) Air dried	0.36 0.34*	(3.0) (2.8)*
	2) Baked	0.36 0.28*	(3.0) (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)*

BOARD NOTE: (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 (1 quart) in any one rolling eight-hour period.)

i) Magnet Wire Coating			
		kg/l	lb/gal
		0.20	(1.7)
		0.20*	(1.7)*

j) <u>Prior to May 1, 2011:</u> Miscellaneous Metal Parts and Products Coating			
1)	Clear coating	0.52	(4.3)
		0.52*	(4.3)*
2)	Extreme performance coating		
	A) Air dried	0.42	(3.5)
		0.42*	(3.5)*
	B) Baked	0.42	(3.5)
		0.40*	(3.3)*
3)	Steel pail and drum interior coating	0.52	(4.3)
		0.52*	(4.3)*
4)	All other coatings		
	A) Air dried Dried	0.42	(3.5)
		0.40*	(3.3)*
	B) Baked	0.36	(3.0)
		0.34*	(2.8)*
5)	Marine engine coating		

A)	Air dried Dried	0.42	(3.5)
		0.42*	(3.5)*
B)	Baked		
	i) Primer/Topcoat	0.42	(3.5)
		0.42*	(3.5)*
	ii) Corrosion resistant basecoat	0.42	(3.5)
		0.28*	(2.3)*
C)	Clear Coating	0.52	(4.3)
		0.52*	(4.3)*
6)	Metallic Coating		
	A) Air Dried	0.42	(3.5)
		0.42*	(3.5)*
	B) Baked	0.36	(3.0)
		0.36	(3.0)*

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- 7) Definitions
- A) For purposes of subsection 218.204(j)(5) of this Section, the following terms are defined:
- i) "Corrosion resistant basecoat" means, for purposes of subsection 218.204(j)(5)(B)(ii) of this Section, 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.
- ii) "Electrodeposition process" means, for purposes of subsection 218.204(j)(5) of this Section, 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.
- iii) "Marine engine coating" means, for purposes of subsection 218.204(j)(5) of this Section, any extreme performance protective, decorative or functional coating applied to an

engine that is used to propel watercraft.

- B) For purposes of subsection 218.204(j)(6) 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 218.204(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.)

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- 2) On and after March 15, 1998, wood furniture sealers and topcoats must comply with one of the limitations specified in subsections (1)(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)

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- C) Meet the provisions of Section 218.215 of this Subpart for use of an averaging approach;
- D) Achieve a reduction in emissions equivalent to the requirements of subsection (1)(2)(A) or (B) of this Section, as calculated using Section 218.216 of this Subpart; or
- E) Use a combination of the methods specified in subsections (1)(2)(A) through (D) of this Section.

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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)

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4) Other wood furniture coating requirements on and after March 15, 1998:

- A) No source subject to the limitations of subsection (1)(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 (1)(2) or (3) of this Section shall comply with the requirements of Section 218.217 of this Subpart.
- C) Any source subject to the limitations of subsection (1)(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 (1)(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

	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 218.204(q) shall apply to this category of coating.

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o) 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 218.204(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 218.219, however, shall apply to these coatings unless specifically excluded in Section 218.219.

		<u>(lb/gal)</u> <u>coatings</u>	<u>(lb/gal)</u> <u>solids</u>
A)	<u>General one component coating</u>		
	i) <u>Air dried</u>	<u>0.34</u> <u>(2.8)</u>	<u>0.54</u> <u>(4.52)</u>
	ii) <u>Baked</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(3.35)</u>
B)	<u>General multi-component coating</u>		
	i) <u>Air dried</u>	<u>0.34</u> <u>(2.8)</u>	<u>0.54</u> <u>(4.52)</u>
	ii) <u>Baked</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(3.35)</u>
C)	<u>Camouflage coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
D)	<u>Electric-insulating varnish</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
E)	<u>Etching filler</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
F)	<u>Extreme high-gloss coating</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.36</u> <u>(3.0)</u>	<u>0.61</u> <u>(5.06)</u>
G)	<u>Extreme performance coating</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.36</u> <u>(3.0)</u>	<u>0.61</u> <u>(5.06)</u>

<u>H)</u>	<u>Heat-resistant coating</u>	<u>0.66*</u>	<u>(5.5)*</u>
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.36</u> <u>(3.0)</u>	<u>0.61</u> <u>(5.06)</u>
<u>I)</u>	<u>High performance architectural coating</u>	<u>0.74</u> <u>(6.2)</u>	<u>4.56</u> <u>(38.0)</u>
<u>J)</u>	<u>High temperature coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
<u>K)</u>	<u>Metallic coating</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.36</u> <u>(3.0)</u>	<u>0.61</u> <u>(5.06)</u>
<u>L)</u>	<u>Military specification coating</u>		
	i) <u>Air dried</u>	<u>0.34</u> <u>(2.8)</u>	<u>0.54</u> <u>(4.52)</u>
	ii) <u>Baked</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(3.35)</u>
<u>M)</u>	<u>Mold-seal coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
<u>N)</u>	<u>Pan backing coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
<u>O)</u>	<u>Prefabricated architectural coating: multi-component</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.28</u>	<u>0.40</u>

		<u>(2.3)</u>	<u>(3.35)</u>
P)	<u>Prefabricated architectural coating: one-component</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(3.35)</u>
Q)	<u>Pretreatment coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
R)	<u>Repair coats and touch-up coatings</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	
	ii) <u>Baked</u>	<u>0.36</u> <u>(3.01)</u>	
S)	<u>Silicone release coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
T)	<u>Solar-absorbent coating</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked</u>	<u>0.36</u> <u>(3.0)</u>	<u>0.61</u> <u>(5.06)</u>
U)	<u>Vacuum-metalizing coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
V)	<u>Drum coating, new, exterior</u>	<u>0.34</u> <u>(2.8)</u>	<u>0.54</u> <u>(4.52)</u>
W)	<u>Drum coating, new, interior</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
X)	<u>Drum coating, reconditioned,</u>	<u>0.42</u>	<u>0.80</u>

	<u>exterior</u>	<u>(3.5)</u>	<u>(6.67)</u>
Y)	<u>Drum coating, reconditioned, interior</u>	<u>0.50</u> <u>(4.2)</u>	<u>1.17</u> <u>(9.78)</u>
Z)	<u>Steel pail and drum interior coating</u>	<u>0.52</u> <u>(4.3)</u>	<u>1.24</u> <u>(10.34)</u>
AA)	<u>Marine engine coating</u>		
	i) <u>Air dried</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	ii) <u>Baked: primer/topcoat</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
	iii) <u>Baked: corrosion resistant basecoat</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(3.35)</u>
	iv) <u>Clear coating</u>	<u>0.52</u> <u>(4.3)</u>	<u>1.24</u> <u>(10.34)</u>
BB)	<u>All other coatings</u>		
	i) <u>Air dried</u>	<u>0.40</u> <u>(3.3)</u>	<u>0.73</u> <u>(5.98)</u>
	ii) <u>Baked</u>	<u>0.34</u> <u>(2.8)</u>	<u>0.54</u> <u>(4.52)</u>

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1464 2) Plastic Parts and Products: Miscellaneous. For purposes of this
1465 subsection (q)(2), miscellaneous plastic parts and products are plastic parts
1466 and products that are not subject to subsection (q)(3), (q)(4), (q)(5), or
1467 (q)(6) of this Section. The limitations in subsection (q)(2) shall not apply
1468 to touch-up and repair coatings; stencil coats applied on clear or
1469 transparent substrates; clear or translucent coatings; coatings applied at a
1470 paint manufacturing facility while conducting performance tests on the
1471 coatings; any individual coating category used in volumes less than 189.2
1472 liters (50 gallons) in any one calendar year, if the total usage of all such
1473 coatings does not exceed 756.9 liters (200 gallons) per calendar year per
1474 source and substitute compliant coatings are not available; reflective
1475 coatings applied to highway cones; mask coatings that are less than 0.5
1476 mm thick (dried) if the area coated is less than 25 square inches;

1477 electromagnetic interference/radio frequency interference (EMI/RFI)
 1478 shielding coatings; and heparin-benzalkonium chloride (HBAC)-
 1479 containing coatings applied to medical devices if the total usage of all such
 1480 coatings does not exceed 378.4 liters (100 gallons) per calendar year per
 1481 source. The limitations in Section 218.219, however, shall apply to such
 1482 coatings unless specifically excluded in Section 218.219.
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	<u>kg/l</u> <u>(lb/gal)</u> <u>coatings</u>	<u>kg/l</u> <u>(lb/gal)</u> <u>solids</u>
A) <u>General one component coating</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(3.35)</u>
B) <u>General multi-component</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
C) <u>Electric dissipating coatings</u> <u>and shock-free coatings</u>	<u>0.80</u> <u>(6.7)</u>	<u>8.96</u> <u>(74.7)</u>
D) <u>Extreme performance</u> <u>(2-pack coatings)</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
E) <u>Metallic coating</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
F) <u>Military specification coating</u>		
i) <u>1-pack coatings</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.54</u> <u>(4.52)</u>
ii) <u>2-pack coatings</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
G) <u>Mold-seal coating</u>	<u>0.76</u> <u>(6.3)</u>	<u>5.24</u> <u>(43.7)</u>
H) <u>Multi-colored coating</u>	<u>0.68</u> <u>(5.7)</u>	<u>3.04</u> <u>(25.3)</u>
I) <u>Optical coating</u>	<u>0.80</u> <u>(6.7)</u>	<u>8.96</u> <u>(74.7)</u>

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J)	<u>Vacuum-metalizing coating</u>	<u>0.80</u> <u>(6.7)</u>	<u>8.96</u> <u>(74.7)</u>
3)	<u>Plastic Parts and Products:</u> <u>Automotive/Transportation</u>		
		<u>kg/l</u> <u>(lb/gal)</u> <u>coatings</u>	<u>kg/l</u> <u>(lb/gal)</u> <u>solids</u>
A)	<u>High bake coatings – interior and exterior parts</u>		
i)	<u>Flexible primer</u>	<u>0.54</u> <u>(4.5)</u>	<u>1.39</u> <u>(11.58)</u>
ii)	<u>Non-flexible primer</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
iii)	<u>Basecoats</u>	<u>0.52</u> <u>(4.3)</u>	<u>1.24</u> <u>(10.34)</u>
iv)	<u>Clear coat</u>	<u>0.48</u> <u>(4.0)</u>	<u>1.05</u> <u>(8.76)</u>
v)	<u>Non-basecoat/clear coat</u>	<u>0.52</u> <u>(4.3)</u>	<u>1.24</u> <u>(10.34)</u>
B)	<u>Low bake/air dried coatings – exterior parts</u>		
i)	<u>Primers</u>	<u>0.58</u> <u>(4.8)</u>	<u>1.66</u> <u>(13.80)</u>
ii)	<u>Basecoat</u>	<u>0.60</u> <u>(5.0)</u>	<u>1.87</u> <u>(15.59)</u>
iii)	<u>Clear coats</u>	<u>0.54</u> <u>(4.5)</u>	<u>1.39</u> <u>(11.58)</u>
iv)	<u>Non-basecoat/clear coat</u>	<u>0.60</u> <u>(5.0)</u>	<u>1.87</u> <u>(15.59)</u>

C)	<u>Low bake/air dried coatings – interior parts</u>		
i)	<u>Color coat</u>	<u>0.38</u> <u>(3.2)</u>	<u>0.67</u> <u>(5.66)</u>
ii)	<u>Primer</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.67)</u>
D)	<u>Touchup and repair coatings</u>	<u>0.62</u> <u>(5.2)</u>	<u>2.13</u> <u>(17.72)</u>
E)	<u>Specialty</u>		
i)	<u>Vacuum metallizing basecoats, texture basecoats</u>	<u>0.66</u> <u>(5.5)</u>	<u>2.62</u> <u>(21.8)</u>
ii)	<u>Reflective argent coatings, air bag cover coatings, and soft coatings</u>	<u>0.71</u> <u>(5.9)</u>	<u>3.64</u> <u>(29.7)</u>
iii)	<u>Gloss reducers, vacuum metallizing topcoats, and texture topcoats</u>	<u>0.77</u> <u>(6.4)</u>	<u>6.06</u> <u>(49.1)</u>
iv)	<u>Stencil coats, adhesion primers, ink pad coatings, electrostatic prep coats, and resist coats</u>	<u>0.82</u> <u>(6.8)</u>	<u>(11.67)</u> <u>(89.4)</u>
v)	<u>Head lamp lens coating</u>	<u>0.89</u> <u>(7.4)</u>	
F)	<u>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.</u>		

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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

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limitations in Section 218.219, however, shall apply to such coatings unless specifically excluded in Section 218.219.

	<u>kg/l</u> <u>(lb/gal)</u> <u>coatings</u>	<u>kg/l</u> <u>(lb/gal)</u> <u>solids</u>
A) <u>Primers</u>	<u>0.14</u> <u>(1.2)</u>	<u>0.17</u> <u>(1.4)</u>
B) <u>Topcoat</u>	<u>0.35</u> <u>(2.9)</u>	<u>0.57</u> <u>(4.80)</u>
C) <u>Color coat (texture coat)</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(4.80)</u>
D) <u>Color coat (non-texture coat)</u>	<u>0.28</u> <u>(2.3)</u>	<u>0.40</u> <u>(4.80)</u>
E) <u>Texture coats other than color texture coats</u>	<u>0.35</u> <u>(2.9)</u>	<u>0.57</u> <u>(4.80)</u>
F) <u>EMI/RFI shielding coatings</u>	<u>0.48</u> <u>(4.0)</u>	<u>1.05</u> <u>(8.76)</u>
G) <u>Fog coat</u>	<u>0.26</u> <u>(2.2)</u>	<u>0.38</u> <u>(3.14)</u>
H) <u>Touchup and repair</u>	<u>0.35</u> <u>(2.9)</u>	<u>0.57</u> <u>(4.80)</u>
I) <u>Specialty coatings</u>		
i) <u>Soft coat</u>	<u>0.52</u> <u>(4.3)</u>	<u>1.24</u> <u>(10.34)</u>
ii) <u>Plating resist</u>	<u>0.71</u> <u>(5.9)</u>	<u>3.64</u> <u>(29.7)</u>
iii) <u>Plating sensitizer</u>	<u>0.85</u> <u>(7.1)</u>	<u>(23.4)</u> <u>(201.0)</u>

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5) Pleasure Craft Surface Coatings

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		<u>kg/l</u> <u>(lb/gal)</u> <u>coatings</u>	<u>kg/l</u> <u>(lb/gal)</u> <u>solids</u>
A)	<u>Extreme high gloss coating – topcoat</u>	<u>0.49</u> <u>(4.1)</u>	<u>1.10</u> <u>(9.2)</u>
B)	<u>High gloss coating – topcoat</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.7)</u>
C)	<u>Pretreatment wash primer</u>	<u>0.78</u> <u>(6.5)</u>	<u>6.67</u> <u>(55.6)</u>
D)	<u>Finish primer/surfacer</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.7)</u>
E)	<u>High build primer/surfacer</u>	<u>0.34</u> <u>(2.8)</u>	<u>0.55</u> <u>(4.6)</u>
F)	<u>Aluminum substrate antifoulant coating</u>	<u>0.56</u> <u>(4.7)</u>	<u>1.53</u> <u>(12.8)</u>
G)	<u>Other substrate antifoulant coating</u>	<u>0.33</u> <u>(2.8)</u>	<u>0.53</u> <u>(4.4)</u>
H)	<u>All other pleasure craft surface coatings for metal or plastic</u>	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> <u>(6.7)</u>

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6) Motor Vehicle Materials

		<u>kg/l</u> <u>(lb/gal)</u> <u>coatings</u>
A)	<u>Cavity wax</u>	<u>0.65</u> <u>(5.42)</u>
B)	<u>Sealer</u>	<u>0.65</u> <u>(5.42)</u>
C)	<u>Deadener</u>	<u>0.65</u> <u>(5.42)</u>

D)	<u>Gasket/gasket sealing material</u>	<u>0.20</u> <u>(1.67)</u>
E)	<u>Underbody coating</u>	<u>0.65</u> <u>(5.42)</u>
F)	<u>Trunk interior coating</u>	<u>0.65</u> <u>(5.42)</u>
G)	<u>Bedliner</u>	<u>0.20</u> <u>(1.67)</u>
H)	<u>Lubricating wax/compound</u>	<u>0.70</u> <u>(5.84)</u>

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

Section 218.205 Daily-Weighted Average Limitations

No owner or operator of a coating line subject to the limitations of Section 218.204 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), (h) ~~or (i), or (j)~~ of this Section (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(d) of this Subpart:

- a) No owner or operator of a coating line subject to only one of the limitations from among Section 218.204(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~~ owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of Section 218.204(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 218.204(j) 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

1531 content shall not exceed the coating VOM content limit corresponding to
 1532 the category of coating used; or

1533
 1534 2) For each coating line which applies coatings subject to more than one
 1535 numerical emission limitation in Section 218.204(j) of this Subpart, during
 1536 the same day, the owner or operator shall have a site-specific proposal
 1537 approved by the Agency and approved by the USEPA as a SIP revision.
 1538 To receive approval, the requirements of USEPA's Emissions Trading
 1539 Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4,
 1540 1986), must be satisfied.

1541
 1542 c) No owner or operator of a can coating line subject to the limitations of Section
 1543 218.204(b) of this Subpart shall operate the subject coating line using a coating
 1544 with a VOM content in excess of the limitations specified in Section 218.204(b)
 1545 of this Subpart unless all of the following requirements are met:

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 1547 1) An alternative daily emission limitation shall be determined for the can
 1548 coating operation, i.e., for all of the can coating lines at the source,
 1549 according to subsection (c)(2) of this Section. Actual daily emissions shall
 1550 never exceed the alternative daily emission limitation and shall be
 1551 calculated by use of the following equation.

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 1553
$$E_d = \sum_{i=1}^n V_i C_i$$

1554
 1555 where:

- 1556
- 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).

1557
 1558 2) The alternative daily emission limitation (A_d) shall be determined for the
 1559 can coating operation, i.e., for all of the can coating lines at the source, on
 1560 a daily basis as follows:
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$$A_d = \sum_{i=1}^n V_i L_i \frac{D_i - C_i}{D_i - L}$$

1562
 1563 where:
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- 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 0.882 kg 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 218.204(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).

1566
 1567 d) No owner or operator of a heavy off-highway vehicle products coating line
 1568 subject to the limitations of Section 218.204(k) of this Subpart shall apply
 1569 coatings to heavy off-highway vehicle products on the subject coating line unless
 1570 the requirements of subsection (d)(1) or (d)(2) of this Section are met.

1571
 1572 1) For each coating line which applies multiple coatings, all of which are

1573 subject to the same numerical emission limitation within Section
 1574 218.204(k) of this Subpart, during the same day (e.g., all coatings used on
 1575 the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average
 1576 VOM content shall not exceed the coating VOM content limit
 1577 corresponding to the category of coating used; or
 1578

- 1579 2) For each coating line which applies coatings subject to more than one
 1580 numerical emission limitation in Section 218.204(k) of this Subpart,
 1581 during the same day, the owner or operator shall have a site specific
 1582 proposal approved by the Agency and approved by the USEPA as a SIP
 1583 revision. To receive approval, the requirements of USEPA's Emissions
 1584 Trading Policy Statement (and related policy) 51 Fed. Reg. 43814
 1585 (December 4, 1986), must be satisfied.
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- 1587 e) No owner or operator of a wood furniture coating line subject to the limitations of
 1588 Section 218.204(l)(1) or (l)(3) of this Subpart shall apply coatings to wood
 1589 furniture on the subject coating line unless the requirements of subsection (e)(1)
 1590 or subsection (e)(2) of this Section, in addition to the requirements specified in the
 1591 note to Section 218.204(l)(1) of this Subpart, are met.
 1592

- 1593 1) For each coating line which applies multiple coatings, all of which are
 1594 subject to the same numerical emission limitation within Section
 1595 218.204(l)(1) or (l)(3) of this Subpart, during the same day (e.g., all
 1596 coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-
 1597 weighted average VOM content shall not exceed the coating VOM content
 1598 limit corresponding to the category of coating used; or
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- 1600 2) For each coating line which applies coatings subject to more than one
 1601 numerical emission limitation in Section 218.204(l)(1) or (l)(3) of this
 1602 Subpart, during the same day, the owner or operator shall have a site
 1603 specific proposal approved by the Agency and approved by the USEPA as
 1604 a SIP revision. To receive approval, the requirements of USEPA's
 1605 Emissions Trading Policy Statement (and related policy) 51 Fed. Reg.
 1606 43814 (December 4, 1986), must be satisfied.
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- 1608 f) No owner or operator of an existing diesel-electric locomotive coating line in
 1609 Cook County, subject to the limitations of Section 218.204(m) of this Subpart
 1610 shall apply coatings to diesel-electric locomotives on the subject coating line
 1611 unless the requirements of subsection (f)(1) or (f)(2) of this Section are met.
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- 1613 1) For each coating line which applies multiple coatings, all of which are
 1614 subject to the same numerical emission limitation within Section
 1615 218.204(m) of this Subpart, during the same day (e.g., all coatings used on

1616 the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average
 1617 VOM content shall not exceed the coating VOM content limit
 1618 corresponding to the category of coating used; or
 1619

1620 2) For each coating line which applies coatings subject to more than one
 1621 numerical emission limitation in Section 218.204(m) of this Subpart,
 1622 during the same day, the owner or operator shall have a site specific
 1623 proposal approved by the Agency and approved by the USEPA as a SIP
 1624 revision. To receive approval, the requirements of USEPA's Emissions
 1625 Trading Policy Statement (and related policy) must be satisfied.
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1627 g) Prior to May 1, 2011, no owner or operator of a plastic parts coating line,
 1628 subject to the limitations of Section 218.204(n) or (o) of this Subpart shall apply
 1629 coatings to business machine or automotive/transportation plastic parts on the
 1630 subject coating line unless the requirements of subsection (g)(1) or (g)(2) of this
 1631 Section are met:
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1633 1) For each coating line which applies multiple coatings, all of which are
 1634 subject to the same numerical emission limitation within Section
 1635 218.204(n) or (o) of this Subpart, during the same day (e.g., all coatings
 1636 used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted
 1637 average VOM content shall not exceed the coating VOM content limit
 1638 corresponding to the category of coating used; or
 1639

1640 2) For each coating line which applies coatings subject to more than one
 1641 numerical emission limitation in Section 218.204(n) or (o) of this Subpart,
 1642 during the same day, the owner or operator shall have a site specific
 1643 proposal approved by the Agency and approved by the USEPA as a SIP
 1644 revision. To receive approval, the requirements of USEPA's Emissions
 1645 Trading Policy Statement (and related policy) must be satisfied.
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1647 h) No owner or operator of a metal furniture coating line, subject to the limitations
 1648 of Section 218.204(g) of this Subpart shall apply coatings on the subject coating
 1649 line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met:
 1650

1651 1) For each coating line which applies multiple coatings, all of which are
 1652 subject to the same numerical emission limitation within Section
 1653 218.204(g) of this Subpart, during the same day (e.g., all coatings used on
 1654 the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average
 1655 VOM content shall not exceed the coating VOM content limit
 1656 corresponding to the category of coating used; or
 1657

1658 2) For each coating line which applies coatings subject to more than one

1659 numerical emission limitation in Section 218.204(g) of this Subpart,
 1660 during the same day, the owner or operator shall have a site specific
 1661 proposal approved by the Agency and approved by the USEPA as a SIP
 1662 revision. To receive approval, the requirements of USEPA's Emissions
 1663 Trading Policy Statement (and related policy) must be satisfied.
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1665 i) No owner or operator of a large appliance coating line, subject to the limitations
 1666 of Section 218.204(h) of this Subpart shall apply coatings on the subject coating
 1667 line unless the requirements of subsection (i)(1) or (i)(2) of this Section are met:
 1668

1669 1) For each coating line which applies multiple coatings, all of which are
 1670 subject to the same numerical emission limitation within Section
 1671 218.204(h) of this Subpart, during the same day (e.g., all coatings used on
 1672 the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average
 1673 VOM content shall not exceed the coating VOM content limit
 1674 corresponding to the category of coating used, or
 1675

1676 2) For each coating line which applies coatings subject to more than one
 1677 numerical emission limitation in Section 218.204(h) of this Subpart,
 1678 during the same day, the owner or operator shall have a site specific
 1679 proposal approved by the Agency and approved by the USEPA as a SIP
 1680 revision. To receive approval, the requirements of USEPA's Emissions
 1681 Trading Policy Statement (and related policy) must be satisfied.
 1682

1683 j) On and after May 1, 2011, no owner or operator of a miscellaneous metal parts
 1684 and products coating line, plastic parts or products coating line, pleasure craft
 1685 surface coating line, or motor vehicle materials coating line subject to the
 1686 limitations of Section 218.204(q) of this Subpart shall apply coatings on the
 1687 subject coating line unless the requirements of subsection (j)(1) or (j)(2) of this
 1688 Section are met:
 1689

1690 1) For each coating line that applies multiple coatings, all of which are
 1691 subject to the same numerical emission limitation within Section
 1692 218.204(q) of this Subpart, during the same day (e.g., all coatings used on
 1693 the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average
 1694 VOM content shall not exceed the coating VOM content limit
 1695 corresponding to the category of coating used; or
 1696

1697 2) For each coating line that applies coatings subject to more than one
 1698 numerical emission limitation in Section 218.204(q) of this Subpart,
 1699 during the same day, the owner or operator shall have a site specific
 1700 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 218.207 Alternative Emission Limitations

a) Any owner or operator of a coating line subject to Section 218.204 of this Subpart, except coating lines subject to Section 218.204(q)(6), may comply with this Section, rather than with Section 218.204 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), (j), ~~or (k)~~, or (l) 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 218.105 of this Part and the recordkeeping and reporting requirements specified in Section 218.211(e) of this Subpart; and the control device is equipped with the applicable monitoring equipment specified in Section 218.105(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)~~, or (l) of this Section may be used as an alternative to compliance with Section 218.204 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 218.204 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

- 1744 Section 218.204 of this Subpart;
 1745
 1746 B) Unless complying with an emission limitation in Section 218.204
 1747 that is already expressed in terms of weight of VOM per volume of
 1748 solids, calculate~~Calculate~~ "S" according to the equation in Section
 1749 218.206 of this Subpart;
 1750
 1751 C) Calculate the overall efficiency required according to Section
 1752 218.105(e) of this Part. For the purposes of calculating this value,
 1753 according to the equation in Section 218.105(e)(2) of this Part,
 1754 VOM₁ is equal to the value of "S" as determined above in
 1755 subsection (b)(2)(B) of this Section. If the coating line is
 1756 complying with an emission limitation in Section 218.204 of this
 1757 Subpart that is already expressed in terms of weight of VOM per
 1758 volume of solids, VOM₁ is equal to that emission limitation.
 1759
 1760 c) No owner or operator of a coating line subject to only one of the emission
 1761 limitations from among Section 218.204(a)(1)(A), (a)(1)(D)(4), (a)(2)(A),
 1762 (a)(2)(E), (a)(2)(F), (c), (d), (e), (f), or (i) of this Subpart and equipped with a
 1763 capture system and control device shall operate the subject coating line unless the
 1764 requirements in subsection (b)(1) or (b)(2) of this Section are met. No owner or
 1765 operator of a coating line subject to Section 218.204(a)(1)(B)(2), ~~or~~
 1766 ~~218.204(a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(D)~~ and equipped with a
 1767 capture system and control device shall operate the coating line unless the owner
 1768 or operator demonstrates compliance with such limitation in accordance with the
 1769 topcoat protocol referenced in Section 218.105(b)(1)(A) or (b)(1)(B), as
 1770 applicable.
 1771
 1772 d) No owner or operator of a miscellaneous metal parts and products coating line
 1773 thatwhich applies one or more coatings during the same day, all of which are
 1774 subject to the same numerical emission limitation within Section 218.204(j) of
 1775 this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 (3.5
 1776 lbs/gal)), and thatwhich is equipped with a capture system and control device
 1777 shall operate the subject coating line unless the requirements in subsection (b)(1)
 1778 or (b)(2) of this Section are met.
 1779
 1780 e) No owner or operator of a heavy off-highway vehicle products coating line
 1781 thatwhich applies one or more coatings during the same day, all of which are
 1782 subject to the same numerical emission limitation within Section 218.204(k) of
 1783 this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 (3.5
 1784 lbs/gal)), and thatwhich is equipped with a capture system and control device
 1785 shall operate the subject coating line unless the requirements in subsection (b)(1)
 1786 or (b)(2) of this Section are met.

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- f) No owner or operator of an existing diesel-electric locomotive coating line in Cook County ~~that~~which applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(m) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 ({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.

- g) 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 218.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/1 ({5.6 lbs/gal})), and ~~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 218.204(l) of this Subpart must also be met.

- h) No owner or operator of a can coating line ~~that~~which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (h)(1) or (h)(2) of this Section are met.
 - 1) An alternative daily emission limitation shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, according to Section 218.205(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;

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V_i = Volume of each coating as 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); 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.

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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.

i) No owner or operator of a plastic parts coating line ~~thatwhich~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(n) or (o) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l ({3.5 lbs/gal})), and ~~thatwhich~~ 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 metal furniture coating line ~~thatwhich~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(g) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l ({2.8 lbs/gal})), and ~~thatwhich~~ 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) No owner or operator of a large appliance coating line ~~thatwhich~~ applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(h) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l ({2.8 lbs/gal})), and ~~thatwhich~~ 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.

l) 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

1849 surface coating line that is equipped with a capture system and control device
 1850 shall operate the subject coating line unless:

- 1851
- 1852 1) The capture system and control device provide at least 90 percent
 1853 reduction in the overall emissions of VOM from the coating line; or
- 1854
- 1855 2) The owner or operator of the coating line complies with all requirements
 1856 set forth in subsection (b)(2) of this Section.

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1858 (Source: Amended at 34 Ill. Reg. _____, effective _____)

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1860 **Section 218.208 Exemptions from Emission Limitations**

1861

1862 a) Exemptions for all coating categories except wood furniture coating. The
 1863 limitations of this Subpart shall not apply to coating lines within a source, that
 1864 otherwise would be subject to the same subsection of Section 218.204 (because
 1865 they belong to the same coating category, e.g., can coating), provided that
 1866 combined actual emissions of VOM from all lines at the source subject to that
 1867 subsection never exceed 6.8 kg/day ({15 lbs/day}) before the application of
 1868 capture systems and control devices. (For example, can coating lines within a
 1869 source would not be subject to the limitations of Section 218.204(b) of this
 1870 Subpart if the combined actual emissions of VOM from the can coating lines
 1871 never exceed 6.8 kg/day ({15 lbs/day}) before the application of capture systems
 1872 and control devices.) Prior to May 1, 2011, volatile-Volatile organic material
 1873 emissions from heavy off-highway vehicle products coating lines must be
 1874 combined with VOM emissions from miscellaneous metal parts and products
 1875 coating lines to determine applicability. On and after May 1, 2011, VOM
 1876 emissions from heavy off-highway vehicle products coating lines shall be
 1877 combined with VOM emissions from miscellaneous metal parts and products
 1878 coating lines and plastic parts and products coating lines to determine
 1879 applicability. Any owner or operator of a coating source shall comply with the
 1880 applicable coating analysis test methods and procedures specified in Section
 1881 218.105(a) of this Part and the recordkeeping and reporting requirements
 1882 specified in Section 218.211(a) of this Subpart if total VOM emissions from the
 1883 subject coating lines are always less than or equal to 6.8 kg/day ({15 lbs/day})
 1884 before the application of capture systems and control devices and, therefore, are
 1885 not subject to the limitations of Section 218.204 of this Subpart. Once a category
 1886 of coating lines at a source is subject to the limitations in Section 218.204 of this
 1887 Subpart the coating lines are always subject to the limitations in Section 218.204
 1888 of this Subpart.

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1890 b) Applicability for wood furniture coating

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- 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 218.204(l) of this Subpart), H (excluding Section 218.405 of this Part), Q, R, S, T (excluding Section 218.486 of this Part), V, X, Y, 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 218.204(l) of this Subpart), H, Q, R, S, T (excluding Section 218.486 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 218.204(l) of this Subpart shall continue to apply to any wood furniture coating line which was ever subject to the limitations of Section 218.204(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

- 1935 covered by an exemption in the Subpart or the applicability criteria of the
 1936 Subpart are not met.
 1937
 1938 5) Any owner or operator of a wood furniture coating line to which the
 1939 limitations of this Subpart are not applicable due to the criteria in
 1940 subsection (b) of this Section shall, upon request by the Agency or the
 1941 USEPA, submit records to the Agency and the USEPA within 30 calendar
 1942 days from the date of the request that document that the coating line is
 1943 exempt from the limitations of this Subpart.
 1944
 1945 c) On and after March 15, 1996, the limitations of this Subpart shall not apply to
 1946 touch-up and repair coatings used by a coating source described by subsections
 1947 218.204(b), (d), (f), (g), and (i), (j), (n) and (o) of this Subpart; provided that the
 1948 source-wide volume of such coatings used does not exceed 0.95 l (1 quart) per
 1949 eight-hour period or exceed 209 l/yr ~~{55 gal/yr}~~ for any rolling twelve month
 1950 period. Recordkeeping and reporting for touch-up and repair coatings shall be
 1951 consistent with subsection ~~(e)~~ of this Section.
 1952
 1953 d) Prior to May 1, 2011, the limitations of this Subpart shall not apply to touch-up
 1954 and repair coatings used by a coating source described by subsections 218.204(j),
 1955 (n), and (o) of this Subpart, provided that the source-wide volume of the coatings
 1956 used does not exceed 0.95 l (1 quart) per eight-hour period or exceed 209 l/yr (55
 1957 gal/yr) for any rolling 12 month period. Recordkeeping and reporting for touch-
 1958 up and repair coatings shall be consistent with subsection (e) of this Section.
 1959
 1960 ~~(e)~~) On and after March 15, 1996, the owner or operator of a coating line or a group of
 1961 coating lines using touch-up and repair coatings that are exempted from the
 1962 limitations of Section 218.204(b), (d), (f), (g), (i), (j), (n) and (o) of this Subpart
 1963 because of the provisions of Section 218.208(c) or (d) of this Subpart shall:
 1964
 1965 1) Collect and record the name, identification number, and volume used of
 1966 each touch-up and repair coating, as applied on each coating line, per
 1967 eight-hour period and per month;
 1968
 1969 2) Perform calculations on a daily basis, and maintain at the source records
 1970 of such calculations, of the combined volume of touch-up and repair
 1971 coatings used source-wide for each eight-hour period;
 1972
 1973 3) Perform calculations on a monthly basis, and maintain at the source
 1974 records of such calculations, of the combined volume of touch-up and
 1975 repair coatings used source-wide for the month and the rolling twelve
 1976 month period;
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- 4) Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to subsections (e)(1) and (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 (1 quart) per eight-hour period or exceeds 209 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 218.208, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

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

Section 218.210 Compliance Schedule

Every owner or operator of a coating line (of a type included within Section 218.204 of this Subpart) shall comply with the requirements of Section 218.204, 218.205, 218.207 or 218.208 and Section 218.211 or Sections 218.212 and 218.213 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 ~~that which~~ is exempt from the limitations of Section 218.204 of this Subpart because of the criteria in Section 218.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.211(b) of this Subpart.
- b) No owner or operator of a coating line complying by means of Section 218.204 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.204 and 218.211(c) of this Subpart.
- c) No owner or operator of a coating line complying by means of Section 218.205 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.205 and 218.211(d) of this Subpart.

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- d) No owner or operator of a coating line complying by means of Section 218.207 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.207 and 218.211(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 218.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 218.204, 218.205 or 218.207 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 218.204, or the alternative control options in Section 218.205 or 218.207 and the requirements of Section 218.211.
 - f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 218.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 218.212 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 218.212 and 218.213 of this Subpart.
 - g) No owner or operator of a coating line subject to the emission limitations in Section 218.204(a)(2) or (q) of this Subpart, or subject to the limitations in Section 218.219 of this Subpart, shall operate the coating line on or after a date consistent with Section 218.106(e) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.204(a)(2) or (q), if applicable, or the alternative control options in Section 218.205 or 218.207, and all applicable requirements in Sections 218.211 and 218.219 of this Subpart.

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

2051
 2052 **Section 218.211 Recordkeeping and Reporting**
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- 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 218.105 of this Part to establish the records required under this Section.
 - b) Any owner or operator of a coating line ~~that~~^{which} is exempted from the limitations of Section 218.204 of this Subpart because of Section 218.208(a) or (b) of this Subpart shall comply with the following:
 - 1) For sources exempt under Section 218.208(a) of this Subpart, by a date

2064 consistent with Section 218.106 of this Part, the owner or operator of a
 2065 coating line or a group of coating lines referenced in subsection (b) of this
 2066 Section shall certify to the Agency that the coating line or group of coating
 2067 lines is exempt under the provisions of Section 218.208(a) of this Subpart.
 2068 Such certification shall include:

- 2070 A) A declaration that the coating line or group of coating lines is
 2071 exempt from the limitations of Section 218.204 of this Subpart
 2072 because of Section 218.208(a) of this Subpart; and
 2073
 2074 B) Calculations ~~that~~which demonstrate that the combined VOM
 2075 emissions from the coating lines or group of coating lines never
 2076 exceed 6.8 kg (15 lbs) per day before the application of capture
 2077 systems and control devices. The following equation shall be used
 2078 to calculate total VOM emissions:
 2079

2080
$$T_e = \sum_{j=1}^m \sum_{i=1}^n (A_i B_i)_j$$

2081 where:
 2082
 2083

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 218.104 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.

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- 2) For sources exempt under Section 218.208(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 218.208(b) of this Subpart. Such certification shall include:
 - A) A declaration that the source is exempt from the limitations of Section 218.204(l) of this Subpart because of Section 218.208(b) of this Subpart; and
 - B) Calculations ~~that~~which demonstrate that the source meets the criteria for exemption because of Section 218.208(b) of this Subpart.
 - 3) For sources exempt under Section 218.208(a) of this Subpart, on and after a date consistent with Section 218.106 of this Part, 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 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 218.208(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

- 2121 each coating line; and
 2122
 2123 B) The weight of VOM per volume and the volume of each coating
 2124 (minus water and any compounds which are specifically exempted
 2125 from the definition of VOM) as applied on each coating line on a
 2126 monthly basis.
 2127
 2128 5) On and after a date consistent with Section 218.106 of this Part, the owner
 2129 or operator of a coating line or group of coating lines exempted from the
 2130 limitations of Section 218.204 of this Subpart because of Section
 2131 218.208(a) of this Subpart shall notify the Agency of any record showing
 2132 that total VOM emissions from the coating line or group of coating lines
 2133 exceed 6.8 kg (15 lbs) in any day before the application of capture systems
 2134 and control devices by sending a copy of such record to the Agency within
 2135 30 days after the exceedance occurs.
 2136
 2137 6) On and after March 15, 1998, any owner or operator of a source exempt
 2138 from the limitations of Section 218.204(l) of this Subpart because of
 2139 Section 218.208(b) of this Subpart shall notify the Agency if the source's
 2140 VOM emissions exceed the limitations of Section 218.208(b) of this
 2141 Subpart by sending a copy of calculations showing such an exceedance
 2142 within 30 days after the change occurs.
 2143
 2144 c) Any owner or operator of a coating line subject to the limitations of Section
 2145 218.204 of this Subpart other than Section 218.204(a)(1)(B)(2), ~~or (a)(1)(C)(3),~~
 2146 (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and complying by means of
 2147 Section 218.204 of this Subpart shall comply with the following:
 2148
 2149 1) By a date consistent with Section 218.106 of this Part, or upon initial start-
 2150 up of a new coating line, or upon changing the method of compliance from
 2151 an existing subject coating line from Section 218.205, Section 218.207,
 2152 Section 218.215, or Section 218.216 of this Subpart to Section 218.204 of
 2153 this Subpart; the owner or operator of a subject coating line shall certify to
 2154 the Agency that the coating line will be in compliance with Section
 2155 218.204 of this Subpart on and after a date consistent with Section
 2156 218.106 of this Part, or on and after the initial start-up date. ~~The Such~~
 2157 certification shall include:
 2158
 2159 A) The name and identification number of each coating as applied on
 2160 each coating line;
 2161
 2162 B) The weight of VOM per volume of each coating (minus water and
 2163 any compounds which are specifically exempted from the

- 2164 definition of VOM) as applied each day on each coating line; ~~and~~
2165
2166 C) On and after March 15, 1998, for coating lines subject to the
2167 limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the
2168 weight of VOM per weight of solids in each coating as applied
2169 each day on each coating line;-
2170
2171 D) For coating lines subject to the limitations of Section
2172 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume
2173 of solids in each coating as applied each day on each coating line,
2174 and the solids turnover ratio of the EDP operation, with supporting
2175 calculations;
2176
2177 E) For coating lines subject to the limitations of Section
2178 218.204(a)(2)(E), the weight of VOM per volume of each coating
2179 as applied each day on each coating line, calculated on an
2180 occurrence weighted average basis;
2181
2182 F) For coating lines subject to the limitations of Section 218.204(q) of
2183 this Subpart, the weight of VOM per volume of each coating, or
2184 the weight of VOM per volume of solids in each coating, as
2185 applicable, as applied each day on each coating line;
2186
2187 2) On and after a date consistent with Section 218.106 of this Part, or on and
2188 after the initial start-up date, the owner or operator of a subject coating
2189 line shall collect and record all of the following information each day,
2190 unless otherwise specified, for each coating line and maintain the
2191 information at the source for a period of three years:
2192
2193 A) The name and identification number of each coating as applied on
2194 each coating line;
2195
2196 B) The weight of VOM per volume of each coating (minus water and
2197 any compounds which are specifically exempted from the
2198 definition of VOM) as applied each day on each coating line;
2199
2200 C) On and after March 15, 1998, for coating lines subject to the
2201 limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the
2202 weight of VOM per weight of solids in each coating as applied
2203 each day on each coating line and certified product data sheets for
2204 each coating; ~~and~~
2205
2206 D) On and after March 15, 1998, for wood furniture coating spray

2207 booths subject to the limitations of Section 218.204(l)(4)(A) of this
2208 Subpart, the weight of VOM per weight of solids in each strippable
2209 spray booth coating as applied each day on each spray booth and
2210 certified product data sheets for each coating;:-

2211
2212 E) For coating lines subject to the limitations of Section
2213 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume
2214 of solids in each coating as applied each day on each coating line,
2215 certified product data sheets for each coating, and the solid
2216 turnover ratio for the EDP operation, calculated on a calendar
2217 monthly basis, with supporting calculations;

2218
2219 F) For coating lines subject to the limitations of Section
2220 218.204(a)(2)(E), the weight of VOM per volume of each coating
2221 as applied each day on each coating line, calculated on an
2222 occurrence weighted average basis, and certified product data
2223 sheets for each coating;

2224
2225 G) For coating lines subject to the limitations of Section 218.204(q) of
2226 this Subpart, the weight of VOM per volume of each coating, or
2227 the weight of VOM per volume of solids in each coating, as
2228 applicable, as applied each day on each coating line, and certified
2229 product data sheets for each coating;

2230
2231 3) On and after a date consistent with Section 218.106 of this Part, the owner
2232 or operator of a subject coating line shall notify the Agency in the
2233 following instances:

2234
2235 A) Any record showing violation of Section 218.204 of this Subpart
2236 shall be reported by sending a copy of such record to the Agency
2237 within 30 days following the ~~occurrence~~ occurrence of the
2238 violation.

2239
2240 B) At least 30 calendar days before changing the method of
2241 compliance from Section 218.204 of this Subpart to Section
2242 218.205 or Section 218.207 of this Subpart, the owner or operator
2243 shall comply with all requirements of subsection (d)(1) or (e)(1) of
2244 this Section ~~below~~, respectively. Upon changing the method of
2245 compliance from Section 218.204 of this Subpart to Section
2246 218.205 of this Subpart or Section 218.207 of this Subpart, the
2247 owner or operator shall comply with all requirements of subsection
2248 (d) or (e) of this Section, respectively.

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- d) Any owner or operator of a coating line subject to the limitations of Section 218.204 of this Subpart and complying by means of Section 218.205 of this Subpart shall comply with the following:
- 1) By a date consistent with Section 218.106 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 218.204 or Section 218.207 of this Subpart to Section 218.205 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 218.205 of this Subpart on and after a date consistent with Section 218.106 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 218.205 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 218.204(1)(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 218.204(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 218.204(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

- 2293 maintain records each day as required in subsection (d)(2) of this
2294 Section.
2295
- 2296 IG) An example of the format in which the records required in
2297 subsection (d)(2) of this Section will be kept.
2298
- 2299 2) On and after a date consistent with Section 218.106 of this Part, or on and
2300 after the initial start-up date, the owner or operator of a subject coating
2301 line shall collect and record all of the following information each day for
2302 each coating line and maintain the information at the source for a period of
2303 three years:
2304
- 2305 A) The name and identification number of each coating as applied on
2306 each coating line.
2307
- 2308 B) The weight of VOM per volume and the volume of each coating
2309 (minus water and any compounds which are specifically exempted
2310 from the definition of VOM) as applied each day on each coating
2311 line.
2312
- 2313 C) On and after March 15, 1998, for coating lines subject to the
2314 limitations of Section 218.204(1)(2)(A) or (B) of this Subpart, the
2315 weight of VOM per weight of solids in each coating as applied
2316 each day on each coating line.
2317
- 2318 D) For coating lines subject to the limitations of Section
2319 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume
2320 of solids in each coating as applied each day on each coating line.
2321
- 2322 E) For coating lines subject to the limitations of Section 218.204(q) of
2323 this Subpart, the weight of VOM per volume of each coating, or
2324 the weight of VOM per volume of solids in each coating, as
2325 applicable, as applied each day on each coating line.
2326
- 2327 F~~D~~) The daily-weighted average VOM content of all coatings as
2328 applied on each coating line as defined in Section 218.104 of this
2329 Part.
2330
- 2331 3) On and after a date consistent with Section 218.106 of this Part, the owner
2332 or operator of a subject coating line shall notify the Agency in the
2333 following instances:
2334
- 2335 A) Any record showing violation of Section 218.205 of this Subpart

2336 shall be reported by sending a copy of such record to the Agency
 2337 within 30 days following the occurrence of the violation.
 2338

2339 B) At least 30 calendar days before changing the method of
 2340 compliance with this Subpart from Section 218.205 of this Subpart
 2341 to Section 218.204 or Section 218.207 of this Subpart, the owner
 2342 or operator shall comply with all requirements of subsection (c)(1)
 2343 or (e)(1) of this Section, respectively. Upon changing the method
 2344 of compliance with this subpart from Section 218.205 to Section
 2345 218.204 or Section 218.207 of this Subpart, the owner or operator
 2346 shall comply with all requirements of subsection (c) or (e) of this
 2347 Section, respectively.
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2349 e) Any owner or operator of a coating line subject to the limitations of Section
 2350 218.207 of this Subpart and complying by means of Section 218.207(c), (d), (e),
 2351 (f), (g), ~~or (h)~~, or (l) of this Subpart shall comply with the following:
 2352

2353 1) By a date consistent with Section 218.106 of this Part, or upon initial start-
 2354 up of a new coating line, or upon changing the method of compliance for
 2355 an existing coating line from Section 218.204 or Section 218.205 of this
 2356 Subpart to Section 218.207 of this Subpart, the owner or operator of the
 2357 subject coating line shall perform all tests and submit to the Agency the
 2358 results of all tests and calculations necessary to demonstrate that the
 2359 subject coating line will be in compliance with Section 218.207 of this
 2360 Subpart on and after a date consistent with Section 218.106 of this Part, or
 2361 on and after the initial start-up date.
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2363 2) On and after a date consistent with Section 218.106 of this Part, or on and
 2364 after the initial start-up date, the owner or operator of a subject coating
 2365 line shall collect and record all of the following information each day for
 2366 each coating line and maintain the information at the source for a period of
 2367 three years:
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2369 A) The weight of VOM per volume of coating solids as applied each
 2370 day on each coating line, if complying pursuant to Section
 2371 218.207(b)(2) of this Subpart.
 2372

2373 B) Control device monitoring data.
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2375 C) A log of operating time for the capture system, control device,
 2376 monitoring equipment and the associated coating line.
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2378 D) A maintenance log for the capture system, control device and

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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 218.106 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 218.207 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 218.207 of this Subpart to Section 218.204 or Section 218.205 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~~subpart from Section 218.207 of this Subpart to Section 218.204 or Section 218.205 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 218.204(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 218.106 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 218.204 of this Subpart on and after a date consistent with Section 218.106 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 218.204(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.

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- 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) of this Sectionbelow.
 - H) An example format for presenting the records required in subsection (f)(2) of this Sectionbelow.
- 2) On and after a date consistent with Section 218.106 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 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 218.204(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.

- 2465 B) If a control ~~device or devices are~~ ~~device(s)~~ is used to control VOM
 2466 emissions, control device monitoring data; a log of operating time
 2467 for the capture system, control device, monitoring equipment and
 2468 the associated coating operation; and a maintenance log for the
 2469 capture system, control device and monitoring equipment,
 2470 detailing all routine and non-routine maintenance performed
 2471 including dates and duration of any outages.
 2472
- 2473 3) On and after a date consistent with Section 218.106 of this Part or on and
 2474 after the initial start-up date, the owner or operator of a subject coating
 2475 operation shall determine and record the daily VOM emissions in kg (lbs)
 2476 per 1 (gal) of coating solids deposited in accordance with the proposal
 2477 submitted and approved pursuant to Section 218.204(a)(1)(B), (a)(1)(C),
 2478 (a)(2)(B), (a)(2)(C), or (a)(2)(D) ~~(a)(2) or (a)(3)~~ of this Subpart within 10
 2479 days from the end of the month and maintain this information at the source
 2480 for a period of three years.
 2481
- 2482 4) On and after a date consistent with Section 218.106 of this Part, the owner
 2483 or operator of a subject coating operation shall notify the Agency in the
 2484 following instances:
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- 2486 A) Any record showing a violation of Section 218.204(a)(1)(B),
 2487 (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) ~~(a)(2) or (a)(3)~~ of this
 2488 Subpart shall be reported by sending a copy of such record to the
 2489 Agency within 15 days from the end of the month in which the
 2490 violation occurred.
 2491
- 2492 B) The owner or operator shall notify the Agency of any change to the
 2493 operation at least 30 days before the change is effected. The
 2494 Agency shall determine whether or not compliance testing is
 2495 required. If the Agency determines that compliance testing is
 2496 required, then the owner or operator shall submit a testing proposal
 2497 to the Agency within 30 days and test within 30 days of the
 2498 approval of the proposal by the Agency and USEPA.
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- 2500 g) On and after a date consistent with Section 218.106 of this Part, or on and after
 2501 the initial start-up date, whichever is later, the owner or operator of a coating line
 2502 subject to the requirements of Section 218.219 of this Subpart shall comply with
 2503 the following:
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- 2505 1) By May 1, 2011, or upon initial start-up, whichever is later, submit a
 2506 certification to the Agency that includes:
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- 2508 A) A description of the practices and procedures that the source will
- 2509 follow to ensure compliance with the applicable requirements in
- 2510 Section 218.219 of this Subpart;
- 2511
- 2512 B) For sources subject to Section 218.219(a)(6), the work practices
- 2513 plan specified in that Section;
- 2514
- 2515 C) For sources subject to Section 218.219(b)(6), the application
- 2516 methods used to apply coatings on the subject coating line;
- 2517
- 2518 2) Notify the Agency of any violation of Section 218.219 of this Subpart by
- 2519 providing a description of the violation and copies of records documenting
- 2520 the violation to the Agency within 30 days following the occurrence of the
- 2521 violation; and
- 2522
- 2523 3) Maintain at the source all records required by this subsection (g) for a
- 2524 minimum of three years from the date the document was created and make
- 2525 those records available to the Agency upon request.
- 2526

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

Section 218.212 Cross-Line Averaging to Establish Compliance for Coating Lines

- 2531 a) On and after March 15, 1996, any owner or operator of a coating line subject to
- 2532 the limitations set forth in Section 218.204 of this Subpart, except coating lines
- 2533 subject to the limitations in Section 218.204(a)(2) or (q) of this Subpart, and with
- 2534 coating lines in operation prior to January 1, 1991 ("pre-existing coating lines"),
- 2535 may, for pre-existing coating lines only, elect to comply with the requirements of
- 2536 this Section, rather than complying with the applicable emission limitations set
- 2537 forth in Section 218.204, if an operational change of the type described below has
- 2538 been made after January 1, 1991, to one or more pre-existing coating lines at the
- 2539 source. An operational change occurs when a pre-existing coating line is replaced
- 2540 with a line using lower VOM coating for the same purpose as the replaced line
- 2541 ("replacement line"). A source electing to rely on this Section to demonstrate
- 2542 compliance with the requirements of this Subpart shall operate pursuant to
- 2543 federally enforceable permit conditions approved by the Agency and USEPA.
- 2544
- 2545 b) An owner or operator of pre-existing coating lines subject to a VOM content
- 2546 limitation in Section 218.204 of this Subpart and electing to rely on this Section to
- 2547 demonstrate compliance with this Subpart must establish, by use of the equations
- 2548 in subsection (d) of this Section, that the calculated actual daily VOM emissions
- 2549 from all participating coating lines, as defined in this subsection below, are less
- 2550 than the calculated daily allowable VOM emissions from the same group of

2551 coating lines. For any pre-existing coating line to be aggregated for the purposes
 2552 of Section 218.212, 218.213, or 218.214 of this Subpart ("participating coating
 2553 lines"), the source must establish that:
 2554

- 2555 1) All coatings applied on the participating coating line shall, at all times,
 2556 have a VOM content less than or equal to the applicable VOM content
 2557 limitation for such coating listed in Appendix H of this Part; and
 2558
- 2559 2) On the date the source elects to rely on this Section to demonstrate
 2560 compliance with this Subpart, all coatings applied on the participating
 2561 coating line are not already in compliance with the VOM content
 2562 limitation for such coating effective on or after March 15, 1996; or the
 2563 participating coating line is a replacement line, as defined in subsection (a)
 2564 of this Section with an operational change occurring on or after January 1,
 2565 1991.
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2567 c) Notwithstanding subsection (a) of this Section, any owner or operator of a coating
 2568 line subject to the limitations set forth in Section 218.204 of this Subpart and
 2569 electing to rely on this Section to demonstrate compliance with this Subpart, may
 2570 also include as a participating coating line, until December 31, 1999, only, any
 2571 replacement line that satisfies all of the following conditions:
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- 2573 1) The replacement line is operated as a powder coating line;
- 2574 2) The replacement line was added after July 1, 1988; and
- 2575 3) The owner or operator also includes as a participating coating line one or
 2576 more coating lines that satisfy the criteria of a replacement line, as
 2577 described in subsection (a) of this Section.
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2581 d) To demonstrate compliance with this Section, a source shall establish the
 2582 following:
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- 2584 1) An alternative daily emission limitation shall be determined for all
 2585 participating coating lines at the source according to subsection (d)(2) of
 2586 this Section. All participating coating lines shall be factored in each day
 2587 to demonstrate compliance. Provided compliance is established pursuant
 2588 to the requirements in this subsection, nothing in this Section requires
 2589 daily operation of each participating line. Actual daily emissions from all
 2590 participating coating lines (E_d) shall never exceed the alternative daily
 2591 emission limitation (A_d) and shall be calculated by use of the following
 2592 equation:
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$$E_d = \sum_{i=1}^n V_i C_i$$

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 l/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/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

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- 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)(2)(A) and (d)(2)(B) of this Section.

- 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:

$$A_l = \sum_{i=1}^n V_i L_i \frac{D_i - C_i}{D_i - L_i}$$

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where:

- A_i = 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 in the participating coating lines;
- 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);
- D_i = The density of VOM in each coating applied. For the purposes of calculating A_i , the density is 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM);
- V_i = Volume of each 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); and
- L_i = The VOM emission limitation for each coating applied, as specified in Section 218.204 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).

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B) The portion of the alternative daily emission limitation for coating operations at a source using powdered coating (A_p) shall be determined for all such participating powder coating lines at the source on a daily basis as follows:

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$$A_p = \sum_{h=1}^m \sum_{j=1}^n \frac{V_j L_j D_j K_h}{D_j - L_j}$$

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/l VOM (7.36 lbs VOM/gal VOM);
- V_j = Volume of each powder coating consumed for the day in units of l (gal) of coating; and
- L_j = The VOM emission limitation for each coating applied, as specified in Section 218.204 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); 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 218.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid and powder. Test methods and recordkeeping requirements shall be approved by the Agency and USEPA and shall be 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.

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

Section 218.219 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 218.204(a)(2) of this Subpart shall:

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- 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 218.204(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 III of 40 CFR 63, incorporated by reference in Section 218.112 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 218.204(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;

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- 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

2721 H) Another coating application method capable of achieving a transfer
2722 efficiency equal to or better than that achieved by HVLP spraying,
2723 if the method is approved in writing by the Agency.
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2725 c) Notwithstanding subsection (b) of this Section, the application method limitations
2726 in subsection (b)(6) shall not apply to the following:
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2728 1) Coating lines complying with Section 218.207(l)(1);
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2730 2) For metal parts and products coating operations: touch-up coatings, repair
2731 coatings, textured finishes, stencil coatings, safety-indicating coatings,
2732 solid-film lubricants, electric-insulating and thermal-conducting coatings,
2733 magnetic data storage disk coatings, and plastic extruded onto metal parts
2734 to form a coating;
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2736 3) For pleasure craft surface coating operations: extreme high gloss coatings;
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2738 4) For plastic parts and products coating operations: airbrush operations
2739 using 18.9 liters (5 gallons) or less of coating per year.
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2741 (Source: Added at 34 Ill. Reg. _____, effective _____)
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2743 SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS

2744 Section 218.890 Applicability

2745 a) Except as provided in subsection (b) of this Section, on and after May 1, 2011, the
2746 requirements of this Subpart shall apply to the owners or operators of sources that
2747 manufacture hulls or decks of boats from fiberglass, or that build molds to make
2748 hulls or decks of boats from fiberglass, and that emit 6.8 kg/day (15 lbs/day) or
2749 more of VOM, calculated in accordance with Section 218.894(a)(1)(B), from
2750 open molding resin and gel coat operations, resin and gel coat mixing operations,
2751 and resin and gel coat application equipment cleaning operations, in the absence
2752 of air pollution control equipment. If a source is subject to this Subpart based
2753 upon such criteria, the limitations of this Subpart shall apply to the manufacture of
2754 all fiberglass boat parts at the source.
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2756 b) Notwithstanding subsection (a) of this Section, the requirements of this Subpart
2757 shall not apply to the following:
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2759 1) Surface coatings applied to fiberglass boats;
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- 2763 2) Industrial adhesives used in the assembly of fiberglass boats. Polyester
 2764 resin putties used to assemble fiberglass parts shall not be considered
 2765 industrial adhesives for purposes of this exclusion;
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- 2767 3) Closed molding operations.
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- 2769 c) If a source is or becomes subject to one or more of the limitations in this Subpart,
 2770 the source is always subject to the applicable provisions of this Subpart.
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- 2772 d) The owner or operator of a source exempt from the limitations of this Subpart
 2773 because of the criteria in this Section is subject to the recordkeeping and reporting
 2774 requirements specified in Section 218.894(a) of this Subpart.
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2776 (Source: Added at 34 Ill. Reg. _____, effective _____)
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2778 **Section 219.891 Emission Limitations and Control Requirements**
 2779

- 2780 a) Except as provided in subsection (f) of this Section, no owner or operator of a
 2781 source subject to the requirements of this Subpart shall use a subject resin or gel
 2782 coat at the source unless the resin and gel coat comply with subsection (b)(1) or
 2783 (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of
 2784 this Section. For sources complying pursuant to subsection (b) or (c) of this
 2785 Section, if the non-monomer VOM content of a resin or gel coat exceeds 5
 2786 percent, by weight, the excess non-monomer VOM shall be added to the
 2787 monomer VOM content of the resin or gel coat in accordance with the equation
 2788 below:
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$$\frac{\text{Weighted Average Monomer VOM Content}}{=} = \frac{\sum_{i=1}^n M_i VOM_i}{\sum_{i=1}^n M_i} + \frac{\sum_{i=1}^n M_i VOM_{nm} - \sum_{i=1}^n 0.05 * M_i}{\sum_{i=1}^n M_i}$$

2791 where:
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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.

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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)

<u>A)</u>	<u>Production resin</u>	
	i) <u>Atomized spray</u>	<u>28</u>
	ii) <u>Non-atomized</u>	<u>35</u>
<u>B)</u>	<u>Pigmented gel coat</u>	<u>33</u>
<u>C)</u>	<u>Clear gel coat</u>	<u>48</u>
<u>D)</u>	<u>Tooling resin</u>	
	i) <u>Atomized</u>	<u>30</u>
	ii) <u>Non-atomized</u>	<u>39</u>
<u>E)</u>	<u>Tooling gel coat</u>	<u>40</u>

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- 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-

2806 month rolling average basis. Equation 1 below shall be used to determine
 2807 the weighted average monomer VOM content for resin and gel coat
 2808 materials.

2809
 2810 Equation 1:
 2811

$$\frac{\text{Weighted Average Monomer VOM Content}}{\text{Content}} = \frac{\sum_{i=1}^n M_i VOM_i}{\sum_{i=1}^n M_i}$$

2812
 2813 where:
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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.

2815
 2816 c) Emissions Averaging Alternative. The owner or operator of a source subject to
 2817 the requirements of this Subpart may elect to include some or all of the subject
 2818 resin and gel coat operations at the source in the emissions averaging alternative.
 2819 Resin and gel coat operations utilizing the emissions averaging alternative shall
 2820 comply with a source-specific monomer VOM mass emission limit on a 12-month
 2821 rolling average basis, calculated at the end of each calendar month. All subject
 2822 resin and gel coat operations that do not utilize the emissions averaging
 2823 alternative shall comply with the requirements in subsection (b) or (d) of this
 2824 Section, as well as with all other applicable requirements in this Section.

2825
 2826 1) The owner or operator of a source subject to this subsection (c) shall use
 2827 Equation 2 to determine the source-specific monomer VOM mass
 2828 emission limit for resin and gel coats included in the emissions average:

2829
 2830 Equation 2:
 2831

$$\text{Monomer VOM Limit} = \frac{46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})}{\text{Content}}$$

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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.

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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:

$$\frac{\text{Monomer VOM Emissions}}{\text{Emissions}} = \frac{(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG})}{(PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})}$$

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2851

where:

- Monomer VOM Emissions \equiv Monomer VOM emissions calculated using the monomer VOM emission equations for each operation included in the average, expressed in kilograms;
- PV_R \equiv 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 \equiv Mass of production resin used in the past 12 months, expressed in Mg;
- PV_{PG} \equiv 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} \equiv Mass of pigmented gel coat used in the past 12 months, expressed in Mg;
- PV_{CG} \equiv 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} \equiv Mass of clear gel coat used in the past 12 months, expressed in Mg;
- PV_{TR} \equiv 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} \equiv Mass of tooling resin used in the past 12 months, expressed in Mg;
- PV_{TG} \equiv 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} \equiv Mass of tooling gel coat used in the past 12 months, expressed in Mg.

2852

2853 3) For purposes of Equation 3, the owner or operator of a source subject to
 2854 this subsection (c) shall use Equation 4 to calculate the weighted-average
 2855 monomer VOM emission rate for the previous 12 months for each resin
 2856 and gel coat operation included in the emissions average, except as
 2857 provided in subsection (e) of this Section.

2858
 2859 Equation 4:
 2860

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$$PV_{OP} = \frac{\sum_{i=1}^n M_i PV_i}{\sum_{i=1}^n M_i}$$

2862
 2863 where:
 2864

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.

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 2866 4) For purposes of Equation 4 and subsection (e)(3) of this Section, the
 2867 following monomer VOM emission rate formulas shall apply:
 2868

- 2869 A) Production resin, tooling resin:
- 2870
- 2871 i) Atomized: $0.014 \times (\text{Resin VOM}\%)^{2.425}$
- 2872
- 2873 ii) Atomized, plus vacuum bagging with roll-out: $0.01185 \times$
- 2874 $(\text{Resin VOM}\%)^{2.425}$
- 2875
- 2876 iii) Atomized, plus vacuum bagging without roll-out: 0.00945
- 2877 $\times (\text{Resin VOM}\%)^{2.425}$
- 2878
- 2879 iv) Nonatomized: $0.014 \times (\text{Resin VOM}\%)^{2.275}$
- 2880
- 2881 v) Nonatomized, plus vacuum bagging with roll-out: $0.0110 \times$
- 2882 $(\text{Resin VOM}\%)^{2.275}$
- 2883
- 2884 vi) Nonatomized, plus vacuum bagging without roll-out:
- 2885 $0.0076 \times (\text{Resin VOM}\%)^{2.275}$
- 2886
- 2887 B) Pigmented gel coat, clear gel coat, tooling gel coat: $0.445 \times (\text{Gel}$
- 2888 $\text{Coat VOM}\%)^{1.675}$.
- 2889

2890 d) Capture System and Control Device Requirements. No owner or operator of a
 2891 source subject to the requirements of this Subpart that is utilizing a capture system
 2892 and control device for a subject resin or gel coat operation shall conduct that
 2893 operation unless the following requirements are satisfied:

- 2894
- 2895 1) An afterburner or carbon adsorber is installed and operated that meets the
- 2896 limitations set forth in this subsection (d). The owner or operator may use
- 2897 an emissions control system other than an afterburner or carbon adsorber
- 2898 if that device complies with all limitations in this subsection (d), the owner
- 2899 or operator submits a plan to the Agency detailing appropriate monitoring
- 2900 devices, test methods, recordkeeping requirements, and operating
- 2901 parameters for the control device, and the plan is approved by the Agency
- 2902 and USEPA within federally enforceable permit conditions;
- 2903
- 2904 2) The VOM emissions at the outlet of the control device meet an emissions
- 2905 limitation determined using Equation 2 in subsection (c)(1) of this Section.
- 2906 In Equation 2, however, instead of using the mass of each material used
- 2907 over the past 12 months to determine the emission limitation, the owner or
- 2908 operator shall use the mass of each material used during the applicable
- 2909 control device performance test;
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3) The owner or operator complies with all testing and monitoring requirements set forth in Section 218.892 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 218.891(b) and (c) of this Subpart using Equation 5 in subsection (e)(3). If complying pursuant to Section 218.891(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 218.891(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:

$$PV_F = PV_U \times \frac{100 - \% \text{ Filler}}{100}$$

where:

PV_F \equiv 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 \equiv The monomer VOM emission rate for the unfilled resin, before filler is added, calculated using the formulas in Section 218.891(b)(4) of this Subpart;

$\% \text{ Filler}$ \equiv 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 218.112 of this Part, or for use in the construction of small passenger vessels regulated by 40 CFR Subchapter T, incorporated by reference in Section 218.112 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 218.892 Testing and Monitoring Requirements

a) Testing to demonstrate compliance with the requirements of Section 218.891 of this Subpart shall be conducted by the owner or operator within 90 days after a

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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 218.891(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 218.112 of this Part.

c) The owner or operator of a source complying with this Subpart pursuant to Section 218.891(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 218.891(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 218.891(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 218.891(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 218.891(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.

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- 3027 4) The methods and procedures of Section 218.105(d) and (f) shall be used
 3028 for testing to demonstrate compliance with the requirements of Section
 3029 218.891(d) of this Subpart, as follows:
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- 3031 A) To select the sampling sites, Method 1 or 1A, as appropriate, 40
 3032 CFR 60, Appendix A, incorporated by reference at Section
 3033 218.112 of this Part. The sampling sites for determining efficiency
 3034 in reducing VOM from the dryer exhaust shall be located between
 3035 the dryer exhaust and the control device inlet, and between the
 3036 outlet of the control device and the exhaust to the atmosphere;
 3037
- 3038 B) To determine the volumetric flow rate of the exhaust stream,
 3039 Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A,
 3040 incorporated by reference at Section 218.112 of this Part;
 3041
- 3042 C) To determine the VOM concentration of the exhaust stream
 3043 entering and exiting the control device, Method 25 or 25A, as
 3044 appropriate, 40 CFR 60, Appendix A, incorporated by reference at
 3045 Section 218.112 of this Part. For thermal and catalytic
 3046 afterburners, Method 25 must be used except under the following
 3047 circumstances, in which case Method 25A must be used:
 3048
- 3049 i) The allowable outlet concentration of VOM from the
 3050 control device is less than 50 ppmv, as carbon;
 3051
- 3052 ii) The VOM concentration at the inlet of the control device
 3053 and the required level of control result in exhaust
 3054 concentrations of VOM of 50 ppmv, or less, as carbon; and
 3055
- 3056 iii) Due to the high efficiency of the control device, the
 3057 anticipated VOM concentration at the control device
 3058 exhaust is 50 ppmv or less, as carbon, regardless of inlet
 3059 concentration. If the source elects to use Method 25A
 3060 under this option, the exhaust VOM concentration must be
 3061 50 ppmv or less, as carbon, and the required destruction
 3062 efficiency must be met for the source to have demonstrated
 3063 compliance. If the Method 25A test results show that the
 3064 required destruction efficiency apparently has been met, but
 3065 the exhaust concentration is above 50 ppmv, as carbon, a
 3066 retest is required. The retest shall be conducted using
 3067 either Method 25 or 25A. If the retest is conducted using
 3068 Method 25A and the test results again show that the
 3069 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 218.105(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 218.891(d).

d) Testing to demonstrate compliance with the VOM content limitations for cleaning solutions in Section 218.891(g) of this Subpart, and with the non-monomer VOM content limitations for resin and gel coat materials in Section 218.891(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 218.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 218.112 of this Part, shall be used to demonstrate compliance; or

- 3113
3114 2) For cleaning solvents, the manufacturer's specifications for VOM content
3115 may be used if the manufacturer's specifications are based on results of
3116 tests of the VOM content conducted in accordance with methods specified
3117 in Section 218.105(a) of this Part; provided, however, Method 24 shall be
3118 used to determine compliance.
3119
3120 e) The owner or operator of a source subject to this Subpart and relying on the VOM
3121 content of the cleaning solution to comply with Section 218.891(g)(1) of this
3122 Subpart shall:
3123
3124 1) For cleaning solutions that are prepared at the source with equipment that
3125 automatically mixes cleaning solvent and water (or other non-VOM):
3126
3127 A) Install, operate, maintain, and calibrate the automatic feed
3128 equipment in accordance with manufacturer's specifications to
3129 regulate the volume of each of the cleaning solvent and water (or
3130 other non-VOM), as mixed; and
3131
3132 B) Pre-set the automatic feed equipment so that the consumption rates
3133 of the cleaning solvent and water (or other non-VOM), as applied,
3134 comply with Section 218.891(g)(1);
3135
3136 2) For cleaning solutions that are not prepared at the source with automatic
3137 feed equipment, keep records of the usage of cleaning solvent and water
3138 (or other non-VOM) as set forth in Section 218.894(g) of this Subpart.
3139
3140 f) Testing to demonstrate compliance with the VOM composite partial vapor
3141 pressure limitation for cleaning solvents set forth in Section 218.891(g) of this
3142 Subpart shall be conducted in accordance with the applicable methods and
3143 procedures set forth in Section 218.110 of this Part.
3144

3145 (Source: Added at 34 Ill. Reg. _____, effective _____)
3146

3147 **Section 218.894 Recordkeeping and Reporting Requirements**
3148

- 3149 a) The owner or operator of a source exempt from the limitations of this Subpart
3150 because of the criteria in Section 218.890(a) of this Subpart shall:
3151
3152 1) By May 1, 2011, or upon initial start-up, whichever is later, submit a
3153 certification to the Agency that includes the following:
3154

- 3155 A) A declaration that the source is exempt from the requirements in
3156 this Subpart because of the criteria in Section 218.890(a);
3157
- 3158 B) Calculations that demonstrate that combined emissions of VOM
3159 from all subject fiberglass boat manufacturing operations
3160 (including solvents used for cleanup operations associated with the
3161 fiberglass boat manufacturing operation) at the source never equal
3162 or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution
3163 control equipment. To calculate daily emissions of VOM, the
3164 owner or operator shall determine the monthly emissions of VOM
3165 from fiberglass boat manufacturing operations at the source
3166 (including solvents used for cleanup operations associated with the
3167 fiberglass boat manufacturing operations) and divide the amount
3168 by the number of days during that calendar month that the
3169 fiberglass boat manufacturing operations were in operation;
3170
- 3171 2) Notify the Agency of any record that shows that the combined emissions
3172 of VOM from subject fiberglass boat manufacturing operations at the
3173 source, including related cleaning activities, ever equal or exceed 6.8
3174 kg/day (15 lbs/day), in the absence of air pollution control equipment,
3175 within 30 days after the event occurs, and provide copies of the record
3176 upon request by the Agency.
3177
- 3178 b) All sources subject to the requirements of this Subpart shall:
3179
- 3180 1) By May 1, 2011, or upon initial start-up of the source, whichever is later,
3181 and upon start-up of a new fiberglass boat manufacturing operation at the
3182 source, submit a certification to the Agency that includes:
3183
- 3184 A) Identification of each subject fiberglass boat manufacturing
3185 operation as of the date of certification;
3186
- 3187 B) A declaration that all subject fiberglass boat manufacturing
3188 operations, including related cleaning operations, are in
3189 compliance with the requirements of this Subpart;
3190
- 3191 C) The limitation with which each subject fiberglass boat
3192 manufacturing operation will comply (i.e., the VOM content
3193 limitation, the emissions averaging alternative, or the emissions
3194 control system alternative);
3195
- 3196 D) Initial documentation that each subject fiberglass boat
3197 manufacturing operation will comply with the applicable

- 3198 limitation, including copies of manufacturer's specifications, test
3199 results (if any), formulation data, and calculations;
3200
3201 E) Identification of the methods that will be used to demonstrate
3202 continuing compliance with the applicable limitations;
3203
3204 F) A description of the practices and procedures that the source will
3205 follow to ensure compliance with the limitations in Section
3206 218.891(h) of this Subpart;
3207
3208 G) A description of each fiberglass boat manufacturing operation
3209 exempt pursuant to Section 218.890(b) of this Subpart, if any;
3210
3211 H) A description of materials subject to Section 218.891(f) of this
3212 Subpart, if any, used in each fiberglass boat manufacturing
3213 operation;
3214
3215 2) At least 30 calendar days before changing the method of compliance in
3216 accordance with Section 218.891(b), (c), and (d), notify the Agency in
3217 writing of the change. The notification shall include a demonstration of
3218 compliance with the newly applicable subsection;
3219
3220 3) Notify the Agency in writing of any violation of the requirements of this
3221 Subpart within 30 days following the occurrence of the violation and
3222 provide records documenting the violation upon request by the Agency;
3223
3224 4) Retain all records required by this Section for at least three years and
3225 make those records available to the Agency upon request.
3226
3227 c) The owner or operator of a fiberglass boat manufacturing operation subject to the
3228 limitations of Section 218.891 of this Subpart and complying by means of Section
3229 218.891(b) shall comply with the following.
3230
3231 1) By May 1, 2011, or upon initial start-up, whichever is later, submit a
3232 certification to the Agency that includes the name, identification number,
3233 and VOM content of each subject resin and gel coat as applied each day
3234 by each subject fiberglass boat manufacturing operation;
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3236 2) Collect and record the following information each day for each fiberglass
3237 boat manufacturing operation complying with Section 218.891(b):
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- 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 218.891(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 218.891 of this Subpart and complying by means of Section 218.891(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 218.891 of this Subpart and complying by means of Section 218.891(d) shall:

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- 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 218.891(d);
 - B) The results of all tests and calculations necessary to demonstrate compliance with the requirements of Section 218.891(d); and
 - C) A declaration that the monitoring equipment required under Section 218.892 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;

 - 2) Within 90 days after conducting testing pursuant to Section 218.892, 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 218.891(d) have been properly performed;
 - B) A statement whether the fiberglass boat manufacturing operations are or are not in compliance with Section 218.891(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 218.892;

 - 3) Collect and record daily the following information for each fiberglass boat manufacturing operation subject to the requirements of Section 218.891(d), and submit that information to the Agency upon request:
 - A) Afterburner or other approved control device monitoring data in accordance with Section 218.892 of this Subpart;
 - B) A log of operating time for the control device and monitoring equipment;

- 3323 C) A maintenance log for the control device and monitoring
3324 equipment detailing all routine and non-routine maintenance
3325 performed, including dates and duration of any outages;
3326
- 3327 D) Information to substantiate that the fiberglass boat manufacturing
3328 operation is operating in compliance with the parameters
3329 determined pursuant to Section 218.892.
3330
- 3331 f) The owner or operator of a source subject to the requirements in Section
3332 218.891(f) of this Subpart shall collect and record the following information for
3333 each fiberglass boat manufacturing operation:
3334
- 3335 1) The name and identification number of each material subject to Section
3336 218.891(f) as applied each day by each subject fiberglass boat
3337 manufacturing operation;
3338
- 3339 2) If subject to Section 218.891(f)(2), the amount of production and tooling
3340 resins, and pigmented, clear, and tooling gel coats used for part or mold
3341 repair and touch-ups, used each month at the subject source, and the total
3342 amount of all resins and gel coats used each month at the subject source;
3343
- 3344 3) If subject to Section 218.891(f)(3), the amount of pure, 100 percent
3345 vinylester resins used for skin coats each month at the subject source, and
3346 the total amount of all resins used each month at the subject source.
3347
- 3348 g) The owner or operator of a source subject to the requirements of Section 218.891
3349 of this Subpart shall collect and record the following information for each
3350 cleaning solution used in each fiberglass boat manufacturing operation:
3351
- 3352 1) For each cleaning solution for which the owner or operator relies on the
3353 VOM content to demonstrate compliance with Section 218.891(g) of this
3354 Subpart and that is prepared at the source with automatic equipment:
3355
- 3356 A) The name and identification of each cleaning solution;
3357
- 3358 B) The VOM content of each cleaning solvent in the cleaning
3359 solution, as determined in accordance with Section 218.892(d) of
3360 this Subpart;
3361
- 3362 C) Each change to the setting of the automatic equipment, with date,
3363 time, description of changes in the cleaning solution constituents
3364 (e.g., cleaning solvents), and a description of changes to the
3365 proportion of cleaning solvent and water (or other non-VOM);

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- 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 218.891(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 218.892(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 218.891(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 218.892(f) of this Subpart;
 - D) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

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- E) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 218.110 of this Part.

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

SUBPART JJ: MISCELLANEOUS INDUSTRIAL ADHESIVES

Section 218.900 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 218.904(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;

- 3452 K) Rubber tire manufacturing.
3453
3454 2) The requirements of Section 218.901(b) through (e) of this Subpart shall
3455 not apply to the following:
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3457 A) Adhesives or adhesive primers being tested or evaluated in any
3458 research and development operation or quality assurance or
3459 analytical laboratory;
3460
3461 B) Adhesives or adhesive primers used in the assembly, repair, or
3462 manufacture of aerospace or undersea-based weapon systems;
3463
3464 C) Adhesives or adhesive primers used in medical equipment
3465 manufacturing operations;
3466
3467 D) Cyanoacrylate adhesive application operations;
3468
3469 E) Aerosol adhesive and aerosol adhesive primer application
3470 operations;
3471
3472 F) Operations using polyester bonding putties to assemble fiberglass
3473 parts at fiberglass boat manufacturing facilities and at other
3474 reinforced plastic composite manufacturing facilities;
3475
3476 G) Operations using adhesives and adhesive primers that are supplied
3477 to the manufacturer in containers with a net volume of 0.47 liters
3478 (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less.
3479
3480 c) If a miscellaneous industrial adhesive application operation at a source is or
3481 becomes subject to one or more of the limitations in this Subpart, the
3482 miscellaneous industrial adhesive application operation is always subject to the
3483 applicable provisions of this Subpart.
3484
3485 d) The owner or operator of a source exempt from the emission limitations and
3486 control requirements of this Subpart because of the criteria in subsection (a) of
3487 this Section is subject to the recordkeeping and reporting requirements specified
3488 in Section 218.904(a) of this Subpart.
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3490 (Source: Added at 34 Ill. Reg. _____, effective _____)
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3492 **Section 218.901 Emission Limitations and Control Requirements**
3493

- 3494 a) The owner or operator of a source subject to the requirements of this Subpart shall
 3495 comply with the limitations in subsection (b), (c), or (d) of this Section, as well as
 3496 with the limitations in subsections (e) and (f) of this Section. Notwithstanding
 3497 this requirement, sources subject to Section 218.900(b)(2) shall comply with the
 3498 limitations in subsection (f) of this Section only.
- 3499
- 3500 b) The owner or operator of adhesive application operations listed in this subsection
 3501 (b) shall comply with the following VOM emission limitations. If an adhesive is
 3502 used to bond dissimilar substrates together, the substrate category with the highest
 3503 VOM emission limitation shall apply:
 3504

		<u>kg VOM/l</u> <u>adhesive or</u> <u>adhesive</u> <u>primer</u> <u>applied</u>	<u>lb VOM/gal</u> <u>adhesive or</u> <u>adhesive</u> <u>primer</u> <u>applied</u>
1)	<u>General adhesive application operations</u>		
	A) <u>Reinforced plastic composite</u>	<u>0.200</u>	<u>(1.7)</u>
	B) <u>Flexible vinyl</u>	<u>0.250</u>	<u>(2.1)</u>
	C) <u>Metal</u>	<u>0.030</u>	<u>(0.3)</u>
	D) <u>Porous material (except wood)</u>	<u>0.120</u>	<u>(1.0)</u>
	E) <u>Rubber</u>	<u>0.250</u>	<u>(2.1)</u>
	F) <u>Wood</u>	<u>0.030</u>	<u>(0.3)</u>
	G) <u>Other substrates</u>	<u>0.250</u>	<u>(2.1)</u>
2)	<u>Specialty adhesive application operations</u>		
	A) <u>Ceramic tile installation</u>	<u>0.130</u>	<u>(1.1)</u>
	B) <u>Contact adhesive</u>	<u>0.250</u>	<u>(2.1)</u>
	C) <u>Cove base installation</u>	<u>0.150</u>	<u>(1.3)</u>
	D) <u>Indoor floor covering installation</u>	<u>0.150</u>	<u>(1.3)</u>
	E) <u>Outdoor floor covering installation</u>	<u>0.250</u>	<u>(2.1)</u>

F)	<u>Installation of perimeter bonded sheet flooring</u>	<u>0.660</u>	<u>(5.5)</u>
G)	<u>Metal to urethane/rubber molding or casting</u>	<u>0.850</u>	<u>(7.1)</u>
H)	<u>Motor vehicle adhesive</u>	<u>0.250</u>	<u>(2.1)</u>
I)	<u>Motor vehicle weatherstrip adhesive</u>	<u>0.750</u>	<u>(6.3)</u>
J)	<u>Multipurpose construction</u>	<u>0.200</u>	<u>(1.7)</u>
K)	<u>Plastic solvent welding (acrylonitrile butadiene styrene (ABS) welding)</u>	<u>0.400</u>	<u>(3.3)</u>
L)	<u>Plastic solvent welding (except ABS welding)</u>	<u>0.500</u>	<u>(4.2)</u>
M)	<u>Sheet rubber lining installation</u>	<u>0.850</u>	<u>(7.1)</u>
N)	<u>Single-ply roof membrane installation/repair (except ethylene propylenediene monomer (EPDM) roof membrane)</u>	<u>0.250</u>	<u>(2.1)</u>
O)	<u>Structural glazing</u>	<u>0.100</u>	<u>(0.8)</u>
P)	<u>Thin metal laminate</u>	<u>0.780</u>	<u>(6.5)</u>
Q)	<u>Tire repair</u>	<u>0.100</u>	<u>(0.8)</u>
R)	<u>Waterproof resorcinol glue</u>	<u>0.170</u>	<u>(1.4)</u>
3)	<u>Adhesive primer application operations</u>		
A)	<u>Motor vehicle glass bonding primer</u>	<u>0.900</u>	<u>(7.5)</u>
B)	<u>Plastic solvent welding adhesive primer</u>	<u>0.650</u>	<u>(5.4)</u>

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

D) Other adhesive primer 0.250 (2.1)

3505
 3506 c) No owner or operator of a source subject to this Subpart shall operate a
 3507 miscellaneous industrial adhesive application operation unless the daily-weighted
 3508 average VOM content of subject adhesives as applied each day by the operation,
 3509 calculated in accordance with subsection (c)(1) of this Section, is less than or
 3510 equal to the emissions limitation calculated in accordance with subsection (c)(2)
 3511 of this Section.

3512
 3513 1) Weighted Average of VOM Content of Adhesives Applied Each Day
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$$VOM_{WA} = \frac{\sum_{i=1}^n M_i VOM_i}{\sum_{i=1}^n M_i}$$

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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;

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2) Mass Weighted Average VOM Limit for an Averaging Operation

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$$Limit_{WA} = \frac{\sum_{i=1}^n M_i Limit_i}{\sum_{i=1}^n M_i}$$

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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.

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- 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

3546 adhesives and an afterburner or carbon adsorption system. The owner or
3547 operator may use an alternative capture and control system if the owner or
3548 operator submits a plan to the Agency detailing appropriate monitoring
3549 devices, test methods, recordkeeping requirements, and operating
3550 parameters for the capture and control system and the system is approved
3551 by the Agency and USEPA within federally enforceable permit conditions.
3552

3553 e) The owner or operator of a source subject to this Subpart shall apply all
3554 miscellaneous industrial adhesives using one or more of the following methods:
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3556 1) Electrostatic spray;
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3558 2) High volume low pressure (HVLP) spray;
3559

3560 3) Flow coating. For the purposes of this Subpart, flow coating means a non-
3561 atomized technique of applying coating to a substrate with a fluid nozzle
3562 with no air supplied to the nozzle;
3563

3564 4) Roll coating or hand application, including non-spray application methods
3565 similar to hand or mechanically powered caulking gun, brush, or direct
3566 hand application;
3567

3568 5) Dip coating, including electrodeposition. For purposes of this Subpart,
3569 "electrodeposition" means a water-borne dip coating process in which
3570 opposite electrical charges are applied to the substrate and the coating.
3571 The coating is attracted to the substrate due to the electrochemical
3572 potential difference that is created;
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3574 6) Airless spray;
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3576 7) Air-assisted airless spray; or
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3578 8) Another adhesive application method capable of achieving a transfer
3579 efficiency equal to or better than that achieved by HVLP spraying, if the
3580 method is approved in writing by the Agency.
3581

3582 f) The owner or operator of a source subject to this Subpart shall comply with the
3583 following work practices for each subject miscellaneous adhesive application
3584 operation at the source:
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3586 1) Store all VOM-containing adhesives, adhesive primers, process-related
3587 waste materials, cleaning materials, and used shop towels in closed
3588 containers;

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- 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.

3607 (Source: Added at 34 Ill. Reg. _____, effective _____)
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3609 **Section 218.902 Testing Requirements**
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- 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 218.901(b) of this Subpart shall be conducted as follows:
 - 1) Method 24, incorporated by reference in Section 218.112 of this Part, shall be used for non-reactive adhesives;
 - 2) Appendix A of 40 CFR 63, Subpart PPPP, incorporated by reference in Section 218.112 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.

- 3632 c) For afterburners and carbon adsorbers, the methods and procedures of Section
 3633 218.105(d) through (f) of this Part shall be used for testing to demonstrate
 3634 compliance with the requirements of Section 218.901(d) of this Subpart, as
 3635 follows:
 3636
 3637 1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60,
 3638 Appendix A, incorporated by reference in Section 218.112 of this Part;
 3639
 3640 2) To determine the volumetric flow rate of the exhaust stream, Method 2,
 3641 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by
 3642 reference in Section 218.112 of this Part;
 3643
 3644 3) To determine the VOM concentration of the exhaust stream entering and
 3645 exiting the emissions control system, Method 25 or 25A, as appropriate,
 3646 40 CFR 60, Appendix A, incorporated by reference in Section 218.112 of
 3647 this Part. For thermal and catalytic afterburners, Method 25 must be used,
 3648 except under the following circumstances, in which case Method 25A
 3649 must be used:
 3650
 3651 A) The allowable outlet concentration of VOM from the emissions
 3652 control system is less than 50 ppmv, as carbon;
 3653
 3654 B) The VOM concentration at the inlet of the emissions control
 3655 system and the required level of control result in exhaust
 3656 concentrations of VOM of 50 ppmv, or less, as carbon;
 3657
 3658 C) Due to the high efficiency of the emissions control system, the
 3659 anticipated VOM concentration at the emissions control system
 3660 exhaust is 50 ppmv or less, as carbon, regardless of inlet
 3661 concentration. If the source elects to use Method 25A under this
 3662 option, the exhaust VOM concentration must be 50 ppmv or less,
 3663 as carbon, and the required destruction efficiency must be met for
 3664 the source to have demonstrated compliance. If the Method 25A
 3665 test results show that the required destruction efficiency apparently
 3666 has been met, but the exhaust concentration is above 50 ppmv, as
 3667 carbon, a retest is required. The retest shall be conducted using
 3668 either Method 25 or 25A. If the retest is conducted using Method
 3669 25A and the test results again show that the required destruction
 3670 efficiency apparently has been met, but the exhaust concentration
 3671 is above 50 ppmv, as carbon, the source must retest using Method
 3672 25;
 3673

3674 D) During testing, the cleaning equipment shall be operated at
3675 representative operating conditions and flow rates.
3676

3677 d) An owner or operator using an emissions control system other than an afterburner
3678 or carbon adsorber shall conduct testing to demonstrate compliance with the
3679 requirements of Section 218.901(d) as set forth in the owner's or operator's plan
3680 approved by the Agency and USEPA pursuant to Section 218.901(d)(3).
3681

3682 (Source: Added at 34 Ill. Reg. _____, effective _____)
3683

3684 **Section 218.903 Monitoring Requirements**
3685

3686 a) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner
3687 or operator of a source subject to Section 218.901(d) of this Subpart shall:
3688

3689 1) Install, calibrate, operate, and maintain temperature monitoring devices
3690 with an accuracy of 3°C or 5°F on the emissions control system in
3691 accordance with Section 218.105(d)(2) of this Part and in accordance with
3692 the manufacturer's specifications. Monitoring shall be performed at all
3693 times when the emissions control system is operating; and
3694

3695 2) Install, calibrate, operate and maintain, in accordance with manufacturer's
3696 specifications, a continuous recorder on the temperature monitoring
3697 devices, such as a strip chart, recorder or computer, with at least the same
3698 accuracy as the temperature monitor.
3699

3700 b) If an emissions control system other than an afterburner or carbon adsorber is
3701 used to demonstrate compliance, the owner or operator of a source subject to
3702 Section 218.901(d) of this Subpart shall install, maintain, calibrate, and operate
3703 the monitoring equipment as set forth in the owner's or operator's plan approved
3704 by the Agency and USEPA pursuant to Section 218.901(d)(3).
3705

3706 (Source: Added at 34 Ill. Reg. _____, effective _____)
3707

3708 **Section 218.904 Recordkeeping and Reporting Requirements**
3709

3710 a) The owner or operator of a source exempt from the limitations of this Subpart
3711 because of the criteria in Section 218.900(a) of this Subpart shall comply with the
3712 following:
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3714 1) By May 1, 2011, or upon initial start-up of the source, whichever is later,
3715 submit a certification to the Agency that includes:
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- A) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 218.900(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;

- 3760 E) Identification of the methods that will be used to demonstrate
3761 continuing compliance with the applicable limitations;
3762
- 3763 F) A description of the practices and procedures that the source will
3764 follow to ensure compliance with the limitations in Section
3765 218.901(f) of this Subpart;
3766
- 3767 G) A description of each adhesive application operation exempt
3768 pursuant to Section 218.900(b)(2) of this Subpart, if any; and
3769
- 3770 H) The application methods used by each subject adhesive application
3771 operation;
3772
- 3773 2) At least 30 calendar days before changing the method of compliance in
3774 accordance with Section 218.901(b), (c), and (d), notify the Agency in
3775 writing of the change. The notification shall include a demonstration of
3776 compliance with the newly applicable subsection;
3777
- 3778 3) Notify the Agency in writing of any violation of the requirements of this
3779 Subpart within 30 days following the occurrence of the violation and
3780 provide records documenting the violation upon request by the Agency;
3781
- 3782 4) Retain all records required by this Section for at least three years and
3783 make those records available to the Agency upon request.
3784
- 3785 c) The owner or operator of an adhesive application operation subject to the
3786 limitations of Section 218.901 of this Subpart and complying by means of Section
3787 218.901(b) shall comply with the following:
3788
- 3789 1) By May 1, 2011, or upon the initial start-up date, whichever is later,
3790 submit a certification to the Agency that includes the name, identification
3791 number, and VOM content of each adhesive as applied by each subject
3792 adhesive application operation;
3793
- 3794 2) Collect and record the name, identification number, and VOM content of
3795 each adhesive as applied each day by each adhesive application operation
3796 complying with Section 218.901(b).
3797
- 3798 d) The owner or operator of an adhesive application operation subject to the
3799 limitations of Section 218.901 of this Subpart and complying by means of
3800 Section 218.901(c) shall comply with the following:
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- 3802 1) By May 1, 2011, or upon initial start-up, whichever is later, submit a
3803 certification to the Agency that includes the name, identification number,
3804 and VOM content of each adhesive as applied by each subject adhesive
3805 application operation;
3806
- 3807 2) Collect and record the following information each day for each adhesive
3808 application operation complying by means of Section 218.901(c):
3809
- 3810 A) The name, identification number, and VOM content of each
3811 adhesive as applied each day by each subject adhesive application
3812 operation;
3813
- 3814 B) The daily weighted average VOM content of all adhesives as
3815 applied by each subject adhesive application operation.
3816
- 3817 e) The owner or operator of an adhesive application operation subject to the
3818 requirements of Section 218.901 of this Subpart and complying by means of
3819 Section 218.901(d) shall:
3820
- 3821 1) By May 1, 2011, or upon the initial start-up date, whichever is later, and
3822 upon initial start-up of a new control device, submit a certification to the
3823 Agency that includes the following:
3824
- 3825 A) The type of afterburner or other approved control device used to
3826 comply with the requirements of Section 218.901(d);
3827
- 3828 B) The results of all tests and calculations necessary to demonstrate
3829 compliance with the control requirements of Section 218.901(d);
3830 and
3831
- 3832 C) A declaration that the monitoring equipment required under
3833 Section 218.903 of this Subpart has been properly installed and
3834 calibrated according to manufacturer's specifications;
3835
- 3836 2) Within 90 days after conducting testing pursuant to Section 218.902 of
3837 this Subpart, submit to the Agency a copy of all test results, as well as a
3838 certification that includes the following:
3839
- 3840 A) A declaration that all tests and calculations necessary to
3841 demonstrate whether the adhesive application operations are in
3842 compliance with Section 218.901(d) have been properly
3843 performed;
3844

- 3845 B) A statement whether the adhesive application operations are or are
3846 not in compliance with Section 218.901(d); and
3847
3848 C) The operating parameters of the afterburner or other approved
3849 control device during testing, as monitored in accordance with
3850 Section 218.903 of this Subpart;
3851
3852 3) Collect and record daily the following information for each adhesive
3853 application operation subject to the requirements of Section 218.901(d):
3854
3855 A) Afterburner or other approved control device monitoring data in
3856 accordance with Section 218.903 of this Subpart;
3857
3858 B) A log of operating time for the afterburner or other approved
3859 control device, monitoring equipment, and the associated
3860 application unit; and
3861
3862 C) A maintenance log for the afterburner or other approved control
3863 device and monitoring equipment detailing all routine and non-
3864 routine maintenance performed, including dates and duration of
3865 any outages.
3866

3867 (Source: Added at 34 Ill. Reg. _____, effective _____)