

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
- 3)

<u>Section Numbers:</u>	<u>Proposed Action:</u>
218.106	Amend
218.181	Amend
218.187	New
218.204	Amend
218.205	Amend
218.207	Amend
218.210	Amend
218.211	Amend
218.212	Amend
218.217	Amend
218.401	Amend
218.402	Amend
218.403	Amend
218.404	Amend
218.405	Amend
218.406	Repeal
218.407	Amend
218.408	Repeal
218.409	Amend
218.410	Amend
218.411	Amend
218.412	New
218.413	New
218.415	New
218.416	New
218.417	New
- 4) Statutory authority: Implementing Sections 21, 22, 22.01 and 22.9, and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/21, 22, 22.01, 22.9, 27]
- 5) A complete description of the subjects and issues involved: The Illinois Environmental Protection Agency (Agency) proposed this rulemaking to satisfy Illinois' obligation to submit a State Implementation Plan addressing Clean Air Act requirements for sources of

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volatile organic material (VOM) emissions in ozone nonattainment areas. The United States Environmental Protection Agency (USEPA) issued Control Techniques Guidelines (CTG) for Group II Consumer and Commercial Product Categories. In the CTG, USEPA recommended control measures that it believes constitute reasonably available control technology (RACT) for those product categories.

For a more detailed description of this rulemaking, see the Board's January 7, 2010, first-notice opinion and order: Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group II Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219. (R10-08)

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking:

The Agency's regulatory proposal included a Technical Support Document, which stated that it relied on sources listed below. Copies of the documents the Agency relied upon are available for review with the Pollution Control Board.

Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2006.

Control Techniques Guidelines for Flexible Package Printing, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2006.

Control Techniques Guidelines: Industrial Cleaning Solvents, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2006.

Control Techniques Guidelines for Flat Wood Paneling Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2006.

Technical Support Document for Controlling VOM Emissions from Lithographic Printing Operations, Illinois Environmental Protection Agency, Air Quality Planning Section, Springfield, IL, October 1994.

Control Techniques Guideline Series: Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (DRAFT), United States Environmental Protection

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Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC,
September 1993.

- 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? No
- 10) Are there any other amendments pending on this Part? Yes

<u>Sections Numbers:</u>	<u>Proposed Actions:</u>	<u>Illinois Register Citation:</u>
218.106	Amended	33 Ill. Reg. 16399; November 20, 2009
218.204	Amended	33 Ill. Reg. 16399; November 20, 2009
218.205	Amended	33 Ill. Reg. 16399; November 20, 2009
218.207	Amended	33 Ill. Reg. 16399; November 20, 2009
218.210	Amended	33 Ill. Reg. 16399; November 20, 2009
218.211	Amended	33 Ill. Reg. 16399; November 20, 2009
218.212	Amended	33 Ill. Reg. 16399; November 20, 2009
218.218	Amended	33 Ill. Reg. 16399; November 20, 2009

- 11) Statement of Statewide Policy Objectives: This proposed rule does not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b) (2008)].
- 12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R10-08 and be addressed to:

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

Address all questions to Tim Fox at 312-814-6085.

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Interested persons may request copies of the Board's opinion and order by calling the Clerk's office at 312-814-3620, or download them from the Board's Web site at www.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 III Product Categories and meets the applicability thresholds specified in the proposed rules.
 - B) Reporting, bookkeeping or other procedures required for compliance: The proposed rules require 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 requirements applicable to affected sources will be required.
- 14) Regulatory Agenda on which this rulemaking was summarized January 2009

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

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AND LOADING OPERATIONS

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	<u>218.119 Applicability for VOL</u>
<u>218.120</u>	<u>Control Requirements for Storage Containers of VOL</u>
	<u>218.121 Storage Containers of VPL</u>
	<u>218.122 Loading Operations</u>
<u>218.123</u>	<u>Petroleum Liquid Storage Tanks</u>
	<u>218.124 External Floating Roofs</u>
	<u>218.125 Compliance Dates</u>
	<u>218.126 Compliance Plan (Repealed)</u>
	<u>218.127 Testing VOL Operations</u>
	<u>218.128 Monitoring VOL Operations</u>
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<u>218.142</u>	<u>Pumps and Compressors</u>
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	218.182 Cold Cleaning
	218.183 Open Top Vapor Degreasing
	218.184 Conveyorized Degreasing
	218.185 Compliance Schedule (Repealed)
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SUBPART F: COATING OPERATIONS

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	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
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218.213	Recordkeeping and Reporting for Cross-Line Averaging Participating Coating Lines
	218.214 Changing Compliance Methods
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SUBPART G: USE OF ORGANIC MATERIAL

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<u>218.301</u>	<u>Use of Organic Material</u>
<u>218.302</u>	<u>Alternative Standard</u>

218.303 Fuel Combustion Emission Units
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- 218.401 Flexographic and Rotogravure Printing
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 - 218.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior to March 15, 1996 (Repealed)
 - 218.407 Emission Limitations and Control Requirements for Lithographic Printing Lines
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 - 218.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996 (Repealed)
 - 218.409 Testing for Lithographic Printing ~~On and After March 15, 1996~~
 - 218.410 Monitoring Requirements for Lithographic Printing
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 - 218.412 Letterpress Printing Lines: Applicability
 - 218.413 Emission Limitations and Control Requirements for Letterpress Printing Lines
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SUBPART Q: SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING PLANT

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- 218.421 General Requirements
 - 218.422 Inspection Program Plan for Leaks
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<u>218.444</u>	<u>Process Unit Turnarounds</u>
<u>218.445</u>	<u>Leaks: General Requirements</u>
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<u>218.451</u>	<u>Sealing Device Requirements</u>
<u>218.452</u>	<u>Compliance Schedule for Leaks</u>
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SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

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<u>218.462</u>	<u>Green Tire Spraying Operations</u>
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SUBPART T: PHARMACEUTICAL MANUFACTURING

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	218.501 <u>Control Requirements for Batch Operations</u>
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218.583	<u>Gasoline Dispensing Operations – Storage Tank Filling Operations</u>
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	<u>Section</u>
218.601	<u>Perchloroethylene Dry Cleaners (Repealed)</u>
	218.602 <u>Applicability (Repealed)</u>
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- 218.604 Compliance Dates (Repealed)
- 218.605 Compliance Plan (Repealed)
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- 218.607 Standards for Petroleum Solvent Dry Cleaners
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- 218.612 Compliance Dates (Repealed)
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SUBPART DD: AEROSOL CAN FILLING

- Section
- 218.680 Applicability

218.686 Control Requirements
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SUBPART FF: BAKERY OVENS (REPEALED)

Section
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218.726 Testing (Repealed)
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Section
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Section
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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)
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SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT
MANUFACTURING PROCESSES

	<u>Section</u>
	<u>218.920</u> <u>Applicability</u>
<u>218.923</u>	<u>Permit Conditions (Repealed)</u>
<u>218.926</u>	<u>Control Requirements</u>
<u>218.927</u>	<u>Compliance Schedule</u>
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SUBPART OO: MISCELLANEOUS FORMULATION
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	<u>Section</u>
	<u>218.940</u> <u>Applicability</u>
<u>218.943</u>	<u>Permit Conditions (Repealed)</u>
<u>218.946</u>	<u>Control Requirements</u>
<u>218.947</u>	<u>Compliance Schedule</u>
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SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL
MANUFACTURING PROCESSES

	<u>Section</u>
	<u>218.960</u> <u>Applicability</u>
<u>218.963</u>	<u>Permit Conditions (Repealed)</u>
<u>218.966</u>	<u>Control Requirements</u>
<u>218.967</u>	<u>Compliance Schedule</u>
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SUBPART TT: OTHER EMISSION UNITS

	<u>Section</u>
	<u>218.980</u> <u>Applicability</u>
<u>218.983</u>	<u>Permit Conditions (Repealed)</u>
<u>218.986</u>	<u>Control Requirements</u>
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SUBPART UU: RECORDKEEPING AND REPORTING

	<u>Section</u>
<u>218.990</u>	<u>Exempt Emission Units</u>
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<u>218.APPENDIX A</u>	<u>List of Chemicals Defining Synthetic Organic Chemical and Polymer Manufacturing</u>
<u>218.APPENDIX B</u>	<u>VOM Measurement Techniques for Capture Efficiency (Repealed)</u>
<u>218.APPENDIX C</u>	<u>Reference Methods and Procedures</u>
<u>218.APPENDIX D</u>	<u>Coefficients for the Total Resource Effectiveness Index (TRE) Equation</u>
<u>218.APPENDIX E</u>	<u>List of Affected Marine Terminals</u>
<u>218.APPENDIX G</u>	<u>TRE Index Measurements for SOCOMI Reactors and Distillation Units</u>
<u>218.APPENDIX H</u>	<u>Baseline VOM Content Limitations for Subpart F, Section 218.212 Cross-Line Averaging</u>

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

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 ~~R10-0808-8~~ at 32 Ill. Reg. 14874, effective August 26, 2008; amended in R10-8 at 34 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

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(p) of this Part shall comply with the requirements in Section 218.204(p), as well as all applicable requirements in Sections 218.205 through 218.211, 218.214, and ~~218.217~~, 218.217 by May 1, 2010.

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

SUBPART E: SOLVENT CLEANING

Section 218.181 Solvent Cleaning Degreasing ~~Operations~~in ~~General~~Operations.

The requirements of Sections 218.182, 218.183, 218.184, and 218.186 of this Subpart shall apply to all cold cleaning, open top vapor degreasing, and conveyORIZED degreasing operations which use volatile organic materials.

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

Section 218.187 Other Industrial Solvent Cleaning Operations

a) Applicability. On and after April 1, 2011:

- 1) Except as provided in subsection (a)(2) of this Section, the requirements of this Section shall apply to all cleaning operations ~~which~~that use organic materials ~~at~~ sources that emit a total of 6.8 kg/day (15 lbs/day) or more of VOM from cleaning operations at the source, in the absence of air pollution control equipment. For purposes of this Section, ~~"~~"cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning,

parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

2) Notwithstanding subsection (a)(1) of this Section:

A) The following cleaning operations shall be exempt from the requirements of subsections (b), (c), (d), (f), and (g) of this Section:

- i) Cleaning operations subject to the limitations in Sections 218.182, 218.183, or 218.184;
- ii) Janitorial cleaning;
- iii) Stripping of cured coatings, inks, or adhesives, including screen reclamation activities;
- iv) Cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;

B) Cleaning operations for emission units within the following source categories shall be exempt from the requirements of subsections (b), (c), (d), (f), and (g) of this Section:

- i) Aerospace coating;
- ii) Flexible package printing;
- iii) Lithographic printing;
- iv) Letterpress printing;
- v) Flat wood paneling coating;
- vi) Large appliance coating;
- vii) Metal furniture coating;
- viii) Paper, film, and foil coating;
- ix) Wood furniture coating;
- x) Shipbuilding and repair coating;
- xi) Plastic parts coating;

- xii) Miscellaneous metal parts coating;
 - xiii) Fiberglass boat manufacturing;
 - xiv) Miscellaneous industrial adhesives; and
 - xv) Auto and light-duty truck assembly coating;
- C) The following cleaning operations shall be exempt from the requirements of subsections (b), (c), (f), and (g) of this Section:
- i) Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;
 - ii) Cleaning conducted as part of performance laboratory tests on coatings, adhesives, or inks; research and development operations; or laboratory tests in quality assurance laboratories;
 - iii) Cleaning of paper-based gaskets and clutch assemblies where rubber is bonded to metal by means of an adhesive;
 - iv) Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;
 - v) Cleaning of medical device and pharmaceutical manufacturing facilities using no more than 1.5 gallons per day of solvents;
 - vi) Cleaning of adhesive application equipment used for thin metal laminating;
 - vii) Cleaning of electronic or electrical cables;
 - viii) Touch-up cleaning performed on printed circuit boards where surface mounted devices have already been attached;
 - ix) Cleaning of coating and adhesive application processes utilized to manufacture transdermal drug delivery products using no more than three gallons per day of ethyl acetate;
 - x) Cleaning of application equipment used to apply coatings on satellites and radiation effect coatings;
 - xi) Cleaning of application equipment used to apply solvent-borne fluoropolymer coatings;

- xii) Cleaning of ultraviolet or electron beam adhesive application;
- xiii) Cleaning of sterilization indicating ink application equipment if the facility uses no more than 1.5 gallons per day of solvents for such cleaning;
- xiv) Cleaning of metering rollers, dampening rollers, and printing plates;
- xv) Cleaning of numismatic dies; and
- xvi) Cleaning operations associated with digital printing.

b) Material and Control Requirements. No owner or operator of a source subject to this Section shall perform any cleaning operation subject to this Section unless the owner or operator meets the requirements in subsection (b)(1), (b)(2), or (b)(3):

1) The VOM content of the as-used cleaning solutions (minus water and any compounds ~~which~~that are specifically exempted from the definitions of VOM) does not exceed the following emissions limitations: _

A) Product cleaning during manufacturing process or surface preparation for coating, adhesive, or ink application:

		<u>g/l</u>	<u>lb/gal</u>
j)	<u>lectrical apparatus components and electronic components</u>	<u>.10</u>	<u>0.83</u>
i)	<u>edical device and pharmaceutical manufacturing</u>	<u>.80</u>	<u>6.7</u>
	<u>B) Repair and maintenance cleaning:</u>	<u>g/l</u>	<u>lb/gal</u>
j)	<u>lectrical apparatus components and electronic components</u>	<u>.10</u>	<u>0.83</u>
i)	<u>edical device and pharmaceutical manufacturing</u>	<u>.80</u>	<u>6.7</u>

ii)	medical device and pharmaceutical manufacturing general work surfaces	.60	5.0
	C) <u>Cleaning of ink application equipment:</u>	g/l	lb/gal
i)	rotogravure printing that does not print flexible packaging	.10	0.83
i)	screen printing	.50	4.2
ii)	ultraviolet ink and electron beam ink application equipment, except screen printing	.65	5.4
v)	lexographic printing that does not print flexible packaging	.10	0.83

kg/l — 1 lb/gal

~~i) Electrical apparatus components and electronic components — 0.10 —~~
0.83

~~ii) Medical device and pharmaceutical manufacturing — 0.80 — 6.7~~

~~B) Repair and maintenance cleaning:~~

~~— kg/l — lb/gal~~

~~i) Electrical apparatus components and electronic components — 0.10 — 0.83~~

~~ii) Medical device and pharmaceutical manufacturing: tools, equipment, and machinery — 0.80 — 6.7~~

~~iii) Medical device and pharmaceutical manufacturing: general work surfaces
0.60 5.0~~

~~C) Cleaning of ink application equipment:~~

~~kg/l lb/gal~~

~~i) Rotogravure printing~~

packaging - - that does not print flexible 0.10 .83

ii) Screen printing
0.50 04.2

iii) Ultraviolet ink and electron beam ink application equipment, except screen printing —
0.65 5.4

iv) Flexographic printing that does not print flexible
packaging 0.10 0.83

D) All other cleaning operations not kg/l
lb/gal 0.050 0.42
subject to a specific limitation in
subsections (b)(1)(A) through
(b)(1)(C) of this Section — 0.050
0.42

- 2) The composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20° C (68° F); or
- 3) An afterburner or carbon adsorber is installed and operated that reduces VOM emissions from the subject cleaning operation by at least 85 percent overall. The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if such device reduces VOM emissions from the subject cleaning operation by at least 85 percent overall, the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for such control device, and such plan is approved by the Agency and USEPA within federally enforceable permit conditions.
- c) The owner or operator of a subject source shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in subsection (g) of this Section and by complying with the recordkeeping and reporting requirements specified in subsection (e) of this Section.
- d) Operating Requirements. The owner or operator of a source subject to the requirements of this Section shall comply with the following for each subject cleaning operation:

- 1) Cover open containers and properly cover and store applicators used to apply cleaning solvents;
 - 2) Minimize air circulation around the cleaning operation;
 - 3) Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;
 - 4) Utilize equipment practices that minimize emissions.
- e) Recordkeeping and Reporting Requirements.
- 1) The owner or operator of a source exempt from the limitations of this Section because of the criteria in Section 218.187(a)(1) of this Subpart shall comply with the following:
 - A) By April 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - i) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 218.187(a)(1);
 - ii) Calculations ~~which~~that demonstrate that combined emissions of VOM from cleaning operations at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment;
 - B) Notify the Agency of any record that shows that the combined emissions of VOM from cleaning operations at the source 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.
 - 2) All sources subject to the requirements of this Section shall:
 - A) By April 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - i) A declaration that all subject cleaning operations are in compliance with the requirements of this Section;
 - ii) Identification of each subject cleaning operation and each VOM-containing cleaning solution used as of the date of certification in such operation;

- iii) If complying with the emissions control system requirement, what type of emissions control system will be used;
 - iv) Initial documentation that each subject cleaning operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;
 - v) Identification of the ~~method(s)~~ methods that will be used to demonstrate continuing compliance with the applicable limitations;
 - vi) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 218.187(d); and
 - vii) A description of each cleaning operation exempt pursuant to Section 218.187(a)(2), if any, and a listing of the emission ~~unit(s)~~ units on which the exempt cleaning operation is performed;
- B) At least 30 calendar days before changing the method of compliance between subsections (b)(1) or (b)(2), and subsection (b)(3) of this Section, notify the Agency in writing of such change. ~~Such~~ The notification shall include a demonstration of compliance with the newly applicable subsection;
- 3) All sources complying with this Section pursuant to the requirements of subsection (b)(1) of this Section shall collect and record the following information for each cleaning solution used:
- A) For each cleaning solution ~~which~~ that is prepared at the source with automatic equipment:
 - i) The name and identification of each cleaning solution;
 - ii) The VOM content of each cleaning solvent in the cleaning solution;
 - iii) 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);

- iv) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - v) The VOM content of the as-used cleaning solution, with supporting calculations; and
 - vi) A calibration log for the automatic equipment, detailing periodic checks;
- B) For each batch of cleaning solution ~~which~~that is not prepared at the source with automatic equipment:
- i) The name and identification of each cleaning solution;
 - ii) Date, time of preparation, and each subsequent modification of the batch;
 - iii) The VOM content of each cleaning solvent in the cleaning solution;
 - iv) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
 - v) The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such 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;
- 4) All sources complying with this Section pursuant to the requirements of subsection (b)(2) of this Section shall collect and record the following information for each cleaning solution used:
- A) The name and identification of each cleaning solution;
 - B) Date, 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 the applicable methods and procedures specified in Section 218.110 of this Part;

- 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 the applicable methods and procedures specified in Section 218.110 of this Part;
- 5) All sources complying with this Section pursuant to the requirements of subsection (b)(3) of this Section shall comply with the following:
- A) By April 1, 2011, or upon initial start-up of the source, whichever is later, and upon initial start-up of a new emissions control system, include in the certification required by subsection (e)(3) of this Section a declaration that the monitoring equipment required under Section 218.187(f) of this Subpart has been properly installed and calibrated according to manufacturer's specifications;
 - B) If testing of an emissions control system is conducted pursuant to Section 218.187(g) of this Subpart, the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Agency and shall submit a certification to the Agency that includes the following:
 - i) A declaration that all tests and calculations necessary to demonstrate compliance with Section 218.187(b)(3) of this Subpart have been properly performed;
 - ii) A statement whether the subject cleaning operation is or is not in compliance with Section 218.187(b)(3) of this Subpart; and
 - iii) The operating parameters of the emissions control system during testing, as monitored in accordance with Section 218.187(f) of this Subpart;
 - C) Collect and record daily the following information for each cleaning operation subject to the requirements of Section 218.187(b)(3) of this Subpart:
 - i) Emissions control system monitoring data in accordance with Section 218.187(f) of this Subpart, as applicable;
 - ii) A log of operating time for the emissions control system, monitoring equipment, and ~~the~~ associated cleaning equipment;

- iii) A maintenance log for the emissions control system and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages;
- D) Maintain records documenting the use of good operating practices consistent with the equipment manufacturer's specifications for the cleaning equipment being used and the emissions control system equipment. At a minimum, these records shall include:
- i) Records for periodic inspection of the cleaning equipment and emissions control system equipment with date of inspection, individual performing the inspection, and nature of inspection;
 - ii) Records for repair of malfunctions and breakdowns with identification and description of incident, date identified, date repaired, nature of repair, and the amount of VOM released into the atmosphere as a result of the incident;
- 6) All sources subject to the requirements of subsections (b) and (d) of this Section shall notify the Agency of any violation of ~~subsections~~ subsection (b) or (d) 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;
- 7) All records required by this subsection (e) shall be retained by the source for at least three years and shall be made available to the Agency upon request.
- f) Monitoring Requirements. __
- 1) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 218.187(b)(3) of this Subpart shall:
- A) Install, calibrate, operate, and maintain temperature monitoring ~~device(s)~~ 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 ~~device(s)~~ devices, such as a strip chart,

recorder or computer, with at least the same accuracy as the temperature monitor;

- 2) 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 218.187(b)(3) of this Subpart shall install, maintain, calibrate, and operate such monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 218.187(b)(3).

g) Testing Requirements.

- 1) Testing to demonstrate compliance with the requirements of this Section shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise specified in this Section. Such 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 ~~such~~the testing;
- 2) Testing to demonstrate compliance with the VOM content limitations in Section 218.187(b)(1) of this Subpart, and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted as follows:
 - A) 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 in Section 218.112 of this Part, shall be used to demonstrate compliance; or
 - B) The manufacturer's specifications for VOM content for cleaning solvents may be used if such 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; provided, however, Method 24 shall be used to determine compliance;
- 3) Testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in Section 218.110 of this Part;
- 4) For afterburners and carbon adsorbers, the methods and procedures of Section 218.105(d) through (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.187(b)(3) 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 in Section 218.112 of this Part;
 - 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 in Section 218.112 of this Part;
 - C) 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:
 - i) The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;
 - ii) 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
 - iii) 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;
- 5) 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 218.187(b)(3) of this Subpart

as set forth in the owner's or operator's plan approved by the Agency and USEPA as federally enforceable permit conditions pursuant to Section 218.187(b)(3) of this Subpart.

(Source: Added 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 provided in Sections 218.204(l) and 218.204(p), 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	lb/gal
1)	Prime coat	0.14	(1.2)
		0.14*	(1.2)*
2)	Primer surface coat	1.81	(15.1)
		1.81*	(15.1)*
		kg/l	lb/gal

~~(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) 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.)

3)

Topcoat

1.81

(15.1)

1.81*

(15.1)*

kg/l

lb/gal

(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) 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.)

4)	Final repair coat	0.58	(4.8)
		0.58*	(4.8)*
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	(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 coat	0.44	(3.7)
		0.44*	(3.7)*
		kg/l	lb/gal
e)	Paper Coating	0.35	(2.9)
		0.28*	(2.3)*
		kg/l	lb/gal

(Note: The

~~paper coating limitation shall not apply to any owner or operator of any paper coating line on which flexographic, or rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in Subpart H 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.)~~

d)	Coil Coating	0.31	(2.6)
		0.20*	(1.7)*
e)	Fabric Coating	0.35	(2.9)
		0.28*	(2.3)*
f)	Vinyl Coating	0.45	(3.8)
		0.28*	(2.3)*
g)	Metal Furniture Coating		
1)	Air dried	0.36	(3.0)

			0.34*	(2.8)*
	2)	Baked	0.36	(3.0)
			0.28*	(2.3)*
	h)	Large Appliance Coating		
	1)	Air dried	0.34	(2.8)
			0.34*	(2.8)*
	2)	Baked	0.34	(2.8)
			0.28*	(2.3)*
(Note: The			kg/l	lb/gal
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	0.20	(1.7)
			0.20*	(1.7)*
j)		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	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	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)*	
7)	Definition Heavy Off Highway Vehicle Products Coating coating is attr:	kg/l	lb/gal	terms are defined:i) reated.iii) "Mar
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 and limitations before March 15, 1998: subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j) above.1) Wood Furniture Coating1)	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)	
(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	kg VOM/kg solids	lb VOM/lb solids	

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:

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	kg/l	lb/gal

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:

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 Existing Diesel Electric Locomotive Coating Lines~~ kg/l lb/gal
 furniture coating in Cook County

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

1)	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)	Plastic Parts Coating: Automotive/Transportation	kg/l	lb/gal

1)	Interiors		
A)	Baked		
i)	Color coat	0.49*	(4.1)*
ii)	Primer	0.46*	(3.8)*
B)	Air-Dried		
i)	Color coat	0.38*	(3.2)*
ii)	Primer	0.42*	(3.5)*
2)	Exteriors (flexible and non-flexible)		
A)	Baked		
i)	Primer	0.60*	(5.0)*
ii)	Primer non-flexible	0.54*	(4.5)*
iii)	Clear coat	0.52*	(4.3)*
iv)	Color coat	0.55*	(4.6)*
B)	Air-Dried		
i)	Primer	0.66*	(5.5)*

a)	<u>Automobile or Light-Duty Truck Coating</u>		<u>kg/l</u>	<u>lb/gal</u>
1)	<u>Prime coat</u>		<u>0.14</u>	<u>(1.2)</u>
			<u>0.14*</u>	<u>(1.2)*</u>
2)	<u>Primer surface coat</u>		<u>1.81</u>	<u>(15.1)</u>
			<u>1.81*</u>	<u>(15.1)*</u>
<u>(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) 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>				
3)	<u>Topcoat</u>		<u>kg/l</u>	<u>lb/gal</u>
			<u>1.81</u>	<u>(15.1)</u>
			<u>1.81*</u>	<u>(15.1)*</u>
<u>(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) of this Part and the recordkeeping and reporting</u>				

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.)

	4)	<u>Final repair coat</u>	<u>kg/l</u>	<u>lb/gal</u>
			<u>0.58</u>	<u>(4.8)</u>
b)		<u>Can Coating</u>	<u>0.58*</u>	<u>(4.8)*</u>
			<u>kg/l</u>	<u>lb/gal</u>
	1)	<u>Sheet basecoat and overvarnish</u>		
	A)	<u>Sheet basecoat</u>	<u>0.34</u>	<u>(2.8)</u>
			<u>0.26*</u>	<u>(2.2)*</u>
	B)	<u>Overvarnish</u>	<u>0.34</u>	<u>(2.8)</u>
			<u>0.34</u>	<u>(2.8)*</u>
	2)	<u>Exterior basecoat and overvarnish</u>	<u>0.34</u>	<u>(2.8)</u>
			<u>0.25*</u>	<u>(2.1)*</u>
	3)	<u>Interior body spray coat</u>		
	A)	<u>Two piece</u>	<u>0.51</u>	<u>(4.2)</u>
			<u>0.44*</u>	<u>(3.7)*</u>
	B)	<u>Three piece</u>	<u>0.51</u>	<u>(4.2)</u>
			<u>0.51*</u>	<u>(4.2)*</u>
	4)	<u>Exterior end coat</u>	<u>0.51</u>	<u>(4.2)</u>
			<u>0.51*</u>	<u>(4.2)*</u>
	5)	<u>Side seam spray coat</u>	<u>0.66</u>	<u>(5.5)</u>
			<u>0.66*</u>	<u>(5.5)*</u>
	6)	<u>End sealing compound coat</u>	<u>0.44</u>	<u>(3.7)</u>
			<u>0.44*</u>	<u>(3.7)*</u>
c)		<u>Paper Coating</u>	<u>kg/l</u>	<u>lb/gal</u>
			<u>0.35</u>	<u>(2.9)</u>
			<u>0.28*</u>	<u>(2.3)*</u>

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

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

BOARD NOTE: The limitation shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 l (1 quart) in any one rolling eight-hour period.

i)	<u>Magnet Wire Coating</u>	<u>kg/l</u>	<u>lb/gal</u>
		<u>0.20</u>	<u>(1.7)</u>
		<u>0.20*</u>	<u>(1.7)*</u>
j)	<u>Miscellaneous Metal Parts and Products Coating</u>		
	1) <u>Clear coating</u>	<u>0.52</u>	<u>(4.3)</u>
		<u>0.52*</u>	<u>(4.3)*</u>
	2) <u>Extreme performance coating</u>		
	A) <u>Air dried</u>	<u>0.42</u>	<u>(3.5)</u>
		<u>0.42*</u>	<u>(3.5)*</u>
	B) <u>Baked</u>	<u>0.42</u>	<u>(3.5)</u>
		<u>0.40*</u>	<u>(3.3)*</u>

3)	<u>Steel pail and drum interior coating</u>	<u>0.52</u> <u>0.52*</u>	<u>(4.3)</u> <u>(4.3)*</u>
4)	<u>All other coatings</u>		
A)	<u>Air Dried</u>	<u>0.42</u> <u>0.40*</u>	<u>(3.5)</u> <u>(3.3)*</u>
B)	<u>Baked</u>	<u>0.36</u> <u>0.34*</u>	<u>(3.0)</u> <u>(2.8)*</u>
5)	<u>Marine engine coating</u>		
A)	<u>Air Dried</u>	<u>0.42</u> <u>0.42*</u>	<u>(3.5)</u> <u>(3.5)*</u>
B)	<u>Baked</u>		
i)	<u>Primer/Topcoat</u>	<u>0.42</u> <u>0.42*</u>	<u>(3.5)</u> <u>(3.5)*</u>
ii)	<u>Corrosion resistant basecoat</u>	<u>0.42</u> <u>0.28*</u>	<u>(3.5)</u> <u>(2.3)*</u>
C)	<u>Clear Coating</u>	<u>0.52</u> <u>0.52*</u>	<u>(4.3)</u> <u>(4.3)*</u>
6)	<u>Metallic Coating</u>		
A)	<u>Air Dried</u>	<u>0.42</u> <u>0.42*</u>	<u>(3.5)</u> <u>(3.5)*</u>
B)	<u>Baked</u>	<u>0.36</u> <u>0.36</u>	<u>(3.0)</u> <u>(3.0)*</u>

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.

k)	<u>Heavy Off-Highway Vehicle Products Coating</u>	<u>kg/l</u>	<u>lb/gal</u>
1)	<u>Extreme performance prime coat</u>	<u>0.42</u>	<u>(3.5)</u>
		<u>0.42*</u>	<u>(3.5)*</u>
2)	<u>Extreme performance topcoat (air dried)</u>	<u>0.42</u>	<u>(3.5)</u>
		<u>0.42*</u>	<u>(3.5)*</u>
3)	<u>Final repair coat (air dried)</u>	<u>0.42</u>	<u>(3.5)</u>
		<u>0.42*</u>	<u>(3.5)*</u>
4)	<u>All other coatings are subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j) above.</u>		
l)	<u>Wood Furniture Coating</u>		
1)	<u>Limitations before March 15, 1998:</u>		
	A)	<u>Clear topcoat</u>	<u>0.67</u>
			<u>(5.6)</u>
	B)	<u>Opaque stain</u>	<u>0.56</u>
			<u>(4.7)</u>
	C)	<u>Pigmented coat</u>	<u>0.60</u>
			<u>(5.0)</u>
	D)	<u>Repair coat</u>	<u>0.67</u>
			<u>(5.6)</u>
	E)	<u>Sealer</u>	<u>0.67</u>
			<u>(5.6)</u>
	F)	<u>Semi-transparent stain</u>	<u>0.79</u>
			<u>(6.6)</u>
	G)	<u>Wash coat</u>	<u>0.73</u>
			<u>(6.1)</u>

(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 (HVL) 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:

	<u>kg VOM/ kg solids</u>	<u>lb VOM/ lb solids</u>
<u>A) Topcoat</u>	<u>0.8</u>	<u>(0.8)</u>
<u>B) Sealers and topcoats with the following limits:</u>		
<u>i) Sealer other than acid-cured alkyd amino vinyl sealer</u>	<u>1.9</u>	<u>(1.9)</u>
<u>ii) Topcoat other than acid-cured alkyd amino conversion varnish topcoat</u>	<u>1.8</u>	<u>(1.8)</u>
<u>iii) Acid-cured alkyd amino vinyl sealer</u>	<u>2.3</u>	<u>(2.3)</u>
<u>iv) Acid-cured alkyd amino conversion varnish topcoat</u>	<u>2.0</u>	<u>(2.0)</u>

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:

		<u>kg/l</u>	<u>lb/gal</u>
<u>A)</u>	<u>Opaque stain</u>	<u>0.56</u>	<u>(4.7)</u>
<u>B)</u>	<u>Non-topcoat pigmented coat</u>	<u>0.60</u>	<u>(5.0)</u>
<u>C)</u>	<u>Repair coat</u>	<u>0.67</u>	<u>(5.6)</u>
<u>D)</u>	<u>Semi-transparent stain</u>	<u>0.79</u>	<u>(6.6)</u>
<u>E)</u>	<u>Wash coat</u>	<u>0.73</u>	<u>(6.1)</u>

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 kg/l lb/gal

County

1)	<u>Extreme performance prime coat</u>	<u>0.42</u> <u>0.42*</u>	<u>(3.5)</u> <u>(3.5)*</u>
2)	<u>Extreme performance top-coat (air dried)</u>	<u>0.42</u> <u>0.42*</u>	<u>(3.5)</u> <u>(3.5)*</u>
3)	<u>Final repair coat (air dried)</u>	<u>0.42</u> <u>0.42*</u>	<u>(3.5)</u> <u>(3.5)*</u>
4)	<u>High-temperature aluminum coating</u>	<u>0.72</u> <u>0.72*</u>	<u>(6.0)</u> <u>(6.0)*</u>
5)	<u>All other coatings</u>	<u>0.36</u> <u>0.36*</u>	<u>(3.0)</u> <u>(3.0)*</u>
n)	<u>Plastic Parts Coating: Automotive/Transportation</u>	<u>kg/l</u>	<u>lb/gal</u>
1)	<u>Interiors</u>		
	A) <u>Baked</u>		
	i) <u>Color coat</u>	<u>0.49*</u>	<u>(4.1)*</u>
	ii) <u>Primer</u>	<u>0.46*</u>	<u>(3.8)*</u>
	B) <u>Air Dried</u>		
	i) <u>Color coat</u>	<u>0.38*</u>	<u>(3.2)*</u>
	ii) <u>Primer</u>	<u>0.42*</u>	<u>(3.5)*</u>
2)	<u>Exteriors (flexible and non-flexible)</u>		
	A) <u>Baked</u>		
	i) <u>Primer</u>	<u>0.60*</u>	<u>(5.0)*</u>
	ii) <u>Primer non-flexible</u>	<u>0.54*</u>	<u>(4.5)*</u>
	iii) <u>Clear coat</u>	<u>0.52*</u>	<u>(4.3)*</u>
	iv) <u>Color coat</u>	<u>0.55*</u>	<u>(4.6)*</u>
	B) <u>Air Dried</u>		

	i)	<u>Primer</u>	0.66*	(5.5)*
ii)		<u>Clear coat</u>	0.54*	(4.5)*
iii)		<u>Color coat (red & black)</u>	0.67*	(5.6)*
iv)		<u>Color coat (others)</u>	0.61*	(5.1)*
3)	3)	<u>Specialty</u>		
A)		<u>Vacuum surface metallizing basecoats, texture basecoats</u>	0.66*	(5.5)*
B)		<u>Black coatings, reflective argnet coatings, air bag cover coatings, and soft coatings</u>	0.71*	(5.9)*
C)		<u>Gloss reducers, vacuum surface metallizing topcoats, and texture topcoats</u>	0.77*	(6.4)*
D)		<u>Stencil coatings, adhesion primers, ink pad coatings, electrostatic prep coatings, and resist coatings</u>	0.82*	(6.8)*
E)		<u>Headlamp lens coatings</u>	0.89*	(7.4)*
o)		<u>Plastic Parts Coating: Business Machine</u>	kg/l	lb/gal
1)	1)	<u>Primer</u>	0.14*	(1.2)*
2)	2)	<u>Color coat (non-texture coat)</u>	0.28*	(2.3)*
3)	3)	<u>Color coat (texture coat)</u>	0.28*	(2.3)*
4)	4)	<u>Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings</u>	0.48*	(4.0)*
5)	5)	<u>Specialty Coatings</u>		
A)	A)	<u>Soft coat</u>	0.52*	(4.3)*
B)	B)	<u>Plating resist</u>	0.71*	(5.9)*

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Plating sensitizer

0.85*

(7.1)*

p) Flat Wood Paneling Coatings. On and after May 1, 2010, flat wood paneling coatings shall comply with one of the following limitations:

- 1) 0.25 kg VOM/~~l~~ of coatings (2.1 lb VOM/gal coatings); or
- 2) 0.35 kg VOM/~~l~~ solids (2.9 lb VOM/gal solids).

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

Section 218.205 Daily-Weighted Average Limitations

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) 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)(4), (c), (d), (e), (f), ~~or~~ (i), or (p) 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) 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
- 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)

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 1(c)(2) of this Section. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation.

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

where:

~~E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);~~

~~i = Subscript denoting a specific coating applied;~~

~~n = Total number of coatings applied in the can coating operation, i.e. all can coating lines at the source;~~

~~V_i = Volume of each coating applied for the day in units of l/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);~~

~~C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).~~

E_d	≡	<u>Actual VOM emissions for the day in units of kg/day (lbs/day);</u>
i	≡	<u>Subscript denoting a specific coating applied;</u>
n	≡	<u>Total number of coatings applied in the can coating operation, i.e. all can coating lines at the source;</u>
V_i	≡	<u>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);</u>
C_i	≡	<u>The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any</u>

compounds which are specifically exempted from the definition of VOM.

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

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

where:

A_d = The VOM emissions allowed for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of surface coatings applied in the can coating operation;

C_i = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

D_i = The density of VOM in each coating applied. For the purposes of calculating A_d , the density is 0.882 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);

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

	<u>definition of VOM):</u>
<u>D_i</u>	<u>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):</u>
<u>V_i</u>	<u>=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):</u>
<u>L_i</u>	<u>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).</u>

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 (l)(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 (l)(3) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used, or

- 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(l)(1) or (l)(3) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

- f) 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)

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, 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) 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)

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.

(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 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 ~~(c)~~, (d), (e), (f), (g), (h), (i), (j), ~~(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)

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)

A) Obtain the emission limitation from the appropriate subsection in Section 218.204 of this Subpart;

B) Calculate \overline{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, \overline{VOM}_i is equal to the value of \overline{S} as determined above in subsection (b)(2)(B) of this Section.

- 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)(4), (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)(2) or 218.204(a)(3) 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).

- d) No owner or operator of a miscellaneous metal parts and products coating line 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(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 [3.5 lbs/gal], and which 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 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 [3.5 lbs/gal]), and which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- f) No owner or operator of an existing diesel-electric locomotive coating line in Cook County 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 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 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 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 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:

$$E_d = \sum_{i=1}^n V_i C_i (1 - F_i)$$

$$E_d = \sum_{i=1}^n V_i C_i (1 - F_i)$$

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 = 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.

$E_d = \sum_{i=1}^n V_i C_i (1 - F_i)$	<p>where:</p> <p>E_d</p> <p>i</p> <p>n</p> <p>V_i</p> <p>C_i</p> <p>F_i</p>	<p>≡ Actual VOM emissions for the day in units of kg/day (lbs/day);</p> <p>≡ Subscript denoting a specific coating applied;</p> <p>≡ Total number of surface coatings as applied in the can coating operation;</p> <p>≡ 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);</p> <p>≡ 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</p> <p>≡ Fraction, by weight, of VOM emissions from the surface coating</p>
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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 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 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 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 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 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 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) No owner or operator of a flat wood paneling coating line ~~which~~that is equipped with a capture system and control device shall operate the subject coating line unless either:

⌋

- 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 flat wood paneling coating line complies with all requirements set forth in subsection (b)(2) of this Section.

(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)
- a) No owner or operator of a coating line 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.
- 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 contained in Section 218.204(p) of this Subpart shall operate ~~said~~that 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(p) or the alternative control options in Section 218.205 or 218.207, and the requirements of Sections 218.211 and 218.217 of this Subpart, as applicable.

(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 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 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:

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

where:

~~T_e = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);~~

~~m = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 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 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 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.~~

T_c	≡	<u>Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);</u>
m	≡	<u>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);</u>
i	≡	<u>Subscript denoting an individual coating line;</u>
n	≡	<u>Total number of coatings as applied each day on each coating line;</u>
i	≡	<u>Subscript denoting an individual coating;</u>
V_i	≡	<u>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 in units of kg VOM/l (lbs VOM/gal); and</u>
B_i	≡	<u>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 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.</u>

- 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) 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 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 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 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)~~
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(l) 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)(2) or (a)(3) of this Subpart and complying by means of Section 218.204 of this Subpart shall comply with the following:

1)

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 ~~startup~~start-up date. Such certification shall include:

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

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

~~C) On and after March 15, 1998, for coating lines subject to the limitations of Section 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; and~~

~~D) For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.~~

~~2) On and after a date consistent with Section 218.106 of this Part, or on and after the initial startup 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)~~

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

D) For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.

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 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(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.

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)~~
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)~~

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 certification shall include:

~~A)~~

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(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.

~~FFF)~~ 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.

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

~~HGH~~) 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 ~~startup~~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)~~
- 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(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.

~~EDE~~) 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)~~
- 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 ~~H(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 ~~H(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 ~~I(c)~~, (d), (e), (f), (g), ~~or~~ (h), or (l) of this Subpart shall comply with the following:

~~1)~~

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 ~~startup~~ 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)~~

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)~~

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 ~~I(c)~~(1) or (d)(1) of this Section, respectively. Upon 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 ~~I(c)~~ or (d) of this Section, respectively.

f) Any owner or operator of a primer ~~urfacesurfacers~~ operation or topcoat operation subject to the limitations of Section 218.204(a)(2) or (a)(3) of this Subpart shall comply with the following:

1)

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 certification shall include:

A)

A) The name and identification number of each coating operation which will comply by means of Section 218.204(a)(2) and (a)(3) of this Subpart and the name and identification number of each coating line in each coating operation.

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

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

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

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

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

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

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

2) On and after a date consistent with Section 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)

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)(2) or (a)(3) of this Subpart including:

i)

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)(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)

A) Any record showing a violation of Section 218.204(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 ~~affected~~ 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(e) of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a flat wood paneling coating line subject to the requirements in Section 218.217 of this Subpart shall comply with the following:

1)

1) By May 1, 2010, or upon initial start-up, whichever is later, submit a certification to the Agency that includes a description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in ~~Sections~~Section 218.217(c) and 218.217(d) of this Subpart; and

2) Notify the Agency of any violation of Section 218.217 of this Subpart by providing a description of the violation and copies of records documenting such violation to the Agency within 30 days following the occurrence of the violation.

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

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

a)

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(p) 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, 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)

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 (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).~~

$E_d = \sum_{i=1}^n V_i C_i$	\equiv	<u>Actual daily VOM emissions from participating coating lines in units of kg/day (lbs/day);</u>
<u>where: E_d</u>	\equiv	<u>Subscript denoting a specific coating applied;</u>
<u>i</u>	\equiv	<u>Total number of coatings applied by all participating coating lines at the source;</u>
<u>n</u>	\equiv	<u>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</u>
<u>V_i</u>	\equiv	<u>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).</u>
<u>C_i</u>	\equiv	

2) The alternative daily emission limitation (~~A_d~~A_{ld}) shall be determined for all participating coating lines at the source on a daily basis as follows:

$$A_d = A_l + A_p$$

~~A_d = where A_l + A_p~~

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

~~A)~~

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:

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

~~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).

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

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).

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 = 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.~~

$A_p = \sum_{h=1}^m \sum_{j=1}^n \frac{V_j L_j D_j K_h}{(D_j - L_j)}$	\equiv	<u>The VOM emissions allowed for the day in units of kg/day (lbs/day):</u>
where: A_p		
h	\equiv	<u>Subscript denoting a specific powder coating line;</u>
i	\equiv	<u>Subscript denoting a specific powder coating applied;</u>
m	\equiv	<u>Total number of participating powder coating lines;</u>
n	\equiv	<u>Total number of powder coatings applied in the participating coating lines;</u>
D_i	\equiv	<u>The assumed density of VOM in liquid coating, 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM);</u>
V_i	\equiv	<u>Volume of each powder coating consumed for the day in units of l (gal) of coating; and</u>
L_i	\equiv	<u>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</u>
K	\equiv	<u>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 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:</u>
		<u>i) K cannot exceed 0.9 for non-recycled powder coating systems; or</u>
		<u>ii) K cannot exceed 2.0 for recycled powder coating systems.</u>

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

Section 218.217 Wood Furniture Coating and Flat Wood Paneling Coating Work Practice Standards

a)

a) Spray booth cleaning. Each owner or operator of a source subject to the limitations of Section 218.204(l) of this Subpart shall not use compounds containing more than 8.0 percent, by weight, of VOM for cleaning spray booth components other than

conveyors, continuous coaters and their enclosures, and metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic solvent to prepare the booth prior to applying the booth coating.

- b) Application equipment requirements. No owner or operator of a source subject to the limitations of Section 218.204(l) of this Subpart shall use conventional air spray guns to apply coating materials to wood furniture under the circumstances specified in subsections (b)(1) through (4) of this Section:

~~1) To apply coating materials that have a VOM content no greater than 1.0 kg VOM/kg solids (1.0 lb VOM/lb solids), as applied;~~

~~2) For repair coating under the following circumstances:~~

~~A) The coating materials are applied after the completion of the coating operation; or~~

~~B) The coating materials are applied after the stain and before any other type of coating material is applied, and the coating materials are applied from a container that has a volume of no more than 2.0 gallons;~~

~~3) If the spray gun is aimed and triggered automatically, rather than manually; or~~

~~4) If emissions from the finishing application station are directed to a control device pursuant to Section 218.216 of this Subpart.~~

- ~~c) Cleaning and storage requirements. Each owner or operator of a source subject to the limitations of Section 218.204(l) or 218.204(p) of this Subpart shall:~~

~~1) Keep, store, and dispose of all coating, cleaning, and washoff materials in closed containers;~~

~~2) Pump or drain all organic solvent used for line cleaning into closed containers;~~

~~3) Collect all organic solvent used to clean spray guns in closed containers; and~~

~~4) Control emissions from washoff operations by using closed tanks.~~

- ~~d) Additional cleaning and storage requirements for flat wood paneling coating lines. Every owner or operator of a source subject to the limitations of Section 218.204(p) of this Subpart shall:~~

~~1) Minimize spills of VOM containing coatings, thinners, and cleaning materials~~

and clean up spills immediately;

2) Minimize emissions of VOM during the cleaning of storage, mixing, and conveying equipment; and

3) Keep mixing vessels which contain VOM containing coatings and other VOM containing materials closed except when specifically in use.

~~e) Application equipment requirements. No owner or operator of a source subject to the limitations of Section 218.204(l) of this Subpart shall use conventional air spray guns to apply coating materials to wood furniture except under the circumstances specified in subsections I(1) through (4) of this Section:~~

~~1)~~

~~1) To apply coating materials that have a VOM content no greater than 1.0 kg VOM/kg solids (1.0 lb VOM/lb solids), as applied;~~

2) For repair coating under the following circumstances:

~~A)~~

~~A) The coating materials are applied after the completion of the coating operation; or~~

~~B) The coating materials are applied after the stain and before any other type of coating material is applied, and the coating materials are applied from a container that has a volume of no more than 2.0 gallons;~~

~~3) If the spray gun is aimed and triggered automatically, rather than manually; or~~

~~4) If emissions from the finishing application station are directed to a control device pursuant to Section 218.216 of this Subpart.~~

c) Cleaning and storage requirements. Each owner or operator of a source subject to the limitations of Section 218.204(l) or 218.204(p) of this Subpart shall:

1) Keep, store, and dispose of all coating, cleaning, and washoff materials in closed containers;

2) Pump or drain all organic solvent used for line cleaning into closed containers;

3) Collect all organic solvent used to clean spray guns in closed containers; and

4) Control emissions from washoff operations by using closed tanks.

d) Additional cleaning and storage requirements for flat wood paneling coating lines. Every owner or operator of a source subject to the limitations of Section 218.204(p) of this Subpart shall:

- 1) Minimize spills of VOM-containing coatings, thinners, and cleaning materials and clean up spills immediately;
- 2) Minimize emissions of VOM during the cleaning of storage, mixing, and conveying equipment; and
- 3) Keep mixing vessels that contain VOM-containing coatings and other VOM-containing materials closed except when specifically in use.
The coating materials are applied after the stain and before any other type of coating material is applied, and the coating materials are applied from a container that has a volume of no more than 2.0 gallons;

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

SUBPART H: PRINTING AND PUBLISHING

Section 218.401 Flexographic and Rotogravure Printing

- a) No owner or operator of a subject flexographic, ~~packaging rotogravure or publication,~~ or rotogravure printing line shall apply at any time any coating or ink unless the VOM content does not exceed the limitation specified in either subsection (a)(1) or (a)(2) ~~below~~, as applicable. Compliance with this Section must be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.404(c) of this Part. As an alternative to compliance with this subsection, a subject printing line may meet the requirements of subsection (b) or (c) ~~below~~.

~~1)~~
1) Prior to May 1, 2010, either:

A) Forty percent VOM by volume of the coating and ink (minus water and any compounds which are specifically exempted from the definition of VOM); or

B) ~~2)~~ Twenty-five percent VOM by volume of the volatile content in the coating and ink; ~~And and~~

2) On and after May 1, 2010:

A) For owners ~~or~~ operators of flexographic or rotogravure printing lines that do not print flexible packaging, either:

i) Forty percent VOM by volume of the coating and ink (minus water and any compounds ~~which~~ that are specifically

exempted from the definition of VOM); or

ii) Twenty-five percent VOM by volume of the volatile content in the coating and ink;

B) For owners or operators of flexographic or rotogravure printing lines that print flexible packaging, or that print flexible packaging and non-flexible packaging on the same line, either:

i) 0.8 kg VOM/kg (0.8 lbs VOM/lb) solids applied; or

ii) 0.16 kg VOM/kg (0.16 lbs VOM/lb) inks and coatings applied;

b) Weighted ~~Averaging Alternative~~ averaging alternative.

1) Prior to May 1, 2010, ~~no~~ no owner or operator of a subject flexographic, ~~packaging rotogravure or publication~~ or rotogravure printing line shall apply coatings or inks on the subject printing line unless the weighted average, by volume, VOM content of all coatings and inks as applied each day on the subject printing line does not exceed the limitation specified in either subsection (a)(1)(A) (as determined by subsection (b)(1)(A)) or subsection (a)(~~121~~)(B) (as determined by subsection (b)(~~121~~)(B)). Compliance with this subsection must be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.404(d) of this Part.

A) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(1)(A) of this Section.

$$Vom_{(i)(A)} = \frac{\sum_{i=1}^n C_i L_i (V_{si} + V_{VOMi})}{\sum_{i=1}^n L_i (V_{si} + V_{VOMi})}$$

where:

VOM_{(i)(A)} ≡ The weighted average VOM content in units of percent VOM by volume of all coatings and inks (minus water and any compounds which are specifically exempted from the definition of VOM) used each day;
i ≡ Subscript denoting a specific coating or ink as applied;
n ≡ The number of different coatings and/or inks as applied each

		day on a printing line;
C_i	\equiv	The VOM content in units of percent VOM by volume of each coating or ink as applied (minus water and any compounds which are specifically exempted from the definition of VOM);
L_i	\equiv	The liquid volume of each coating or ink as applied in units of L (gal);
V_{si}	\equiv	The volume fraction of solids in each coating or ink as applied; and
V_{VOMi}	\equiv	The volume fraction of VOM in each coating or ink as applied.

B) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(1)(~~A~~B) of this Section.

~~N~~

$$\begin{aligned}
 \text{VOM}_{(i)(A)} &= \frac{\sum_{i=1}^n C_i L_i (V_{si} + V_{VOMi})}{\sum_{i=1}^n L_i (V_{si} + V_{VOMi})} \\
 \text{Vom}_{(i)(B)} &= \frac{\sum_{i=1}^n C_i L_i V_{vmi}}{\sum_{i=1}^n L_i V_{vmi}}
 \end{aligned}$$

~~Where~~where:

~~VOM_{(i)(A)}~~ = The weighted average VOM content in units of percent VOM by volume of all coatings and inks (minus water and any compounds which are specifically exempted from the definition of VOM) used each day;

~~I~~ = Subscript denoting a specific coating or ink as applied;

~~n~~ = The number of different coatings and/or inks as applied each day on a printing line;

~~C_i~~ = The VOM content in units of percent VOM by volume of each coating or ink as applied (minus water and any compounds which are specifically exempted from the definition of VOM);

$L_i =$ The liquid volume of each coating or ink as applied in units of 1 (gal);

$V_{si} =$ The volume fraction of solids in each coating or ink as applied; and

$V_{VOMi} =$ The volume fraction of VOM in each coating or ink as applied.

B2) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(12)(B) of this Section.

$$VOM_{(i)(B)} = \frac{\sum_{i=1}^n C_i L_i V_{Vmi}}{\sum_{i=1}^n L_i V_{Vmi}}$$

Where:-

$VOM_{(i)(B)} =$ The weighted average VOM content in units of percent VOM by volume of the volatile content of all coatings and inks used each day;

$I =$ Subscript denoting a specific coating or ink as applied;

$n =$ The number of different coatings and/or inks as applied each day on each printing line;

$C_i =$ The VOM content in units of percent VOM by volume of the volatile matter in each coating or ink as applied;

$L_i =$ The liquid volume of each coating or ink as applied in units of 1 (gal) and

$V_{Vmi} =$ The volume fraction of volatile matter in each coating or ink as applied.

$VOM_{(i)(B)}$ \equiv The weighted average VOM content in units of percent VOM

		<u>by volume of the volatile content of all coatings and inks used each day:</u>
<u>i</u>	<u>=</u>	<u>Subscript denoting a specific coating or ink as applied;</u>
<u>n</u>	<u>=</u>	<u>The number of different coatings and/or inks as applied each day on each printing line;</u>
<u>C_i</u>	<u>=</u>	<u>The VOM content in units of percent VOM by volume of the volatile matter in each coating or ink as applied;</u>
<u>L_i</u>	<u>=</u>	<u>The liquid volume of each coating or ink as applied in units of l (gal) and</u>
<u>V_{VMi}</u>	<u>=</u>	<u>The volume fraction of volatile matter in each coating or ink as applied.</u>

- 2) On and after May 1, 2010, no owner or operator of a subject flexographic or rotogravure printing line that does not print flexible packaging shall apply coatings or inks on the subject printing line unless the weighted average, by weight, VOM content of all coatings and inks as applied each day on the subject printing line does not exceed the limitation specified in either subsection (a)(2)(A)(i) (calculated in accordance with the equation in subsection (b)(1)(A)) or subsection (a)(2)(A)(ii) (calculated in accordance with the equation in subsection (b)(1)(B)) of this Section. Compliance with this subsection (b)(2) shall be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.404(d) of this Subpart.

- 3) On and after May 1, 2010, no owner or operator of a subject flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, shall apply coatings or inks on the subject printing line unless the weighted average, by weight, VOM content of all coatings and inks as applied each day on the subject printing line does not exceed the limitation specified in either subsection (a)(2)(B)(i) (calculated in accordance with the equation in subsection (b)(3)(A)) or subsection (a)(2)(B)(ii) (calculated in accordance with the equation in subsection (b)(3)(B)) of this Section. Compliance with this subsection (b)(3) shall be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.404(d) of this Subpart.

A) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(2)(B)(i) of this

The weighted average VOM content in units of kg VOM per kg (lbs VOM per lb) solids of all coatings and inks used each day:

$$Vom_{(A)} = \frac{\sum_{i=1}^n C_i W_i}{\sum_{i=1}^n W_i}$$

Section.

e: VOM_(A)

- wher
- i ≡ Subscript denoting a specific coating or ink as applied;
 - n ≡ The number of different coatings and/or inks as applied each day on a printing line;
 - C_i ≡ The VOM content in units of kg VOM per kg (lbs VOM per lb) solids of each coating or ink as applied;
 - W_i ≡ Weight of solids in each coating or ink, as applied, in units of kg/l (lb/gal).

B) The following equation shall be used to determine if the weighted average VOM content in units of kg (lbs) VOM per weight in kg (lbs) of all coatings or inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(2)(B)(ii) of this

Section.

$$Vom_{(B)} = \frac{\sum_{i=1}^n C_i L_i}{\sum_{i=1}^n L_i}$$

where:

VOM_(B)

- i ≡ Subscript denoting a specific coating or ink as applied;
- n ≡ The number of different coatings and/or inks as applied each day on each printing line;
- C_i ≡ The VOM content in units of kg (lbs) VOM per weight in kg (lbs) of each coating or ink as applied;
- L_i ≡ The weight of each coating or ink, as applied, in units of kg/l (lb/gal).

A) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(2)(B)(i) of this Section.

$$\frac{\sum_{i=1}^n C_i W_i}{\sum_{i=1}^n W_i} = Vom_{(A)}$$

Where:

VOM_(A) = The weighted average VOM content in units of kg

VOM per kg (lbs VOM per lb) solids of all coatings and inks used each day;

I= Subscript denoting a specific coating or ink as applied;

n= The number of different coatings and/or inks as applied each day on a printing line;

C_i= The VOM content in units of kg VOM per kg (lbs VOM per lb) solids of each coating or ink as applied;

W_i= Weight of solids in each coating or ink, as applied, in units of kg/l (lb/gal).

B) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(2)(B)(ii) of this Section.

$$\frac{\sum_{i=1}^n C_i L_i}{\sum_{i=1}^n L_i} \quad \text{VOM}_{(B)} = \frac{\sum_{i=1}^n W_i C_i}{\sum_{i=1}^n W_i}$$

Where:

VOM_(B)= The weighted average VOM content in units of kg (lbs) VOM per weight in kg (lbs) of all coatings or inks as applied each day;

I= Subscript denoting a specific coating or ink as applied;

n= The number of different coatings and/or inks as applied each day on each printing line;

C_i= The VOM content in units of kg (lbs) VOM per weight in kg (lbs) of each coating or ink as applied;

L_i= The weight of each coating or ink, as applied, in units of kg/l (lb/gal).

c) Capture ~~System and Control Device Requirements~~ system and control device requirements.

d) _____

1) Prior to May 1, 2010, ~~no~~no owner or operator of a subject ~~flexographic, packaging rotogravure or publication flexographic~~rotogravure printing line equipped with a capture system and control device shall operate the subject printing line unless the owner or operator meets the requirements in subsection ~~(c)(1)(A), (c)(1)(B)(2), or (c)(131)(C), as well as and as~~ subsections (c)(~~141~~)(D), (c)(5), and (c)(6) ~~below~~.

~~A1~~ One of:

~~i)~~ i) A carbon adsorption system is used ~~which~~that reduces the captured VOM emissions by at least 90 percent by weight;
or

~~B2ii)~~ ii) An incineration system is used ~~which~~that reduces the captured VOM emissions by at least 90 percent by weight;
or

~~C3iii)~~ iii) An alternative VOM emission reduction system is used ~~which~~that is demonstrated to have at least a 90 percent control device efficiency, approved by the Agency and approved by USEPA as a SIP revision;
and

~~D4B)~~ B) The printing line is equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least:

~~iA)~~ i) 75 percent where a publication rotogravure printing line is employed;
or

~~iiB)~~ ii) 65 percent where a packaging rotogravure printing line is employed;
or

~~iiiC)~~ iii) 60 percent where a flexographic printing line is employed;
and

2) On and after May 1, 2010, no owner or operator of a flexographic or rotogravure printing line that does not print flexible packaging and that is equipped with a capture system and control device shall operate the subject printing line unless the owner or operator meets the requirements in subsection ~~(c)(1)(A), (c)(1)(B), or (c)(1)(C), as well as~~ subsections (c)(1)(D), (c)(5), and (c)(6) of this Section;

3) On and after May 1, 2010, no owner or operator of a flexographic or rotogravure printing line that prints flexible packaging and that is equipped with a capture system and control device shall operate the subject printing line unless the owner or operator meets the

requirements in subsections I(c)(5) and I(c)(6) of this Section and the capture system and control device provides an overall reduction in VOM emissions of at least:

- A) A) 65 percent wherein which a subject printing line was first constructed at the subject source prior to March 14, 1995,1995 and utilizes a control device that was first constructed at the subject source prior to January 1, 2010; or
 - B) 70 percent wherewhen a subject printing line was first constructed at the subject source prior to March 14, 1995,1995 and utilizes a control device that was first constructed at the subject source on or after January 1, 2010; or
 - C) 75 percent wherewhen a subject printing line was first constructed at the subject source on or after March 14, 1995,1995 and utilizes a control device that was first constructed at the subject source prior to January 1, 2010; or
 - D) 80 percent wherewhen a subject printing line was first constructed at the subject source on or after March 14, 1995,1995 and utilizes a control device that was first constructed at the subject source on or after January 1, 2010;
- 4) On and after May 1, 2010, the owner or operator of a flexographic or rotogravure printing line that prints flexible packaging and non-flexible packaging on the same line and that is equipped with a control device shall be subject to the requirements of either subsection I(c)(1)(D) or subsection I(c)(3) of this Section, whichever is more stringent, as well as subsections I(c)(5) and I(c)(6) of this Section;
 - 5) The control device is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and except as provided in Section 218.105(d)(3) of this Part, the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use; and
 - 6) The capture system and control device are operated at all times when the subject printing line is in operation. The owner or operator shall demonstrate compliance with this subsection by using the applicable capture system and control device test methods and procedures specified in Section 218.105I(c) through Section 218.105(f) of this Part and by complying with the recordkeeping and reporting requirements specified in Section 218.404(e) of this Part. The owner or operator of a printing line subject to the requirements in Section 218.401I(c)(2) or 218.401I(c)(1)(D) of this Section that performed all testing necessary to demonstrate

compliance with Section 218.401(c)(1)(D) prior to May 1, ~~2010, 2010~~ is not required to retest pursuant to this subsection (c)(6). The owner or operator of a printing line subject to the requirements in Section 218.401(c)(3) shall perform testing in compliance with this subsection (c)(6), even if the owner or operator already performed such testing prior to May 1, 2010, unless the following conditions are met. Nothing in this subsection (c)(6), however, shall limit the Agency's ability to require that the owner or operator perform testing pursuant to Section 35 Ill. Adm. Code 201.282:

A)

A) On or after May 1, 2000, the owner or operator of the subject printing line performed all testing necessary to demonstrate compliance with Section 218.401(c)(1)(D);

B) Such testing also demonstrated an overall control efficiency equal to or greater than the applicable control efficiency requirements in Section 218.401(c)(3);

C) The owner or operator submitted the results of such ~~test(s) tests~~ to the Agency, and the ~~test(s) was tests were~~ not rejected by the Agency;

D) The same capture system and control device subject to the tests referenced in subsection (c)(6)(A) of this Section is still being used by the subject printing line; and

E) The owner or operator complies with all recordkeeping and reporting requirements in Section 218.404(e)(1)(B).

d) No owner or operator of subject flexographic or rotogravure printing ~~line(s) lines~~ that print flexible packaging or print flexible packaging and non-flexible packaging on the same line shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with the subject flexographic or rotogravure printing ~~line(s) lines~~ to be kept, stored, or disposed of in any manner other than in closed containers, or conveyed from one location to another in any manner other than in closed containers or pipes, except when specifically in use.

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

Section 218.402 Applicability

~~a)~~

a) Except as otherwise provided in Section 218.401, ~~the The the~~ limitations of Section 218.401 of this ~~Subpart Part Subpart~~ apply to all flexographic and rotogravure printing lines at a subject source. Sources with flexographic and/or rotogravure printing lines are subject sources if:

4)

1) Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing line(s)lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)lines) at the source ever exceed 90.7 Mg (100 tons) per calendar year and the flexographic and rotogravure printing line(s)lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)lines) at the source are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision; or

2) The flexographic and rotogravure printing line(s)lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)lines) at the source have a potential to emit 22.7 Mg (25 tons) or more of VOM per year.

b) The limitations of Section 218.401(d) shall apply to all owners or operators of flexographic or rotogravure printing line(s)lines that print flexible packaging, or that print flexible packaging and non-flexible packaging on the same line, at a source where the combined emissions of VOM from all flexographic and rotogravure printing lines total 6.8 kg/day (15 lbs/day) or more (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)lines), in the absence of air pollution control equipment.

~~Ebc~~) Upon achieving compliance with this Subpart, the flexographic and rotogravure printing lines are not required to meet Subpart G (Sections 218.301 or 218.302 of this Part). Flexographic and rotogravure printing lines exempt from this Subpart are subject to Subpart G (Sections 218.301 or 218.302 of this Part). Rotogravure or flexographic equipment used for both roll printing and paper coating is subject to this Subpart.

~~Eed~~) Once subject to the limitations of Section 218.401, a flexographic or rotogravure printing line is always subject to the limitations of Section 218.401 of this Part.

~~Ede~~) Any owner or operator of any flexographic or rotogravure printing line that is exempt from any of the limitations of Section 218.401 of this Part because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 218.404(b) and (f) of this Part, as applicable.

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

Section 218.403 Compliance Schedule

Every owner or operator of a flexographic and/or rotogravure printing line shall comply

with the applicable requirements of Section 218.401 and Section 218.404 of this Part in accordance with the applicable compliance ~~schedule(s)~~schedules specified in subsection (a), (b), (c), ~~or~~ (d), (e), (f), or (g) ~~below~~:

- a) ~~No~~ owner or operator of a flexographic or rotogravure printing line ~~which~~that is exempt from the limitations of Section 218.401 of this Part because of the criteria in Section 218.402(a) of this Part shall operate said printing 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 218.404(b) of this Part.
- b) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 218.401(a)(1) of this Part shall operate said printing 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 218.401(a)(1) and Section 218.404(c) of this Part.
- c) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 218.401(b)(1) of this Part shall operate said printing 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 218.401(b)(1) and Section 218.404(d) of this Part.
- d) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 218.401~~(c)~~(1)(D) of this Part shall operate said printing 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, the applicable provisions in Sections 218.401~~(c)~~ and ~~Section~~ 218.404(e) of this Part.
- e) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 218.401(a)(2), (b)(2), or (b)(3) or complying by means of Section 218.401(c)(2), (c)(3), or (c)(4), shall operate ~~said~~the printing line on or after May 1, 2010, unless the owner or operator has complied with, and continues to comply with, Section 218.401(a)(2), (b)(2) or (b)(3), and Section 218.401(c), as applicable, and all applicable provisions in Section 218.404 of this Part.
- f) No owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, shall operate ~~said~~the printing line on or after May 1, 2010, unless the owner or operator has complied with, and continues to comply with, Section 218.401(d) and Section 218.404(g) of this Part.
- g) No owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, and ~~which~~that is exempt from the limitations of Section 218.401(d) because of the criteria in Section 218.402(b) of this Part shall operate ~~said~~the printing line on or after May 1, 2010, unless the owner or operator has

complied with, and continues to comply with, Section 218.402(b) and Section 218.404(f) of this Part.

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

Section 218.404 Recordkeeping and Reporting

- a) a) The VOM content of each coating and ink 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 printing line which is exempted from any of the limitations of Section 218.401 of this Part because of the criteria in Section 218.402(a) of this Part shall comply with the following:
- 1) 1) By a date consistent with Section 218.106 of this Part, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, by May 1, 2010, the owner or operator of a flexographic ~~or~~ and rotogravure printing line to which this subsection (b) is applicable shall certify to the Agency that the flexographic and rotogravure printing line is exempt under the provisions of Section 218.402(a) of this Part. Such certification shall include:
- A) A) A declaration that the flexographic and rotogravure printing line is exempt from the limitations of the criteria in Section 218.401 of this Part because of Section 218.402(a) of this Part; and
- B) Calculations which demonstrate that total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices. Total maximum theoretical emissions of VOM for a flexographic or rotogravure printing source is the sum of maximum theoretical emissions of VOM from each flexographic and rotogravure printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year before the application of capture systems and control devices for each flexographic and rotogravure printing line at the source:

$$E_p = A \times B + 1095 (C \times D \times F)$$

where:-

~~$E_p =$ Total maximum theoretical emissions of VOM from one~~

flexographic or rotogravure printing line in units of kg/year (lbs/year);-

A= ~~Weight of VOM per volume of solids of the coating or ink with the highest VOM content as applied each year on the printing line in units of kg VOM/l (lbs VOM/gal) of coating or ink solids;~~

B= ~~Total volume of solids for all coatings and inks that can potentially be applied each year on the printing line in units of l/year (gal/year). The method by which the owner or operator accurately calculated the volume of each coating and ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;~~

C= ~~Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of kg/g/l (lbs VOM/gal) of such material;~~

D= ~~The greatest volume of cleanup material or solvent used in any 8-hour period and~~

F= ~~The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.~~

$$E_p = A \times B + 1095 (C \times D \times F) \text{ where: } E_p = \begin{array}{l} \text{Total maximum theoretical emissions of VOM from one} \\ \text{flexographic or rotogravure printing line in units of kg/year} \\ \text{(lbs/year);} \\ \text{A} \quad \text{Weight of VOM per volume of solids of the coating or ink with the} \\ \quad \text{highest VOM content as applied each year on the printing} \\ \quad \text{line in units of kg VOM/l (lbs VOM/gal) of coating or ink} \\ \quad \text{solids;} \\ \text{B} \quad \text{Total volume of solids for all coatings and inks that can potentially} \\ \quad \text{be applied each year on the printing line in units of l/year} \\ \quad \text{(gal/year). The instrument and/or method by which the} \\ \quad \text{owner or operator accurately measured or calculated the} \\ \quad \text{volume of each coating and ink as applied and the amount} \\ \quad \text{that can potentially be applied each year on the printing line} \\ \quad \text{shall be described in the certification to the Agency;} \\ \text{C} \quad \text{Weight of VOM per volume of material for the cleanup material or} \\ \quad \text{solvent with the highest VOM content as used each year on} \\ \quad \text{the printing line in units of kg/l (lbs VOM/gal);} \\ \text{D} \quad \text{The greatest volume of cleanup material or solvent used in any 8-} \\ \quad \text{hour period;} \end{array}$$

F

The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.

- 2) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a flexographic and rotogravure printing line referenced in this subsection shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

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

B) The VOM content and the volume of each coating and ink as applied each year on each printing line.

- 3) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a flexographic and rotogravure printing line exempted from the limitations of Section 218.401 of this Part because of the criteria in Section 218.402(a) of this Part shall notify the Agency of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year 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.

- c) Any owner or operator of a printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(a) of this Part shall comply with the following:

1) By a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance from an existing subject printing line from Section 218.401(b) or Section 218.401(c) of this Part to Section 218.401(a) of this Part, the owner or operator of a subject printing line shall certify to the Agency that the printing line will be in compliance with Section 218.401(a) of this Part on and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or on and after the initial start-up date. The owner or operator of a printing line subject to the requirements in Section 218.401(a)(2)(B) shall certify in accordance with this subsection (c)(1) even if the owner or operator of such line submitted a certification prior to January 1, 2010. Such certification shall include:

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

B) The VOM content of each coating and ink as applied each day on each printing line.

- 2) On and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(a) of this Part 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)

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

B) The VOM content of each coating and ink as applied each day on each printing line.

- 3) On and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Agency in the following instances:

A)

A) Any record showing violation of Section 218.401(a) of this Part 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 Section 218.401 of this Part from Section 218.401(a) of this Part to Section 218.401(b) or (c) of this Part, the owner or operator shall comply with all requirements of subsection (d)(1) or (e)(1) of this Section, respectively. Upon changing the method of compliance with Section 218.401 of this Part from Section 218.401(a) of this Part to Section 218.401(b) or (c) of this Part, 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 printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(b) shall comply with the following:

1)

1) By a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing subject printing line from Section 218.401(a) or (c) of this Part to Section 218.401(b) of this Part, the owner or operator of the subject printing line shall certify to the Agency that the printing line will be in compliance with Section 218.401(b) of this Part on and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or on and after the initial start-up date. The owner or operator of a printing line subject to the requirements in Section 218.401(b)(3) shall certify in accordance with this subsection (d)(1) even if the owner or operator of such line submitted a

certification prior to January 1, 2010. Such certification shall include:

- ~~A)~~

A) The name and identification number of each printing line which will comply by means of Section 218.401(b) of this Part.
 - B) The name and identification number of each coating and ink available for use on each printing line.
 - C) The VOM content of each coating and ink as applied each day on each printing line.
 - D) The instrument or method by which the owner or operator will accurately measure or calculate the volume, or weight of solids, as applicable, of each coating and ink as applied each day on each printing line.
 - E) The method by which the owner or operator will create and maintain records each day as required in subsection (d)(2) of this Section.
 - F) 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 Section 218.403(e), as applicable, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(b) of this Part shall collect and record all of the following information each day for each printing line and maintain the information at the source for a period of three years:
- ~~A)~~

A) The name and identification number of each coating and ink as applied on each printing line.
 - B) The VOM content and the volume, or weight of solids, as applicable, of each coating and ink as applied each day on each printing line.
 - C) The daily-weighted average VOM content of all coatings and inks as applied on each printing line.
- 3) On and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Agency in the following instances:
- ~~A)~~

A) Any record showing violation of Section 218.401(b) of this Part 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 Section 218.401 of this Part from Section 218.401(b) of this Part to Section 218.401(a) or 218.401(c) of this Part, 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 Section 218.401 of this Part from Section 218.401(b) of this Part to Section 218.401(a) or (c) of this Part, 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 printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(c) of this Part shall comply with the following:

- 1) By a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from Section 218.401(a) or (b) of this Part to Section 218.401(c) of this Part, the owner or operator of the subject printing line shall either:

~~A)~~

~~Perform~~ Perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with Section 218.401(c) of this Part on and after a date consistent with Section ~~218.106, 218.106 of this Part,~~ or Section 218.403(e), as applicable, or on and after the initial start-up date; or,

B) If not required to perform such testing pursuant to Section 218.401(c)(6), submit a certification to the Agency that includes:

i)

i) A declaration that the owner or operator is not required to perform testing pursuant to Section 218.401(c)(6);

ii) The ~~date(s)~~ dates that testing demonstrating compliance with Section 218.401(c)(3) was performed; and

iii) The ~~date(s)~~ dates that the results of such testing were submitted to the Agency: .

- 2) On and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(c) of this Part shall collect and record all of the following information each day for each printing line and

maintain the information at the facility for a period of three years:

- ~~A)~~
A) Control device monitoring data.
 - B) A log of operating time for the capture system, control device, monitoring equipment and the associated printing line.
 - C) 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 Section 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Agency in the following instances:
- ~~A)~~
A) Any record showing violation of Section 218.401~~H(c)~~ of this Part, 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 Section 218.401 of this Part from Section 218.401~~H(c)~~ of this Part to Section 218.401(a) or (b) of this Part, 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 Section 218.401 of this Part from Section 218.401(c) of this Part to Section 218.401(a) or (b) of this Part, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.
- 4) By May 1, 2010, or upon initial start-up of a new printing line, whichever is later, the owner or operator of a printing line subject to the requirements in Section 218.401~~H(c)~~(3) or ~~H(c)~~(4) shall submit to the Agency records documenting the date the printing line was constructed at the subject source and the date the control device for such printing line was constructed at the subject source.
- f) Any owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, and ~~which~~that is exempt from the limitations of Section 218.401(d) because of the criteria in Section 218.402(b) shall:
- ~~1)~~
1) By May 1, 2010, or upon initial start-up of a new printing line, whichever is later, and upon modification of a printing line, submit a certification to the Agency that includes:

 - ~~A)~~

- A) A declaration that the source is exempt from the requirements in Section 218.401(d) because of the criteria in Section 218.402(b);
 - B) Calculations ~~which~~that demonstrate that combined emissions of VOM from all flexographic and rotogravure printing lines (including inks and solvents used for cleanup operations associated with such printing lines) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment; and
- 2) Notify the Agency in writing if the combined emissions of VOM from all flexographic and rotogravure printing lines (including inks and solvents used for cleanup operations associated with the flexographic and rotogravure lines) at the source 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
- g) Any owner or operator of a printing line subject to the limitations of Section 218.401(d) shall:
- 1) By May 1, 2010, or upon initial start-up of a new printing line, whichever is later, submit a certification to the Agency describing the practices and procedures that the owner or operator will follow to ensure compliance with the limitations of Section 218.401(d); and
- 2) Notify the Agency of any violation of Section 218.401(d) by sending a description of the violation and copies of records documenting such violations to the Agency within 30 days following the occurrence of the violation.
- h) All records required by subsections (f) and (g) of this Section shall be retained for at least three years and shall be made available to the Agency upon request.

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

Section 218.405 Lithographic Printing: Applicability

- a) ~~Until March 15, 1996, the limitations of Section 218.406 of this Subpart apply to all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with the heatset web offset lithographic printing line(s)) at a source subject to the requirements of this Subpart. All sources with heatset web offset lithographic printing lines are sources subject to the requirements of this Subpart unless:~~
 - 1) ~~Total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations~~

~~associated with the heatset web offset lithographic printing line(s)) at the source never exceed 90.7 Mg (100 tons) per calendar year in the absence of air pollution control equipment; or~~

~~2) A federally enforceable permit or SIP revision for all heatset web offset lithographic printing line(s) at a source requires the owner or operator to limit production or capacity of these printing line(s) to reduce total VOM emissions from all heatset web offset lithographic printing line(s) to 90.7 Mg (100 tons) per calendar year or less in the absence of air pollution control equipment.~~

~~b) Any owner or operator of any heatset web offset lithographic printing line that is exempt from the limitations in Section 218.406 of this Subpart because of the criteria in subsection (a) of this Section shall be subject to the recordkeeping and reporting requirements in Section 218.406(b)(1) of this Subpart.~~

~~Ae) On and after March 15, 1996, Every every owner or operator of lithographic printing line(s)a) Every owner or operator of lithographic printing lines~~ is subject to the recordkeeping and reporting requirements in Section 218.411 of this Subpart.

~~Bd) On and after March 15, 1996, b) Prior to May 1, 2010, Sections 218.407 through 218.410 of this Subpart shall apply to:~~

~~1) All owners or operators of heatset web offset lithographic printing line(s)lines~~ unless:

~~A)~~

~~A) Total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with heatset web offset lithographic printing lines) at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices. To determine a source's total maximum theoretical emissions of VOM for the purposes of this subsection, the owner or operator shall use the calculations set forth in Section 218.411(a)(1)(C)406(b)(1)(A)(ii) of this Subpart; or~~

~~B) Federally enforceable permit conditions or SIP revision for all heatset web offset lithographic printing line(s)lines at the source requires the owner or operator to limit production or capacity of these printing line(s)lines to total VOM emissions of 90.7 Mg/yr (100 TPY) or less, before the application of capture systems and control devices;~~

~~2) All owners or operators of heatset web offset, non heatset web offset, or~~

~~sheet-fed offset~~ lithographic printing line(s) lines, unless the combined emissions of VOM from all lithographic printing line(s) lines at the source (including solvents used for cleanup operations associated with the lithographic printing line(s) lines) never exceed 45.5 kg/day (100 lbs/day), as determined in accordance with Section 218.411(a)(1)(B), before the application of capture systems and control devices.

c) On and after May 1, 2010:

1)

1) The requirements in ~~Sections~~Section 218.407(a)(1)(B) through (a)(1)(E) and 218.407(b) and all applicable provisions in Sections 218.409 through 218.411 of this Subpart shall apply to all owners or operators of heatset web offset lithographic printing line(s) lines, if the combined emissions of VOM from all lithographic printing line(s) lines at the source (including solvents used for cleanup operations associated with the lithographic printing line(s) lines) ever exceed 45.5 kg/day (100 lbs/day), calculated in accordance with Section 218.411(b)(2)(B), before the application of capture systems and control devices;

2) The requirements in ~~Sections~~Section 218.407(a)(1)(A) and 218.407(a)(2) through (a)(5) and all applicable provisions in Sections 218.409 through 218.411 of this Subpart shall apply to all owners or operators of lithographic printing line(s) lines if the combined emissions of VOM from all lithographic printing line(s) lines at the source (including solvents used for cleanup operations associated with the lithographic printing line(s) lines) ever equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with Section 218.411(b)(1)(B), before the application of capture systems and control devices;

3) Notwithstanding subsection ~~I(c)~~(2) of this Section, at sources where the combined emissions of VOM from all lithographic printing line(s) lines at the source (including solvents used for cleanup operations associated with the lithographic printing line(s) lines) equal or exceed 6.8 kg/day (15 lbs/day) but do not exceed 45.5 kg/day (100 lbs/day), calculated in accordance with Section 218.411(b)(1)(B), before the application of capture systems and control devices, the following exclusions shall apply unless the owner or operator of the source certifies pursuant to Section 218.411(g)(1)(B) that the source will not make use of any such exclusions:

A)

A) The requirements of ~~Sections~~Section 218.407(a)(1)(A), 218.407(a)(2), and 218.407(a)(3) of this Subpart shall not apply to lithographic printing line(s) lines with a total fountain solution reservoir of less than 3.8 liters (1 gallon);

- B) The requirements of Section 218.407(a)(3) of this Subpart shall not apply to sheet-fed offset lithographic printing line(s)lines with maximum sheet size of 11x17 inches or smaller;
- C) The requirements of Section 218.407(a)(4) of this Subpart shall not apply to up to a total of 416.3 liters (110 gallons) per year of cleaning materials used on all lithographic printing lines at the source;
- D) The requirements of Section 218.407(a)(4)(A)(i) shall not apply to lithographic printing lines at the source. Instead, the requirements of Section 218.407(a)(4)(A)(ii) shall apply to such lines.

~~Ded~~) If a lithographic printing line at a source is or becomes subject to one or more of the limitations in ~~Sections 218.406 or~~ Section 218.407 of this Subpart, the lithographic printing line(s)lines at the source are always subject to the applicable provisions of this Subpart.

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

Section 218.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior ~~to March~~ to March 15, 1996 (Repealed)

- a) ~~Emission Standards and Limitations. No owner or operator of a heatset web offset printing line at a source that meets or exceeds the applicability levels in Section 218.405(a) of this Subpart may cause or allow the operation of such heatset web offset printing line(s) unless the owner or operator meets the requirements in subsections (a)(1) or (a)(2) of this Section and the requirements in subsections (a)(3) and (a)(4) of this Section. The owner or operator shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in Section 218.105(a), (d), and (f) of this Part and by complying with the recordkeeping and reporting requirements specified in subsection (b) of this Section.~~
 - 1) ~~An afterburner system is installed and operated that reduces 90 percent of the VOM emissions (excluding methane and ethane) from the dryer exhaust; or~~
 - 2) ~~The fountain solution contains no more than 8 percent, by weight, of VOM and a condensation recovery system is installed and operated that removes at least 75 percent of the non-isopropyl alcohol organic materials from the dryer exhaust; and~~
 - 3) ~~The control device is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to~~

~~manufacturer's specifications at all times when the control device is in use; and~~

4) ~~The control device is operated at all times when the printing line is in operation.~~

b) ~~Recordkeeping and Reporting. The VOM content of each fountain solution and ink and the efficiency of each 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 subsection.~~

1) ~~Any owner or operator of a lithographic printing line which is exempted from the limitations of subsection (a) of this Section because of the criteria in 218.405(a) of this Subpart shall comply with the following:~~

A) ~~By a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall certify to the Agency that the heatset web offset lithographic printing line is exempt under the provisions of Section 218.405(a) of this Subpart. Such certification shall include:~~

i) ~~A declaration that the heatset web offset lithographic printing line is exempt from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart; and~~

ii) ~~Calculations which demonstrate that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of air pollution control equipment. Total maximum theoretical emissions of VOM for a heatset web offset lithographic printing source is the sum of maximum theoretical emissions of VOM from each heatset web offset lithographic printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year in the absence of air pollution control equipment for each heatset web offset lithographic printing line at the source:~~

$$E_p = (R \times A \times B) + [(C \times D) + 1095 (F \times G \times H)]$$

~~where:~~

~~E_p = Total maximum theoretical emissions of VOM from~~

one heatset web offset printing line in units of kg/yr (lb/yr);

- A = ~~Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal) of solids;~~
- B = ~~Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The instrument or method by which the owner or operator accurately measured or calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;~~
- C = ~~Weight of VOM per volume of fountain solution with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal);~~
- D = ~~The total volume of fountain solution that can potentially be used each year on the printing line in units of l/yr (gal/yr). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;~~
- F = ~~Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of Kg/l (lb/gal) of such material;~~
- G = ~~The greatest volume of cleanup material or solvent used in any 8-hour period; and~~
- H = ~~The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.~~
- R = ~~The multiplier representing the amount of VOM not retained in the substrate being used. For paper, R = 0.8. For foil, plastic, or other impervious substrates, R = 1.0.~~

~~B) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:~~

~~i) The name and identification of each fountain solution and ink as applied on each printing line; and~~

~~ii) The VOM content and the volume of each fountain solution and ink as applied each year on each printing line.~~

~~C) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a source exempted from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart shall notify the Agency of any record showing that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines exceed 90.7 Mg (100 tons) in any calendar year in the absence of air pollution control equipment by sending a copy of such record to the Agency within 30 days after the exceedence occurs.~~

2) Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(1) of this Section shall comply with the following:

A) By a date consistent with Section 218.106 of this Part, or upon initial start up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(2) to (a)(1) of this Section, perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(1) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after the initial start up date;

B) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) Control device monitoring data;

ii) A log of operating time for the control device, monitoring equipment and the associated printing line; and

- iii) ~~A maintenance log for the control device and monitoring equipment detailing all routine and nonroutine maintenance performed including dates and duration of any outages;~~
- C) ~~On and after a date consistent with Section 218.106 of this Part, notify the Agency in the following instances:~~
- i) ~~Any violation of subsection (a)(1) of this Section shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;~~
 - ii) ~~Any record showing a violation of subsection (a)(1) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and~~
 - iii) ~~At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3) of this Section.~~
- 3) ~~Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(2) of this Section shall:~~
- A) ~~By a date consistent with Section 218.106 of this Part, or upon initial start up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(1) to (a)(2) of this Section, perform all tests and submit to the Agency and the USEPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(2) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date;~~
 - B) ~~On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:~~
 - i) ~~The VOM content of the fountain solution used each day on~~

each printing line;

- ii) ~~A log of operating time for the control device and the associated printing line; and~~
- iii) ~~A maintenance log for the control device detailing all routine and non-routine maintenance performed including dates and duration of any outages;~~

~~C) On and after a date consistent with Section 218.106 of this Part, notify the Agency in the following instances:~~

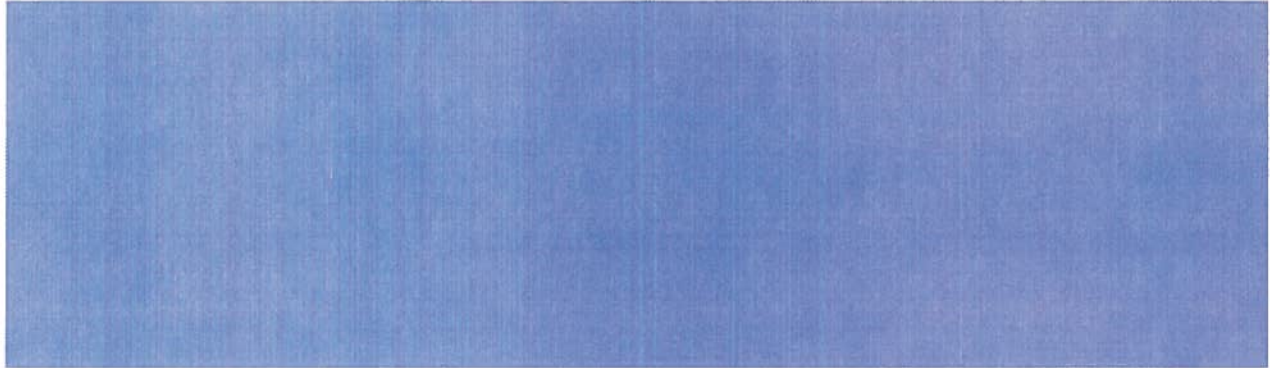
- i) ~~Any violation of subsection (a)(2) shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;~~
- ii) ~~Any record showing a violation of subsection (a)(2) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and~~
- iii) ~~At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2) of this Section.~~

~~e) Compliance Schedule. Every owner or operator of a heatset web offset lithographic printing line shall comply with the applicable requirements of subsections (a) and (b) of this Section in accordance with the applicable compliance schedule specified in subsections (e)(1), (e)(2), or (e)(3) of this Section:~~

- 1) ~~No owner or operator of a heatset web offset lithographic printing line which is exempt from the limitations of subsection (a) of this Section because of the criteria in Section 218.405 (a) of this Subpart shall operate said printing 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 218.405(a) and 218.406(b)(1) of this Subpart.~~
- 2) ~~No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(1) of this Section shall operate said~~

~~printing 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, subsections (a)(1), (a)(3), (a)(4) and (b)(2) of this Section.~~

- 3) ~~No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(2) of this Section shall operate said printing 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, subsections (a)(2), (a)(3), (a)(4) and (b)(3) of this Section.~~



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

Section 218.407 Emission Limitations and Control Requirements for Lithographic Printing Lines ~~On and After March 15, 1996~~

- a) ~~On and after March 15, 1996, no~~No owner or operator of lithographic printing ~~line(s)~~lines subject to the requirements of this Subpart shall:
- 1) Cause or allow the operation of any heatset web offset lithographic printing line unless:
 - A) The total VOM content in the as-applied fountain solution meets one of the following conditions:
 - i) 1.6 percent or less, by ~~weight~~volume; ~~weight~~weight;
 - ii) 3 percent or less, by ~~weight~~volume; ~~weight~~weight, and the temperature of the fountain solution is maintained below 15.6°~~C~~C (60°~~F~~F), measured at the reservoir or the fountain tray; or

- iii) 5 percent or less, by ~~weight~~~~volume~~~~weight~~, and the as-applied fountain solution contains no alcohol;
 - B) The air pressure in the dryer is maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating;
 - C) An afterburner is installed and operated so that VOM emissions (excluding methane and ethane) from the press dryer exhaust(s) are reduced as follows:
 - i) Prior to May 1, 2010, by 90 percent, by weight, or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon); and
 - ii) On and after May 1, 2010, by at least 90 percent, by weight, for afterburners first constructed at the source prior to January 1, 2010; by at least 95 percent, by weight, for afterburners first constructed at the source on or after January 1, 2010; or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon);
 - D) The afterburner complies with all monitoring provisions specified in Section 218.410(c) of this ~~Subpart is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated, and maintained according to manufacturer's specifications at all times when the afterburner is in use~~Subpart; and
 - E) The afterburner is operated at all times when the printing line is in operation, except the afterburner may be shut down between November 1 and April 1 as provided in Section 218.107 of this Part;
- 2) Cause or allow the operation of any non-heatset web offset lithographic printing line unless the VOM content of the as-applied fountain solution is 5 percent or less, by ~~weight~~~~volume~~~~weight~~, and the as-applied fountain solution contains no alcohol;
 - 3) Cause or allow the operation of any sheet-fed offset lithographic printing line unless:
 - A) The VOM content of the as-applied fountain solution is 5 percent or less, by ~~weight~~~~volume~~~~weight~~; or

- B) The VOM content of the as-applied fountain solution is 8.5 percent or less, by ~~weight~~~~volume~~~~weight~~, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;
- 4) Cause or allow the use of a cleaning solution on any lithographic printing line unless:
 - A) The VOM content of the as-used cleaning solution is less than or equal to:
 - i) 30 percent, by weight; or
 - ii) On and after May 1, 2010, for owners or operators of sources that meet the applicability criteria in Section 218.405(c)(3) and do not certify pursuant to Section 218.411(g)(1)(B) that the source will not make use of any of the exclusions in Section 218.405(c)(3), 70 percent, by weight; or
 - B) The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F);
- 5) Cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers, except when specifically in use.
- b) An owner or operator of a heatset web offset lithographic printing line subject to the requirements of subsection (a)(1)(C) of this Section may use a control device other than an afterburner, if:
 - 1) The control device reduces VOM emissions from the press dryer ~~exhaust(s)~~~~exhausts~~ as follows:
 - A) Prior to May 1, 2010, by at least 90 percent, by weight, or to a maximum control device exhaust outlet concentration of 20 ppmv (as carbon); and
 - B) On and after May 1, 2010:
 - i) By at least 90 percent, by weight, for control devices first constructed at the source prior to January 1, 2010;
 - ii) By at least 95 percent, by weight, for control devices first constructed at the source on or after January 1, 2010; or

- iii) To a maximum control device exhaust outlet concentration of 20 ppmv (as carbon);
- 2) The owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; and
- 3) The use of the control device with testing, monitoring, and recordkeeping in accordance with this plan is approved by the Agency and USEPA as federally enforceable permit conditions.

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

Section 218.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996 (Repealed)

- a) ~~Every owner or operator of a lithographic printing line subject to one or more of the control requirements of Section 218.407 of this Subpart shall comply with the applicable requirements of Sections 218.407 through 218.411 of this Subpart on and after March 15, 1996, or upon initial start-up, whichever is later.~~
- b) ~~No owner or operator of a lithographic printing line which is exempt from the limitations of Section 218.407 of this Subpart because of the criteria in Section 218.405(d) of this Subpart, shall operate said printing line on or after March 15, 1996, unless the owner or operator has complied with, and continues to comply with, Sections 218.405(d) and 218.411(a) of this Subpart.~~

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

Section 218.409 Testing for Lithographic Printing ~~On and After March 15, 1996~~

- a) Testing to demonstrate compliance with the requirements of Section 218.407 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 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 testing to allow the Agency to be present during such testing.
- b) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.407(a)(1)(C) or (b)(1) 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 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;

- 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 at Section 218.112 of this Part;
- 3) 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:
 - A) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;
 - B) 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
 - C) Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;
- 4) Notwithstanding the criteria or requirements in Method 25 ~~which~~that 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);
- 5) During testing, the printing ~~line(s)~~lines shall be operated at representative operating conditions and flow rates; and
- 6) During testing, an air flow direction indicating device, such as a smoke

stick, shall be used to demonstrate 100 percent emissions capture efficiency for the dryer in accordance with Section 218.407(a)(1)(B) of this Subpart.

- c) Testing to demonstrate compliance with the VOM content limitations in Section 218.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A) of this Subpart, and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of Section 218.411(a)(1)(B)-, (b)(1)(B), or (b)(2)(B) of this Subpart, as applicable), 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) The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks may be used if such 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; provided, however, Method 24 shall be used to determine compliance.
- d) Testing to demonstrate compliance with the requirements of Section 218.407(b) of this Subpart shall be conducted as set forth in the owner or operator's plan approved by the Agency and USEPA as federally enforceable permit conditions pursuant to Section 218.407(b) of this Subpart.
- e) Testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in Section 218.110 of this Part.

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

Section 218.410 Monitoring Requirements for Lithographic Printing

- a) Fountain Solution Temperature.
- 1) The owner or operator of any lithographic printing ~~line(s)~~lines relying on the temperature of the fountain solution to demonstrate compliance shall install, maintain, and continuously operate a temperature monitor of the fountain solution in the reservoir or fountain tray, as applicable.
 - 2) The temperature monitor must be capable of reading with an accuracy of 1°C or 2°C , and must be attached to an automatic, continuous

recording device such as a strip chart, recorder, or computer, with at least the same accuracy, that is installed, calibrated and maintained in accordance with the manufacturer's specifications. If the automatic, continuous recording device malfunctions, the owner or operator shall record the temperature of the fountain solution at least once every two operating hours. The automatic, continuous recording device shall be repaired or replaced as soon as practicable.

- b) Fountain Solution VOM Content. The owner or operator of any lithographic printing ~~line(s)~~lines subject to Section 218.407(a)(1)(A), (a)(2) or (a)(3) of this Subpart shall:
- 1) For a fountain solution to which VOM is not added automatically:
 - A) Maintain records of the VOM content of the fountain solution in accordance with Section 218.411(~~eee~~)(2)(C); or
 - B) Take a sample of the as-applied fountain solution from the fountain tray or reservoir, as applicable, each time a fresh batch of fountain solution is prepared or each time VOM is added to an existing batch of fountain solution in the fountain tray or reservoir, and shall determine compliance with the VOM content limitation of the as-applied fountain solution by using one of the following options:
 - i) With a refractometer or hydrometer with a visual, analog, or digital readout and with an accuracy of 0.5 percent. The refractometer or hydrometer must be calibrated with a standard solution for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications, against measurements performed to determine compliance. The refractometer or hydrometer must be corrected for temperature at least once per 8-hour shift or once per batch of fountain solution prepared or modified, whichever is longer; or
 - ii) With a conductivity meter if it is demonstrated that a refractometer and hydrometer cannot distinguish between compliant and noncompliant fountain solution for the type and amount of VOM in the fountain solution. A source may use a conductivity meter if it demonstrates that both hydrometers and refractometers fail to provide significantly different measurements for standard solutions containing 95 percent, 100 percent and 105 percent of the applicable VOM content limit. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. A standard solution shall be used to

calibrate the conductivity meter for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications;

- 2) For fountain solutions to which VOM is added at the source with automatic feed equipment, determine the VOM content of the as-applied fountain solution based on the setting of the automatic feed equipment which makes additions of VOM up to a pre-set level. Records must be retained of the VOM content of the fountain solution in accordance with Section 218.411(~~eee~~)(2)(D) of this Subpart. The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications.
- c) **Afterburners For Heatset Web Offset Lithographic Printing ~~Line(s).~~ Lines.**
If an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to Section 218.407(a)(1)(C) of this Subpart shall:
- 1) Install, calibrate, maintain, and operate temperature monitoring ~~device(s)~~ devices with an accuracy of 3° C or 5° F on the afterburner 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 afterburner 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.
- d) **Other Control Devices for Heatset Web Offset Lithographic Printing ~~Line(s).~~ Lines.**
If a control device other than an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to this Subpart shall install, maintain, calibrate and operate such monitoring equipment as set forth in the owner or operator's plan approved by the Agency and USEPA pursuant to Section 218.407(b) of this Subpart.
- e) **Cleaning Solution:**
- 1) The owner or operator of any lithographic printing line relying on the VOM content of the cleaning solution to comply with Section 218.407(a)(4)(A) of this Subpart must:
 - A) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):

- i) 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
 - ii) 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 218.407(a)(4)(A) of this Subpart;
 - B) 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 218.411(~~fdf~~)(2) of this Subpart.
- 2) The owner or operator of any lithographic printing line relying on the vapor pressure of the cleaning solution to comply with Section 218.407(a)(4)(B) of this Subpart must keep records for such cleaning solutions used on any such ~~line(s)~~lines as set forth in Section 218.411(~~fdf~~)(2)(C) of this Subpart.

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

Section 218.411 Recordkeeping and Reporting for Lithographic Printing

- a) Exempt units prior to May 1, 2010. An owner or operator of lithographic printing ~~line(s)~~lines exempt from the limitations of Section 218.407 of this Subpart prior to May 1, 2010, because of the criteria in Section 218.405(~~bdb~~) of this Subpart, shall comply with the following:
 - 1) ~~By March 15, 1996, Upon~~Upon initial start-up of a new lithographic printing line, and upon modification of a lithographic printing line, submit a certification to the Agency that includes:
 - A) A declaration that the source is exempt from the control requirements in Section 218.407 of this Part because of the criteria in Section 218.405(~~bdb~~) of this Subpart;
 - B) Calculations ~~which~~that demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, as follows:

- i) To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that lithographic printing lines at the source were in operation;
 - ii) To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the tests methods and procedures set forth in Section 218.409(c) of this Subpart shall be used;
 - iii) To determine VOM emissions from inks used on lithographic printing ~~line(s)~~lines at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks except when using an impervious substrate, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate except when using an impervious substrate. For impervious substrates such as metal or plastic, no emission adjustment factor is used. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing ~~line(s)~~lines; and
 - iv) To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing ~~line(s)~~lines at the source, no retention factor is used;
- C) Either a declaration that the source, through federally enforceable permit conditions, has limited its maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with heatset web offset printing lines) at the source to no more than 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices or calculations which demonstrate that the source's total maximum theoretical emissions of VOM do not exceed 90.7 Mg/yr (100 TPY). ~~To determine the source's total maximum theoretical emissions for the purposes of this subsection, the owner or operator shall use the calculations set forth in Section 218.406(b)(1)(A)(ii) of this Subpart; and~~ Total maximum theoretical emissions of VOM for a heatset web offset lithographic printing source is the sum of maximum theoretical emissions of VOM from each heatset web offset lithographic printing line at the

source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year in the absence of air pollution control equipment for each heatset web offset lithographic printing line at the source:

$$E_p = (R \times A \times B) + (C \times D) + 1095 (F \times G \times H)$$

Where:

E_p = Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/yr (lb/yr);

A = Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal) of solids;

B = Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The method by which the owner or operator accurately calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;

C = Weight of VOM per volume of fountain solution with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal);

D = The total volume of fountain solution that can potentially be used each year on the printing line in units of l/yr (gal/yr). The method by which the owner or operator accurately calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;

F = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of kg/l (lb/gal) of such material;

G = The greatest volume of cleanup material or solvent used in any 8-hour period; and

H = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-

hour period.

R = The multiplier representing the amount of VOM not retained in the substrate being used. For paper, R = 0.8. For metal, plastic, or other impervious substrates, R = 1.0;

$$E_p = (R \times A \times B) + (C \times D) + 1095 (F \times G \times H)$$

where: E_p

Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/yr (lb/yr):

- A Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal) of solids;
- B Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The method by which the owner or operator accurately calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;
- C = Weight of VOM per volume of fountain solution with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal);
- D The total volume of fountain solution that can potentially be used each year on the printing line in units of l/yr (gal/yr). The method by which the owner or operator accurately calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;
- E Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of kg/l (lb/gal) of such material;
- G The greatest volume of cleanup material or solvent used in any 8-hour period;
- H = The highest fraction of cleanup material or solvent that is not recycled or recovered for offsite disposal during any 8-hour period;
- R The multiplier representing the amount of VOM not retained in the substrate being used. For paper, R = 0.8. For metal, plastic, or other impervious substrates, R = 1.0;

- D) A description and the results of all tests used to determine the VOM content of inks, fountain solution additives, and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 218.409(c)(1) of this

Subpart;

- 2) Notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.
- b) Exempt units on and after May 1, 2010.
- 1) Lithographic printing lines exempt pursuant to Section 218.405(c)(2). By May 1, 2010, or upon initial start-up of a new lithographic printing line, whichever is later, and upon modification of a lithographic printing line, an owner or operator of lithographic printing ~~line(s)~~ lines exempt from the limitations in Section 218.407 of this Subpart because of the criteria in Section 218.405(c)(2) of this Subpart shall submit a certification to the Agency that includes the information specified in either subsections (b)(1)(A), (b)(1)(B), and (b)(1)(D) of this Section, or subsections (b)(1)(A) and (b)(1)(C) of this Section, as applicable. An owner or operator complying with subsection (b)(1)(B) shall also comply with the requirements in subsection (b)(1)(E) of this Section. An owner or operator complying with subsection (b)(1)(C) shall also comply with the requirements in subsection (b)(1)(F) of this Section:
 - A) A declaration that the source is exempt from the requirements in Section 218.407 of this Part because of the criteria in Section 218.405(c)(2) of this Subpart;
 - B) Calculations ~~which~~that demonstrate that combined emissions of VOM from all lithographic printing ~~line(s)~~ lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing ~~line(s)~~ lines) at the source do not equal or exceed 6.8 kg/day (15 lbs/day), before the use of capture systems and control devices, as follows:
 - i) To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that lithographic printing lines at the source were in operation;
 - ii) To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the test methods

and procedures set forth in Section 218.409(c) of this Subpart shall be used;

- iii) To determine VOM emissions from inks used on lithographic printing line(s)lines at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks except when using an impervious substrate, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate except when using an impervious substrate. For impervious substrates such as metal or plastic, no emission adjustment factor is used. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s)lines; and
 - iv) To determine VOM emissions from cleaning solutions used on lithographic printing line(s)lines at the source, an emission adjustment factor of 0.50 shall be used in calculating emissions from used shop towels if the VOM composite vapor pressure of each associated cleaning solution is less than 10 mmHg measured at 20°C (68°F) and the shop towels are kept in closed containers. For cleaning solutions with VOM composite vapor pressures of equal to or greater than 10 mmHg measured at 20°C (68°F) and for shop towels that are not kept in closed containers, no emission adjustment factor is used;
- C) As an alternative to the calculations in subsection (b)(1)(B), ~~above,~~ a statement that the source uses less than the amount of material specified in subsectionsubsection (b)(1)(C)(i) or (ii), ~~below,~~ as applicable, during each calendar month. A source may determine that it emits below 6.8 kg/day (15 lbs/day) of VOM based upon compliance with such material use limitations. If the source exceeds this amount of material use in a given calendar month, the owner or operator must, within 15 days ~~of~~after the end of that month, complete the emissions calculations of subsection (b)(1)(B) to determine daily emissions for applicability purposes. If the source ever exceeds this amount of material use for six consecutive calendar months, it is no longer eligible to use this subsection, (b)(1)(C) as an alternative to the calculations in subsection (b)(1)(B). If a source has both heatset web offset and either nonheatset web offset or sheetfed lithographic printing operations, or has all three types of printing operations, the owner or operator

may not make use of this alternative and must use the calculations in subsection (b)(1)(B).

- i) The sum of all sheetfed and nonheatset web offset lithographic printing operations at the source; 242.3 liters (64 gallons) of cleaning solvent and fountain solution additives, combined; or
 - ii) The sum of all heatset web offset lithographic printing operations at the source; 204.1 kg (450 lbs) of ink, cleaning solvent, and fountain solution additives, combined;
- D) A description and the results of all tests used to determine the VOM content of inks, fountain solution additives, and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 218.409(c)(1) of this Subpart;
- E) For sources complying with subsection (b)(1)(B) of this Section, notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever equal or exceed 6.8 kg/day (15 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. If such emissions of VOM at the source equal or exceed 6.8 kg/day (15 lbs/day) but do not exceed 45.5 kg/day (100 lbs/day), the source shall comply with the requirements in subsection (b)(2) of this Section;
- F) For sources complying with subsection (b)(1)(C) of this Section, comply with the following:
 - i) Maintain material use records showing that the source uses less than the amount of material specified in subsections (b)(1)(C)(i) and (b)(1)(C)(ii) during each calendar month, or, if the source exceeds the material use limitations, records showing that the source exceeded the limitations but did not emit 6.8 kg/day (15 lbs/day) or more of VOM;
 - ii) Notify the Agency in writing if the source exceeds the material use limitations for six consecutive calendar months, or if the source changes its method of compliance from subsection (b)(1)(C) to subsection (b)(1)(B) of this Section, within 30 days after the event occurs;

2) Heatset web offset lithographic printing lines exempt pursuant to Section 218.405(c)(1) but not exempt pursuant to Section 218.405(c)(2). By May 1, 2010, or upon initial start-up of a new heatset web offset lithographic printing line, whichever is later, and upon modification of a heatset web offset lithographic printing line, an owner or operator of heatset web offset lithographic printing ~~line(s)~~ lines that are exempt from the limitations in Section 218.407 of this Subpart pursuant to the criteria in Section 218.405(c)(1) of this Subpart, but that are not exempt pursuant to the criteria in Section 218.405(c)(2) of this Subpart, shall submit a certification to the Agency that includes the information specified in subsections (b)(2)(A) through (b)(2)(C) of this Section. Such owner or operator shall also comply with the requirements in subsection (b)(2)(D) of this Section:

- A) A declaration that the source is exempt from the control requirements in Section 218.407 of this Part because of the criteria in Section 218.405(c)(1) of this Subpart, but is not exempt pursuant to the criteria in Section 218.405(c)(2) of this Subpart;
- B) Calculations ~~which~~that demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, as follows (the following methodology shall also be used to calculate whether a source exceeds 45.5 kg/day (100 lbs/day) for purposes of determining eligibility for the exclusions set forth in Section ~~218.405~~218.415(c)(3), in accordance with ~~Section~~Sections 218.411(g)(2)(A)(i):
 - i) To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that lithographic printing lines at the source were in operation;
 - ii) To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the ~~tests~~test methods and procedures set forth in Section 218.409(c) of this Subpart shall be used;

- iii) To determine VOM emissions from inks used on lithographic printing line(s) lines at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks except when using an impervious substrate, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate except when using an impervious substrate. For impervious substrates such as metal or plastic, no emission adjustment factor is used. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s) lines;
 - iv) To determine VOM emissions from cleaning solvents used on lithographic printing line(s) lines at the source, an emission adjustment factor of 0.50 shall be used in calculating emissions from cleaning solution in shop towels if the VOM composite vapor pressure of such cleaning solution is less than 10 mmHg measured at 20°C (68°F) and the shop towels are kept in closed containers. For cleaning solutions with VOM composite vapor pressures of equal to or greater than 10 mmHg measured at 20°C (68°F) and for shop towels that are not kept in closed containers, no emission adjustment factor is used;
 - C) A description and the results of all tests used to determine the VOM content of inks, fountain solution additives, and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 218.409(c)(1) of this Subpart;
 - D) Notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs.
- c2) Unless complying with subsections (b)(1)(C) and (b)(1)(F) of this Section, an owner or operator of lithographic printing line(s) lines subject to the requirements of subsection (a) or (b) of this Section shall ~~On and after March 15, 1996,~~ collect

and record either the information specified in subsection (c)(1) or (c)(2) ~~(a)(2)(A)~~ or ~~(a)(2)(B)~~ of this Section for all lithographic printing lines at the source:

1A) Standard recordkeeping, including the following:

~~AiA~~) The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

~~BiB~~) A daily record which shows whether a lithographic printing line at the source was in operation on that day;

~~CiiiC~~) The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

~~DivD~~) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; ~~and~~

~~EvE~~) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B), 218.411(b)(1)(B), or 218.411(b)(2)(B) of this Subpart, as applicable;

2B) Purchase and inventory recordkeeping, including the following:

~~AiA~~) The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

~~BiB~~) Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;

~~CiiiC~~) Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;

~~DivD~~) A daily record which shows whether a lithographic printing line at the source was in operation on that day;

~~EvE~~) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each

fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to subsections (c)(2)(A), (c)(2)(B), and (c)(2)(C) ~~(a)(2)(B)(i), (a)(2)(B)(ii) and (a)(2)(B)(iii)~~ of this Section; ~~and~~

~~EviE)~~ The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B), 218.411(b)(1)(B), or 218.411(b)(2)(B) of this Subpart, as applicable; ~~and~~

~~3) On and after March 15, 1996, notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.~~

~~dbd)~~ An owner or operator of a heatset web offset lithographic printing ~~line(s)~~ lines subject to the control requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart shall comply with the following:

- 1) By May 1, ~~2010~~ ~~March 15, 1996,~~ 2010, upon initial start-up of a new printing line, and upon initial start-up of a new control device for a heatset web offset printing line, submit a certification to the Agency that includes the following:
 - A) An identification of each heatset web offset lithographic printing line at the source;
 - B) A declaration that each heatset web offset lithographic printing line is in compliance with the requirements of Section 218.407 (a)-(1)-(B), (a)-(1)-(C), (a)-(1)-(D) and (a)(1)-(E) or (b) of this Subpart, as appropriate;
 - C) The type of afterburner or other approved control device used to comply with the requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart and the date that such device was first constructed at the source;
 - D) The control requirements in Section 218.407(a)(1)(C) or (b)(1) of this Subpart with which the lithographic printing line is complying;
 - E) The results of all tests and calculations necessary to demonstrate

compliance with the control requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and

- F) A declaration that the monitoring equipment required under Section 218.407(a)(1)(D) or (b) of this Subpart, as applicable, has been properly installed and calibrated according to manufacturer's specifications;
- 2) If testing of the afterburner or other approved control device is conducted pursuant to Section 218.409(b) of this Subpart, the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Agency and shall submit a certification to the Agency that includes the following:
- A) A declaration that all tests and calculations necessary to demonstrate whether the lithographic printing line(s)lines is in compliance with Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable, have been properly performed;
 - B) A statement whether the lithographic printing line(s)lines is or is not in compliance with Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and
 - C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 218.410(c) or (d) of this Subpart, as applicable;
- 3) ~~On and after March 15, 1996,~~ Except as provided in subsection (d)(3)(D)(ii) of this Section, collect and record daily the following information for each heatset web offset lithographic printing line subject to the requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart:
- A) Afterburner or other approved control device monitoring data in accordance with Section 218.410(c) or (d) of this Subpart, as applicable;
 - B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated printing line;
 - 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; and
 - D) A log detailing checks on the air flow direction or air pressure of

the dryer and press room to ~~ensureinsure~~ensure compliance with the requirements of Section 218.407(a)(1)(B) of this Subpart as follows:

- i) Prior to May 1, 2010, at least once per 24-hour period while the line is operating; and
 - ii) On and after May 1, 2010, at least once per calendar month while the line is operating;
- 4) ~~On and after March 15, 1996, Notify~~Notify the Agency in writing of any violation of Section 218.407(a)(1)(C) or (b)(1) of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation;
 - 5) If changing its method of compliance between subsections (a)(1)(C) and (b) of Section 218.407 of this Subpart, certify compliance for the new method of compliance in accordance with subsection (b)(1) of this Section at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing ~~line(s)~~lines will be in compliance with the requirements of Section 218.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) of this Subpart, or Section 218.407(b) of this Subpart, as applicable.
- ~~eee)~~ An owner or operator of a lithographic printing line subject to Section 218.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart, shall:
- 1) By May 1, 2010, ~~March 15, 1996,~~ and upon initial start-up of a new lithographic printing line, certify to the Agency that fountain solutions used on each lithographic printing line will be in compliance with the applicable VOM content limitation. Such certification shall include:
 - A) Identification of each lithographic printing line at the source, by type, e.g., heatset web offset, non-heatset web offset, or sheet-fed offset;
 - B) Identification of each centralized fountain solution reservoir and each lithographic printing line that it serves;
 - C) A statement that the fountain solution will comply with the VOM content limitations in Section 218.407(a)(1)(A), (a)(2), or (a)(3), as applicable; ~~The VOM content limitation with which each fountain solution will comply;~~
 - D) Initial documentation that each type of fountain solution will comply with the applicable VOM content ~~limitation(s)~~limitations, 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 limitation, e.g., a refractometer, hydrometer, conductivity meter, or recordkeeping procedures with detailed description of the compliance methodology; and
 - F) A sample of the records that will be kept pursuant to Section 218.411(~~eee~~)(2) of this Subpart.
- 2) ~~On and after March 15, 1996, Collect~~Collect and record the following information for each fountain solution:
- A) The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing ~~line(s)~~lines or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch;
 - B) If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to Section 218.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in Section 218.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart:
 - i) The date and time of preparation, and each subsequent modification, of the batch;
 - ii) The results of each measurement taken in accordance with Section 218.410(b) of this Subpart;
 - iii) Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and
 - iv) Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;
 - C) If the VOM content of the fountain solution is determined pursuant to Section 218.410(b)(1)(A) of this Subpart, for each batch of as-applied fountain solution:
 - i) Date and time of preparation and each subsequent modification of the batch;

- ii) Volume or weight, as applicable, and VOM content of each component used in, or subsequently added to, the fountain solution batch;
 - iii) Calculated VOM content of the as-applied fountain solution; and
 - iv) Any other information necessary to demonstrate compliance with the applicable VOM content limits in Section 218.407(a)(1)(A), (a)(2) and (a)(3) of this Subpart, as specified in the source's operating permit;
 - D) If the VOM content of the fountain solution is determined pursuant to Section 218.410(b)(2) of this Subpart, for each setting:
 - i) VOM content limit corresponding to each setting;
 - ii) Date and time of initial setting and each subsequent setting;
 - iii) Documentation of the periodic calibration of the automatic feed equipment in accordance with the manufacturer's specifications; and
 - iv) Any other information necessary to demonstrate compliance with the applicable VOM content limits in Sections 218.407(a)(1)(A), (a)(2) and (a)(3) of this Subpart, as specified in the source's operating permit;
 - E) If the owner or operator relies on the temperature of the fountain solution to comply with the requirements in Section 218.407(a)(1)(A)(ii) or (a)(3)(B) of this Subpart:
 - i) The temperature of the fountain solution at each printing line, as monitored in accordance with Section 218.410(a); and
 - ii) A maintenance log for the temperature monitoring devices and automatic, continuous temperature recorders detailing all routine and non-routine maintenance performed, including dates and duration of any outages;
- 3) Notify the Agency in writing of any violation of Section 218.407 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation. ~~and~~

- 4) ~~If changing its method of demonstrating compliance with the applicable VOM content limitations in Section 218.407 of this Subpart, or changing the method of demonstrating compliance with the VOM content limitations for fountain solutions pursuant to Section 218.409 of this Subpart, certify compliance for such new method(s) in accordance with subsection (c)(1) of this Section within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 218.407 of this Subpart.~~

~~fd~~ For lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the requirements of Section 218.407 of this Subpart shall:

- 1) By May 1, ~~2010~~~~March 15, 1996~~,2010, and upon initial start-up of a new lithographic printing line, certify to the Agency that all cleaning solutions, other than those excluded pursuant to Section 218.405(c)(3)(C), and the handling of all cleaning materials, will be in compliance with the requirements of Section 218.407(a)(4)(A) or (a)(4)(B) and (a)(5) of this Subpart, and such certification shall also include:
- ~~A)~~ ~~Identification of each VOM-containing cleaning solution used on each lithographic printing line;~~
 - ~~AB)~~
 - A) A statement that the cleaning solution will comply with the limitations in Section 218.407(a)(4);~~The limitation with which each VOM-containing cleaning solution will comply, i.e., the VOM content or vapor pressure;~~
 - ~~C)~~ ~~Initial documentation that each VOM-containing cleaning solution will comply with the applicable limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;~~
 - ~~BDB)~~ Identification of the ~~method(s)~~methods that will be used to demonstrate continuing compliance with the applicable limitations;
 - ~~CEC)~~ A sample of the records that will be kept pursuant to Section 218.411(~~fd~~)(2) of this Subpart; and
 - ~~DFD)~~ A description of the practices that ~~ensure~~assure~~ensure~~ that VOM-containing cleaning materials are kept in closed containers;
- 2) ~~On and after March 15, 1996, Collect~~~~collect~~Collect and record the following information for each cleaning solution used on each lithographic printing line:

- A) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.407(a)(4)(A) of this Subpart and ~~which~~that is prepared at the source with automatic equipment:
- i) The name and identification of each cleaning solution;
 - ii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.409(c) of this Subpart;
 - iii) 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);
 - iv) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - v) The VOM content of the as-used cleaning solution, with supporting calculations; and
 - vi) A calibration log for the automatic equipment, detailing periodic checks;
- B) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.407(a)(4)(A) of this Subpart, and which is not prepared at the source with automatic equipment:
- i) The name and identification of each cleaning solution;
 - ii) Date and time of preparation, and each subsequent modification, of the batch;
 - iii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.409(c) of this Subpart;
 - iv) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
 - v) The VOM content of the as-used cleaning solution, with

supporting calculations. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM content may be used if such 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;

- C) 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 218.407(a)(4)(B) of this Subpart:
- i) The name and identification of each cleaning solution;
 - ii) Date and time of preparation, and each subsequent modification, of the batch;
 - iii) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 218.409(e) of this Subpart. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in Sections 218.105(a) and 218.110 of this Part;
 - iv) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
 - v) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 218.409(e) of this Subpart. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in Sections 218.105(a) and 218.110 of this Part;
- D) The date, time, and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;
- 3) ~~On and after March 15, 1996, Notify~~Notify the Agency in writing of any violation of Section 218.407 of this Subpart within 30 days after the

occurrence of such violation. Such notification shall include a copy of all records of such violation. ~~;~~ ~~and~~

~~4) If changing its method of demonstrating compliance with the requirements of Section 218.407(a)(4) of this Subpart, or changing between automatic and manual methods of preparing cleaning solutions, certify compliance for such new method in accordance with subsection (d)(1) of this Section, within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 218.407(a)(4) of this Subpart.~~

g) The owner or operator of lithographic printing ~~line(s)~~ lines subject to one or more of the exclusions set forth in Section 218.405(c)(3) shall:

1) By May 1, 2010, or upon initial start-up of a new lithographic printing line that is subject to one or more of the exclusions set forth in Section 218.405(c)(3), whichever is later, submit a certification to the Agency that includes either:

A) A declaration that the source is subject to one or more of the exclusions set forth in Section 218.405(c)(3) and a statement indicating which such exclusions apply to the source; or

B) A declaration that the source will not make use of any of the exclusions set forth in Section 218.405(c)(3);

~~2)~~
2) Unless the source has certified in accordance with subsection (g)(1)(B) of this Section that it will not make use of any of the exclusions set forth in Section 218.405(c)(3):

A) Collect and record the following information for all lithographic printing lines at the source:

i) Calculations ~~which~~ that demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, determined in accordance with the calculations in Section 218.411(b)(2)(B) of this Subpart;

ii) The amount of cleaning materials used on lithographic printing lines at the source that does not comply with the

cleaning material limitations in Section 218.407(a)(4) of this Subpart;

- B) Notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs;
- 3) If changing from utilization of the exclusions set forth in Section 218.405(c)(3) to opting out of such exclusions pursuant to subsection (g)(1)(B) of this Section, or if there is a change at the source such that the exclusions no longer apply, certify compliance in accordance with subsection (g)(1)(B) of this Section within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) lines will be in compliance with the applicable requirements of Section 218.407 of this Subpart;
 - 4) If changing from opting out of the exclusions set forth in Section 218.405(c)(3) pursuant to subsection (g)(1)(B) of this Section to utilization of such exclusions, certify compliance in accordance with subsection (g)(1)(A) of this Section within 30 days after making such change.
- heh) The owner or operator shall maintain all records required by this Section at the source for a minimum period of three years and shall make all records available to the Agency upon request.
- i) Provisions for calculation of emissions from heatset web offset lithographic printing operations. To calculate VOM emissions from heatset web offset lithographic printing operations for purposes other than the applicability thresholds specified in Section 218.405 of this Subpart, sources may use the following emission adjustment factors (for Annual Emissions Reports or permit limits, for example):
 - 1) A factor of 0.80 may be used in calculating emissions from all heatset inks to account for VOM retention in the substrate except when using an impervious substrate. For impervious substrates such as metal or plastic, no emission adjustment factor is used. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s) lines;
 - 2) To determine VOM emissions from fountain solutions that contain no alcohol, an emission adjustment factor may be used to account for carryover into the dryer, except when using an impervious substrate. The VOM emitted from the fountain solution shall be calculated using the

following equation:

$$Vom_{fs} = 0.30 \times Vom_{tot} + (0.70 \times Vom_{tot}) \times (1 - DE)$$

where: VOM_{tot} Total VOM in the fountain solution;

VOM_{fs} VOM emitted from the fountain solution;

DE Destruction efficiency of the control device on the associated dryer, in decimal form (i.e., 95% control is represented as 0.95). If no control device is present, DE = 0;

$$VOM_{fs} = 0.30 \times VOM_{tot} + (0.70 \times VOM_{tot}) \times (1 - DE)$$

Where: _____

VOM_{tot} = Total VOM in the fountain solution;

VOM_{fs} = VOM emitted from the fountain solution;

DE = Destruction efficiency of the control device on the associated dryer, in decimal form (i.e., 95% control is represented as 0.95). If no control device is present, $DE = 0$;

For fountain solutions that contain alcohol, impervious substrates such as metal or plastic, or non-heatset lithographic presses, no emission adjustment factor is used;

- 3) To determine VOM emissions from cleaning solutions used on heatset web offset lithographic printing line(s) lines at the source, an emission adjustment factor of 0.50 may be used in calculating emissions from used shop towels if the VOM composite vapor pressure of each associated cleaning solution is less than 10 mmHg measured at 20°C (68°F) and the shop towels are kept in closed containers. To determine VOM emissions from automatic blanket wash solution with a VOM composite vapor pressure of less than 10 mmHg measured at 20°C (68°F), an emission adjustment factor may be used to account for carryover into the dryer, except when using an impervious substrate. The VOM emitted from the automatic blanket wash solution shall be calculated using the following equation.

$$VOM_{tw} = 0.60 \times VOM_{tot} + (0.40 \times VOM_{tot}) \times (1 - DE)$$

Where: _____

VOM_{tot} = Total VOM in the blanket wash;

VOM_{tw} = VOM emitted from the blanket wash;

~~DE = Destruction efficiency of the control device on the associated dryer, in decimal form (i.e., 95% control is represented as 0.95). If no control device is present, DE =~~

~~$$Q: Vom_{bw} = 0.60 \times Vom_{tot} + (0.40 \times Vom_{tot}) \times (1 - DE)$$~~

where:

~~DE = Destruction efficiency of the control device on the associated dryer, in decimal form (i.e., 95% control is represented as 0.95). If no control device is present, DE = 0;~~

For cleaning solutions with VOM composite vapor pressures of equal to or greater than 10 mmHg measured at 20°C (68°F), for shop towels that are not kept in closed containers, and for impervious substrates such as metal or plastic, no emission adjustment factor is used.

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

Section 218.412 Letterpress Printing Lines: Applicability

- a) Except as provided in subsection (b) of this Section, on and after May 1, 2010, the limitations in Sections 218.413 through 218.416 of this Subpart shall apply to:
 - 1) All heatset web letterpress printing line(s)lines at a source if all heatset web letterpress printing line(s)lines (including solvents used for cleanup operations associated with heatset web letterpress printing line(s)lines) at the source have a total potential to emit 22.7 Mg (25 tons) or more of VOM per year; and
 - 2) All letterpress printing line(s)lines at a source where the combined emissions of VOM from all letterpress printing line(s)lines at the source (including solvents used for cleanup operations associated with the letterpress printing line(s)lines) ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, calculated in accordance with Section 218.417(b)(1)(B).
- b) Notwithstanding subsection (a) of this Section, the requirements of Section 218.413(a)(2) of this Subpart shall not apply to up to 416.3 liters (110 gallons) per year of cleaning materials used on letterpress printing lines at a subject source.
- c) On and after May 1, 2010, the recordkeeping and reporting requirements in Section 218.417 of this Subpart shall apply to all owners or operators of letterpress printing line(s)lines.
- d) If a letterpress printing line at a source is or becomes subject to one or more of the limitations in Section 218.413 of this Subpart, the letterpress printing line(s)lines at the source are always subject to the applicable provisions of this Subpart.

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

Section 218.413 Emission Limitations and Control Requirements for Letterpress Printing Lines

- a) No owner or operator of letterpress printing ~~line(s)~~lines subject to the requirements of this Subpart shall:
- 1) Cause or allow the operation of any heatset web letterpress printing line that meets the applicability requirements of Section 218.412(a)(1) unless:
 - A) The air pressure in the dryer is maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating;
 - B) An afterburner is installed and operated so that VOM emissions (excluding methane and ethane) from the press dryer ~~exhaust(s)~~exhausts are reduced as follows:
 - i) By 90 percent, by weight, for afterburners first constructed at the source prior to January 1, 2010;
 - ii) By 95 percent, by weight, for afterburners first constructed at the source on or after January 1, 2010; or
 - iii) To a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon);
 - C) The afterburner complies with all monitoring provisions specified in Section 218.416(a) of this Subpart; and
 - D) The afterburner is operated at all times when the printing line is in operation, except the afterburner may be shut down between November 1 and April 1 as provided in Section 218.107 of this Part;
 - 2) Cause or allow the use of a cleaning solution on any letterpress printing line unless:
 - A) The VOM content of the as-used cleaning solution is less than or equal to 70 percent, by weight; or
 - B) The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F);

- 3) Cause or allow VOM-containing cleaning materials, including used cleaning towels, associated with any letterpress printing line to be kept, stored, or disposed of in any manner other than in closed containers, except when specifically in use.
- b) An owner or operator of a heatset web letterpress printing line subject to the requirements of subsection (a)(1)(B) of this Section may use a control device other than an afterburner, if:
- 1) The control device reduces VOM emissions from the press dryer ~~exhaust(s)~~exhausts as follows:
 - A) By 90 percent, by weight, for control devices first constructed at the source prior to January 1, 2010;
 - B) By 95 percent, by weight, for control devices first constructed at the source on or after January 1, 2010; or
 - C) To a maximum control device exhaust outlet concentration of 20 ppmv (as carbon);
 - 2) The owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; and
 - 3) The use of the control device in accordance with this plan is approved by the Agency and USEPA as federally enforceable permit conditions.

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

Section 218.415 Testing for Letterpress Printing Lines

- a) Testing to demonstrate compliance with the requirements of Section 218.413 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 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 testing to allow the Agency to be present during such testing.
- b) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.413(a)(1)(B) or (b)(1) 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.

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;

- 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 control device, 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 control device is less than 50 ppmv, as carbon;
 - B) 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
 - C) Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;
- 4) 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);
- 5) During testing, the printing line(s) shall be operated at representative operating conditions and flow rates; and

- 6) During testing, an air flow direction indicating device, such as a smoke stick, shall be used to demonstrate 100 percent emissions capture efficiency for the dryer in accordance with Section 218.413(a)(1)(A) of this Subpart.
- c) Testing to demonstrate compliance with the VOM content limitations in Section 218.413(a)(2)(A) of this Subpart, and to determine the VOM content of cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of Section 218.417(b)(1)(B) 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 in Section 218.112 of this Part, shall be used to demonstrate compliance; or
 - 2) The manufacturer's specifications for VOM content for cleaning solvents and inks may be used if such 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; provided, however, Method 24 shall be used to determine compliance.
- d) Testing to demonstrate compliance with the requirements of Section 218.413(b) of this Subpart shall be conducted as set forth in the owner or operator's plan approved by the Agency and USEPA as federally enforceable permit conditions pursuant to Section 218.413(b) of this Subpart.
- e) Testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in Section 218.110 of this Part.

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

Section 218.416 Monitoring Requirements for Letterpress Printing Lines

- a) Afterburners ~~For Heatset Web Letterpress Printing Line(s)~~ for heatset web letterpress printing lines. If an afterburner is used to demonstrate compliance, the owner or operator of a heatset web letterpress printing line subject to Section 218.413(a)(1)(B) of this Subpart shall:
 - 1) Install, calibrate, maintain, and operate temperature monitoring ~~device(s)~~ devices with an accuracy of 3° C or 5° F on the afterburner 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 afterburner 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) Other Control Devices for Heatset Web Letterpress Printing Line(s) control devices for heatset web letterpress printing lines. If a control device other than an afterburner is used to demonstrate compliance, the owner or operator of a heatset web letterpress printing line subject to this Subpart shall install, maintain, calibrate, and operate such monitoring equipment as set forth in the owner or operator's plan approved by the Agency and USEPA pursuant to Section 218.413(b) of this Subpart.

- c) Cleaning Solution solution.
 - 1) The owner or operator of any letterpress printing line relying on the VOM content of the cleaning solution to comply with Section 218.413(a)(2)(A) of this Subpart must:
 - A) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):
 - i) 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
 - ii) 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 218.413(a)(2)(A) of this Subpart;
 - B) 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 218.417(c)(2) of this Subpart.
 - 2) The owner or operator of any letterpress printing line relying on the vapor pressure of the cleaning solution to comply with Section 218.413(a)(2)(B) of this Subpart must keep records for such cleaning solutions used on any such line(s) lines as set forth in Section 218.417(e)(2)(C) of this Subpart.

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

Section 218.417 Recordkeeping and Reporting for Letterpress Printing Lines

- a) By May 1, 2010, or upon initial start-up of a new heatset web letterpress printing line, whichever is later, and upon modification of a heatset web letterpress printing line, an owner or operator of a heatset web letterpress printing line exempt from any of the limitations of Section 218.413 of this Subpart because of the criteria in Section 218.412(a)(1) shall submit a certification to the Agency that includes:
 - 1) A declaration that the source is exempt from the requirements in Section 218.413 of this Subpart because of the criteria in Section 218.412(a)(1) of this Subpart;
 - 2) Calculations which demonstrate that the source's total potential to emit VOM does not equal or exceed 22.7 Mg (25 tons) per year.
- b) An owner or operator of a letterpress printing line exempt from any of the limitations of Section 218.413 of this Subpart because of the criteria in Section 218.412(a)(2) shall:
 - 1) By May 1, 2010, or upon initial start-up of a new letterpress printing line, whichever is later, and upon modification of a letterpress printing line, submit a certification to the Agency that includes the information specified in either subsections (b)(1)(A) through (b)(1)(C) of this Section, or subsections (b)(1)(A) and (b)(1)(D) of this Section, as applicable:
 - A) A declaration that the source is exempt from the control requirements in Section 218.413 of this Part because of the criteria in Section 218.412(a)(2) of this Subpart;
 - B) Calculations ~~which~~that demonstrate that combined emissions of VOM from all letterpress printing lines (including inks and solvents used for cleanup operations associated with the letterpress printing lines) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, as follows:
 - i) To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all letterpress printing lines at the source (including solvents used for cleanup operations associated with the letterpress printing lines) and divide this amount by the number of days during that calendar month that letterpress printing lines at the source were in operation;

- ii) To determine the VOM content of the inks and cleaning solvents, the tests methods and procedures set forth in Section 218.415(c) of this Subpart shall be used;
 - iii) To determine VOM emissions from inks used on letterpress printing line(s)lines at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks except when using an impervious substrate, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate except when using an impervious substrate. For impervious substrates such as metal or plastic, no emission adjustment factor is used. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s)lines; and
 - iv) To determine VOM emissions from cleaning solutions used on letterpress printing line(s)lines at the source, an emission adjustment factor of 0.50 shall be used in calculating emissions from used shop towels if the VOM composite vapor pressure of each associated cleaning solution is less than 10 mmHg measured at 20°C (68°F) and the shop towels are kept in closed containers. Otherwise, no retention factor is used;
- C) A description and the results of all tests used to determine the VOM content of inks and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 218.415(c)(1) of this Subpart;
- D) As an alternative to the calculations in subsection (b)(1)(B), ~~above,~~ a statement that the source uses less than the amount of material specified in subsections (b)(1)(D)(i) or (b)(1)(D)(ii), ~~below,~~ as applicable, during each calendar month. A source may determine that it emits below 6.8 kg/day (15 lbs/day) of VOM based upon compliance with such material use limitations. If the source exceeds this amount of material use in a given calendar month, the owner or operator must, within 15 days of the end of that month, complete the emissions calculations of subsection (b)(1)(B) to determine daily emissions for applicability purposes. If the source ever exceeds this amount of material use for six consecutive calendar months, it is no longer eligible to use this subsection as an alternative to the calculations in subsection (b)(1)(B). ~~If a source has both heatset web and either nonheatset web or sheetfed letterpress printing operations, or has all three types of printing~~

~~operations, the owner or operator may not make use of this alternative and must use the calculations in subsection (b)(1)(B).~~

- i) The sum of all sheetfed and nonheatset web letterpress printing operations at the source: 242.3 liters (64 gallons) of cleaning solvent; or
 - ii) The sum of all heatset web letterpress printing operations at the source: 204.1 kg (450 lbs) of ink and cleaning solvent;
- 2) For sources complying with subsection (b)(1)(B) of this Section, notify the Agency in writing if the combined emissions of VOM from all letterpress printing lines (including inks and solvents used for cleanup operations associated with the letterpress printing lines) at the source 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;
- 3) For sources complying with subsection (b)(1)(D) of this Section, comply with the following:
 - iA) Maintain material use records showing that the source uses less than the amount of material specified in subsections (b)(1)(D)(i) and (b)(1)(D)(ii) during each calendar month, or, if the source exceeds the material use limitations, records showing that the source exceeded the limitations but did not emit 6.8 kg/day (15 lbs/day) or more of VOM;
 - iiB) Notify the Agency in writing if the source exceeds the material use limitations for six consecutive calendar months, or if the source changes its method of compliance from subsection (b)(1)(D) to subsection (b)(1)(B) of this Section, within 30 days after the event occurs;
- c) Unless complying with subsection (b)(1)(D) and (b)(3) of this Section, on and after May 1, 2010, an owner or operator of a letterpress printing line subject to the requirements in subsections (a) or (b) of this Section shall collect and record either the information specified in subsection (c)(1) or (c)(2) of this Section for all letterpress printing lines at the source:
 - 1) Standard recordkeeping, including the following:
 - A) The name and identification of each letterpress ink and cleaning solvent used on any letterpress printing line, recorded each month;

- B) A daily record which that shows whether a letterpress printing line at the source was in operation on that day;
- C) The VOM content and the volume of each letterpress ink and cleaning solvent used on any letterpress printing line, recorded each month;
- D) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each cleaning solvent and letterpress ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and
- E) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.417(b)(1)(B) of this Subpart;

2) Purchase and inventory recordkeeping, including the following:

- A) The name, identification, and VOM content of each letterpress ink and cleaning solvent used on any letterpress printing line, recorded each month;
 - B) Inventory records from the beginning and end of each month indicating the total volume of each letterpress ink, and cleaning solvent to be used on any letterpress printing line at the source;
 - C) Monthly purchase records for each letterpress ink and cleaning solvent used on any letterpress printing line at the source;
 - D) A daily record which that shows whether a letterpress printing line at the source was in operation on that day;
 - E) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each cleaning solvent and letterpress ink (with the applicable ink VOM emission adjustment factor) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to subsections (c)(2)(A), (c)(2)(B), and (c)(2)(C) of this Section; and
 - F) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.417(b)(1)(B) of this Subpart;
- d) An owner or operator of a heatset web letterpress printing line(s) lines subject to the control requirements of Section 218.413(a)(1)(B) or (b)(1) of this Subpart shall comply with the following:

- 1) By May 1, 2010, or upon initial start-up of a new printing line, whichever is later, and upon initial start-up of a new control device for a heatset web printing line, submit a certification to the Agency that includes the following:
 - A) An identification of each heatset web letterpress printing line at the source;
 - B) A declaration that each heatset web letterpress printing line is in compliance with the requirements of Section 218.413 (a)(1) or (b) of this Subpart, as appropriate;
 - C) The type of afterburner or other approved control device used to comply with the requirements of Section 218.413(a)(1)(B) or (b)(1) of this Subpart, and the date that such device was first constructed at the subject source;
 - D) The control requirements in Section 218.413(a)(1)(B) or (b)(1) of this Subpart with which the letterpress printing line is complying;
 - E) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 218.413(a)(1)(B) or (b)(1) of this Subpart, as applicable; and
 - F) A declaration that the monitoring equipment required under Section 218.413(a)(1)(C) or (b) of this Subpart, as applicable, has been properly installed and calibrated according to manufacturer's specifications;
- 2) If testing of the afterburner or other approved control device is conducted pursuant to Section 218.415(b) of this Subpart, the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Agency and shall submit a certification to the Agency that includes the following:
 - A) A declaration that all tests and calculations necessary to demonstrate whether the letterpress printing line(s)lines is in compliance with Section 218.413(a)(1)(B) or (b)(1) of this Subpart, as applicable, have been properly performed;
 - B) A statement whether the heatset web letterpress printing line(s)lines is or is not in compliance with Section 218.413(a)(1)(B) or (b)(1) of this Subpart, as applicable; and

- C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 218.416(a) or (b) of this Subpart, as applicable;
- 3) Except as provided in subsection (d)(3)(D) of this Section, collect and record daily the following information for each heatset web letterpress printing line subject to the requirements of Section 218.413(a)(1)(B) or (b)(1) of this Subpart:
- A) Afterburner or other approved control device monitoring data in accordance with Section 218.416(a) or (b) of this Subpart, as applicable;
 - B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated printing line;
 - 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; and
 - D) A log detailing checks on the air flow direction or air pressure of the dryer and press room to ensure compliance with the requirements of Section 218.413(a)(1)(A) of this Subpart at least once per calendar month while the line is operating;
- 4) Notify the Agency in writing of any violation of Section 218.413(a)(1)(B) or (b)(1) of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation;
- 5) If changing the method of compliance between Sections 218.413(a)(1)(B) and 218.413(b) of this Subpart, certify compliance for the new method of compliance in accordance with Section 218.413(b) at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s)lines will be in compliance with the requirements of Section 218.413(a)(1) of this Subpart, or Section 218.413(b) of this Subpart, as applicable.
- e) For letterpress printing line cleaning operations, an owner or operator of a letterpress printing line subject to the requirements of Section 218.413 of this Subpart shall:
- 1) By May 1, 2010, or upon initial start-up of a new letterpress printing line, whichever is later, certify to the Agency that all cleaning solutions, other

than those excluded pursuant to Section 218.412(b), and the handling of all cleaning materials will be in compliance with the requirements of Section 218.413(a)(2)(A) or (a)(2)(B) and (a)(3) of this Subpart. Such certification shall include:

- A) A statement that the cleaning solution will comply with the limitations in Section 218.413(a)(2);
 - B) Identification of the ~~method(s)~~ methods that will be used to demonstrate continuing compliance with the applicable limitations;
 - C) A sample of the records that will be kept pursuant to Section 218.417(e)(2) of this Subpart; and
 - D) A description of the practices that ensure that VOM-containing cleaning materials are kept in closed containers;
- 2) Collect and record the following information for each cleaning solution used on each letterpress printing line:
- A) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.413(a)(2)(A) of this Subpart and ~~which~~ that is prepared at the source with automatic equipment:
 - i) The name and identification of each cleaning solution;
 - ii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.415(c) of this Subpart;
 - iii) 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);
 - iv) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - v) The VOM content of the as-used cleaning solution, with supporting calculations; and
 - vi) A calibration log for the automatic equipment, detailing periodic checks;

B) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.413(a)(2)(A) of this Subpart, and ~~which~~that is not prepared at the source with automatic equipment:

- i) The name and identification of each cleaning solution;
- ii) Date and time of preparation, and each subsequent modification, of the batch;
- iii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.415(c) of this Subpart;
- iv) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
- v) The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM content may be used if such 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;

C) 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 218.413(a)(2)(B) of this Subpart:



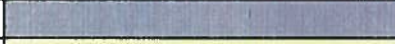


- i) The name and identification of each cleaning solution;
- ii) Date and time of preparation, and each subsequent modification, of the batch;
- iii) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 218.415(e) of this Subpart. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in Sections 218.105(a) and 218.110 of this Part;

- iv) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
 - v) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 218.415(e) of this Subpart. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's specifications are based on results of tests conducted in accordance with methods specified in Sections 218.105(a) and 218.110 of this Part;
- D) The date, time, and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;
 - E) The amount of cleaning materials used on letterpress printing lines at the source that do not comply with the cleaning material limitations set forth in Section 218.413(a)(2) of this Subpart;
- 3) Notify the Agency in writing of any violation of Section 218.413 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation.
- f) The owner or operator shall maintain all records required by this Section at the source for a minimum period of three years and shall make all records available to the Agency upon request.

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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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319	218.886	Emissions Testing (Renumbered)
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321		SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT
322		MANUFACTURING PROCESSES
323		
324	Section	
325	218.920	Applicability
326	218.923	Permit Conditions (Repealed)
327	218.926	Control Requirements
328	218.927	Compliance Schedule
329	218.928	Testing
330	218.929	Cementable and Dress or Performance Shoe Leather
331		
332		SUBPART QQ: MISCELLANEOUS FORMULATION
333		MANUFACTURING PROCESSES
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335	Section	
336	218.940	Applicability
337	218.943	Permit Conditions (Repealed)
338	218.946	Control Requirements
339	218.947	Compliance Schedule
340	218.948	Testing
341		
342		SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL
343		MANUFACTURING PROCESSES
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345 Section
 346 218.960 Applicability
 347 218.963 Permit Conditions (Repealed)
 348 218.966 Control Requirements
 349 218.967 Compliance Schedule
 350 218.968 Testing

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 352 SUBPART TT: OTHER EMISSION UNITS
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354 Section
 355 218.980 Applicability
 356 218.983 Permit Conditions (Repealed)
 357 218.986 Control Requirements
 358 218.987 Compliance Schedule
 359 218.988 Testing

360
 361 SUBPART UU: RECORDKEEPING AND REPORTING
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363 Section
 364 218.990 Exempt Emission Units
 365 218.991 Subject Emission Units

366
 367 218.APPENDIX A List of Chemicals Defining Synthetic Organic Chemical and Polymer
 368 Manufacturing
 369 218.APPENDIX B VOM Measurement Techniques for Capture Efficiency (Repealed)
 370 218.APPENDIX C Reference Methods and Procedures
 371 218.APPENDIX D Coefficients for the Total Resource Effectiveness Index (TRE) Equation
 372 218.APPENDIX E List of Affected Marine Terminals
 373 218.APPENDIX G TRE Index Measurements for SOCOMI Reactors and Distillation Units
 374 218.APPENDIX H Baseline VOM Content Limitations for Subpart F, Section 218.212
 375 Cross-Line Averaging
 376

377 AUTHORITY: Implementing Section 10 and authorized by Sections 27 and 28 of the
 378 Environmental Protection Act [415 ILCS 5/10, 27, and 28].
 379

380 SOURCE: Adopted at R91-7 at 15 Ill. Reg. 12231, effective August 16, 1991; amended in R91-
 381 24 at 16 Ill. Reg. 13564, effective August 24, 1992; amended in R91-28 and R91-30 at 16 Ill.
 382 Reg. 13864, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16636, effective
 383 September 27, 1993; amended in R93-14 at 18 Ill. Reg. 1945, effective January 24, 1994;
 384 amended in R94-12 at 18 Ill. Reg. 14973, effective September 21, 1994; amended in R94-15 at
 385 18 Ill. Reg. 16392, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16950,
 386 effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6848,
 387 effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7359, effective May 22, 1995;

388 amended in R96-13 at 20 Ill. Reg. 14428, effective October 17, 1996; amended in R97-24 at 21
 389 Ill. Reg. 7708, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3556, effective
 390 February 2, 1998; amended in R98-16 at 22 Ill. Reg. 14282, effective July 16, 1998; amended in
 391 R02-20 at 27 Ill. Reg. 7283, effective April 8, 2003; amended in R04-12/20 at 30 Ill. Reg. 9684,
 392 effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. 7086, effective April 30, 2007;
 393 amended in R08-8 at 32 Ill. Reg. 14874, effective August 26, 2008; amended in R10-8 at 34 Ill.
 394 Reg. _____, effective _____.

395
 396 SUBPART A: GENERAL PROVISIONS

397
 398 **Section 218.106 Compliance Dates**

- 399
- 400 a) Except as otherwise provided in this Section or as otherwise provided in a specific
 401 Subpart of this Part, compliance with the requirements of all rules is required by
 402 July 1, 1991, or September 1, 1991, for all sources located in Cook, DuPage,
 403 Kane, Lake, McHenry, or Will Counties, consistent with the appropriate
 404 provisions of Section 218.103 of this Subpart.
 - 405
 - 406 b) Except as otherwise provided in this Section or as otherwise provided in a specific
 407 Subpart of this Part, compliance with the requirements of this Part is required by
 408 November 15, 1993, for all sources located in Aux Sable Township or Goose
 409 Lake Township in Grundy County, or in Oswego Township in Kendall County.
 - 410
 - 411 c) All emission units which meet the applicability requirements of Sections
 412 218.402(a)(2), 218.611(b), 218.620(b), 218.660(a), 218.680(a), 218.920(b),
 413 218.940(b), 218.960(b) or 218.980(b) of this Part, including emission units at
 414 sources which are excluded from the applicability criteria of Sections
 415 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a), or
 416 218.980(a) of this Part by virtue of permit conditions or other enforceable means,
 417 must comply with the requirements of Subparts H, Z, AA, CC, DD, PP, QQ, RR
 418 or TT of this Part, respectively, by March 15, 1995. Any owner or operator of an
 419 emission unit which has already met the applicability requirements of Sections
 420 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a)
 421 218.980(a) of this Part on or by the effective date of this subsection is required to
 422 comply with all compliance dates or schedules found in Sections 218.106(a) or
 423 218.106(b), as applicable.
 - 424
 - 425 d) Any owner or operator of a source with an emission unit subject to the
 426 requirements of Section 218.204(m)(2) or (m)(3) of this Part shall comply with
 427 those requirements by March 25, 1995.
 - 428
 - 429 e) Any owner or operator of a source subject to the requirements of Section
 430 218.204(p) of this Part shall comply with the requirements in Section 218.204(p),

431 as well as all applicable requirements in Sections 218.205 through 218.211,
432 218.214, and 218.217 by May 1, 2010.

433
434 (Source: Amended at 34 Ill. Reg. _____, effective _____)
435

436 SUBPART E: SOLVENT CLEANING
437

438 **Section 218.181 Solvent Cleaning Degreasing Operationsin General**
439

440 The requirements of Sections 218.182, 218.183, 218.184, and 218.186 of this Subpart shall apply
441 to all cold cleaning, open top vapor degreasing, and conveyORIZED degreasing operations which
442 use volatile organic materials.
443

444 (Source: Amended at 34 Ill. Reg. _____, effective _____)
445

446 **Section 218.187 Other Industrial Solvent Cleaning Operations**
447

448 a) Applicability. On and after April 1, 2011:
449

450 1) Except as provided in subsection (a)(2) of this Section, the requirements of
451 this Section shall apply to all cleaning operations that use organic
452 materials sources that emit a total of 6.8 kg/day (15 lbs/day) or more of
453 VOM from cleaning operations at the source, in the absence of air
454 pollution control equipment. For purposes of this Section, "cleaning
455 operation" means the process of cleaning products, product components,
456 tools, equipment, or general work areas during production, repair,
457 maintenance, or servicing, including but not limited to spray gun cleaning,
458 spray booth cleaning, large and small manufactured components cleaning,
459 parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank
460 cleaning, at sources with emission units;

461
462 2) Notwithstanding subsection (a)(1) of this Section:
463

464 A) The following cleaning operations shall be exempt from the
465 requirements of subsections (b), (c), (d), (f), and (g) of this
466 Section:
467

468 i) Cleaning operations subject to the limitations in Sections
469 218.182, 218.183, or 218.184;

470
471 ii) Janitorial cleaning;
472

- 473 iii) Stripping of cured coatings, inks, or adhesives, including
- 474 screen reclamation activities;
- 475
- 476 iv) Cleaning operations in printing pre-press areas, including
- 477 the cleaning of film processors, color scanners, plate
- 478 processors, film cleaning, and plate cleaning;
- 479

480 B) Cleaning operations for emission units within the following source

481 categories shall be exempt from the requirements of subsections

482 (b), (c), (d), (f), and (g) of this Section:

483

- 484 i) Aerospace coating;
- 485
- 486 ii) Flexible package printing;
- 487
- 488 iii) Lithographic printing;
- 489
- 490 iv) Letterpress printing;
- 491
- 492 v) Flat wood paneling coating;
- 493
- 494 vi) Large appliance coating;
- 495
- 496 vii) Metal furniture coating;
- 497
- 498 viii) Paper, film, and foil coating;
- 499
- 500 ix) Wood furniture coating;
- 501
- 502 x) Shipbuilding and repair coating;
- 503
- 504 xi) Plastic parts coating;
- 505
- 506 xii) Miscellaneous metal parts coating;
- 507
- 508 xiii) Fiberglass boat manufacturing;
- 509
- 510 xiv) Miscellaneous industrial adhesives; and
- 511
- 512 xv) Auto and light-duty truck assembly coating;
- 513

514 C) The following cleaning operations shall be exempt from the

515 requirements of subsections (b), (c), (f), and (g) of this Section:

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- i) Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;
 - ii) Cleaning conducted as part of performance laboratory tests on coatings, adhesives, or inks; research and development operations; or laboratory tests in quality assurance laboratories;
 - iii) Cleaning of paper-based gaskets and clutch assemblies where rubber is bonded to metal by means of an adhesive;
 - iv) Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;
 - v) Cleaning of medical device and pharmaceutical manufacturing facilities using no more than 1.5 gallons per day of solvents;
 - vi) Cleaning of adhesive application equipment used for thin metal laminating;
 - vii) Cleaning of electronic or electrical cables;
 - viii) Touch-up cleaning performed on printed circuit boards where surface mounted devices have already been attached;
 - ix) Cleaning of coating and adhesive application processes utilized to manufacture transdermal drug delivery products using no more than three gallons per day of ethyl acetate;
 - x) Cleaning of application equipment used to apply coatings on satellites and radiation effect coatings;
 - xi) Cleaning of application equipment used to apply solvent-borne fluoropolymer coatings;
 - xii) Cleaning of ultraviolet or electron beam adhesive application;
 - xiii) Cleaning of sterilization indicating ink application equipment if the facility uses no more than 1.5 gallons per day of solvents for such cleaning;

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- xiv) Cleaning of metering rollers, dampening rollers, and printing plates;
- xv) Cleaning of numismatic dies; and
- xvi) Cleaning operations associated with digital printing.

b) Material and Control Requirements. No owner or operator of a source subject to this Section shall perform any cleaning operation subject to this Section unless the owner or operator meets the requirements in subsection (b)(1), (b)(2), or (b)(3):

1) The VOM content of the as-used cleaning solutions (minus water and any compounds that are specifically exempted from the definitions of VOM) does not exceed the following emissions limitations:

A) Product cleaning during manufacturing process or surface preparation for coating, adhesive, or ink application:

	<u>kg/l</u>	<u>lb/gal</u>
i) <u>Electrical apparatus components and electronic components</u>	<u>0.10</u>	<u>0.83</u>
ii) <u>Medical device and pharmaceutical manufacturing</u>	<u>0.80</u>	<u>6.7</u>

B) Repair and maintenance cleaning:

	<u>kg/l</u>	<u>lb/gal</u>
i) <u>Electrical apparatus components and electronic components</u>	<u>0.10</u>	<u>0.83</u>
ii) <u>Medical device and pharmaceutical manufacturing</u>	<u>0.80</u>	<u>6.7</u>
iii) <u>Medical device and pharmaceutical manufacturing general work surfaces</u>	<u>0.60</u>	<u>5.0</u>

C) Cleaning of ink application equipment:

kg/l lb/gal

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i)	<u>Rotogravure printing that does not print flexible packaging</u>	<u>0.10</u>	<u>0.83</u>
ii)	<u>Screen printing</u>	<u>0.50</u>	<u>4.2</u>
iii)	<u>Ultraviolet ink and electron beam ink application equipment, except screen printing</u>	<u>0.65</u>	<u>5.4</u>
iv)	<u>Flexographic printing that does not print flexible packaging</u>	<u>0.10</u>	<u>0.83</u>

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		<u>kg/l</u>	<u>lb/gal</u>
D)	<u>All other cleaning operations not subject to a specific limitation in subsections (b)(1)(A) through (b)(1)(C) of this Section</u>	<u>0.050</u>	<u>0.42</u>

2) The composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20° C (68° F); or

3) An afterburner or carbon adsorber is installed and operated that reduces VOM emissions from the subject cleaning operation by at least 85 percent overall. The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if such device reduces VOM emissions from the subject cleaning operation by at least 85 percent overall, the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for such control device, and such plan is approved by the Agency and USEPA within federally enforceable permit conditions.

c) The owner or operator of a subject source shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in subsection (g) of this Section and by complying with the recordkeeping and reporting requirements specified in subsection (e) of this Section.

d) Operating Requirements. The owner or operator of a source subject to the requirements of this Section shall comply with the following for each subject cleaning operation:

1) Cover open containers and properly cover and store applicators used to apply cleaning solvents;

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- 2) Minimize air circulation around the cleaning operation;
 - 3) Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;
 - 4) Utilize equipment practices that minimize emissions.
- e) Recordkeeping and Reporting Requirements.
- 1) The owner or operator of a source exempt from the limitations of this Section because of the criteria in Section 218.187(a)(1) of this Subpart shall comply with the following:
 - A) By April 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - i) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 218.187(a)(1);
 - ii) Calculations that demonstrate that combined emissions of VOM from cleaning operations at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment;
 - B) Notify the Agency of any record that shows that the combined emissions of VOM from cleaning operations at the source 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.
 - 2) All sources subject to the requirements of this Section shall:
 - A) By April 1, 2011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - i) A declaration that all subject cleaning operations are in compliance with the requirements of this Section;
 - ii) Identification of each subject cleaning operation and each VOM-containing cleaning solution used as of the date of certification in such operation;

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- iii) If complying with the emissions control system requirement, what type of emissions control system will be used;
 - iv) Initial documentation that each subject cleaning operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;
 - v) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;
 - vi) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 218.187(d); and
 - vii) A description of each cleaning operation exempt pursuant to Section 218.187(a)(2), if any, and a listing of the emission units on which the exempt cleaning operation is performed;
- B) At least 30 calendar days before changing the method of compliance between subsections (b)(1) or (b)(2) and subsection (b)(3) of this Section, notify the Agency in writing of such change. The notification shall include a demonstration of compliance with the newly applicable subsection;
- 3) All sources complying with this Section pursuant to the requirements of subsection (b)(1) of this Section shall collect and record the following information for each cleaning solution used:
- A) For each cleaning solution that is prepared at the source with automatic equipment:
 - i) The name and identification of each cleaning solution;
 - ii) The VOM content of each cleaning solvent in the cleaning solution;
 - iii) 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

- 703 changes to the proportion of cleaning solvent and water (or
704 other non-VOM);
705
706 iv) The proportion of each cleaning solvent and water (or other
707 non-VOM) used to prepare the as-used cleaning solution;
708
709 v) The VOM content of the as-used cleaning solution, with
710 supporting calculations; and
711
712 vi) A calibration log for the automatic equipment, detailing
713 periodic checks;
714
715 B) For each batch of cleaning solution that is not prepared at the
716 source with automatic equipment:
717
718 i) The name and identification of each cleaning solution;
719
720 ii) Date, time of preparation, and each subsequent
721 modification of the batch;
722
723 iii) The VOM content of each cleaning solvent in the cleaning
724 solution;
725
726 iv) The total amount of each cleaning solvent and water (or
727 other non-VOM) used to prepare the as-used cleaning
728 solution; and
729
730 v) The VOM content of the as-used cleaning solution, with
731 supporting calculations. For cleaning solutions that are not
732 prepared at the site but are used as purchased, the
733 manufacturer's specifications for VOM content may be
734 used if such manufacturer's specifications are based on
735 results of tests of the VOM content conducted in
736 accordance with methods specified in Section 218.105(a) of
737 this Part;
738
739 4) All sources complying with this Section pursuant to the requirements of
740 subsection (b)(2) of this Section shall collect and record the following
741 information for each cleaning solution used:
742
743 A) The name and identification of each cleaning solution;
744

- 745 B) Date, time of preparation, and each subsequent modification of the
746 batch;
747
- 748 C) The molecular weight, density, and VOM composite partial vapor
749 pressure of each cleaning solvent, as determined in accordance
750 with the applicable methods and procedures specified in Section
751 218.110 of this Part;
752
- 753 D) The total amount of each cleaning solvent used to prepare the as-
754 used cleaning solution; and
755
- 756 E) The VOM composite partial vapor pressure of each as-used
757 cleaning solution, as determined in accordance with the applicable
758 methods and procedures specified in Section 218.110 of this Part;
759
- 760 5) All sources complying with this Section pursuant to the requirements of
761 subsection (b)(3) of this Section shall comply with the following:
762
- 763 A) By April 1, 2011, or upon initial start-up of the source, whichever
764 is later, and upon initial start-up of a new emissions control
765 system, include in the certification required by subsection (e)(3) of
766 this Section a declaration that the monitoring equipment required
767 under Section 218.187(f) of this Subpart has been properly
768 installed and calibrated according to manufacturer's specifications;
769
- 770 B) If testing of an emissions control system is conducted pursuant to
771 Section 218.187(g) of this Subpart, the owner or operator shall,
772 within 90 days after conducting such testing, submit a copy of all
773 test results to the Agency and shall submit a certification to the
774 Agency that includes the following:
775
- 776 i) A declaration that all tests and calculations necessary to
777 demonstrate compliance with Section 218.187(b)(3) of this
778 Subpart have been properly performed;
779
- 780 ii) A statement whether the subject cleaning operation is or is
781 not in compliance with Section 218.187(b)(3) of this
782 Subpart; and
783
- 784 iii) The operating parameters of the emissions control system
785 during testing, as monitored in accordance with Section
786 218.187(f) of this Subpart;
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- C) Collect and record daily the following information for each cleaning operation subject to the requirements of Section 218.187(b)(3) of this Subpart:
 - i) Emissions control system monitoring data in accordance with Section 218.187(f) of this Subpart, as applicable;
 - ii) A log of operating time for the emissions control system, monitoring equipment, and associated cleaning equipment;
 - iii) A maintenance log for the emissions control system and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages;

- D) Maintain records documenting the use of good operating practices consistent with the equipment manufacturer's specifications for the cleaning equipment being used and the emissions control system equipment. At a minimum, these records shall include:
 - i) Records for periodic inspection of the cleaning equipment and emissions control system equipment with date of inspection, individual performing the inspection, and nature of inspection;
 - ii) Records for repair of malfunctions and breakdowns with identification and description of incident, date identified, date repaired, nature of repair, and the amount of VOM released into the atmosphere as a result of the incident;

- 6) All sources subject to the requirements of subsections (b) and (d) of this Section shall notify the Agency of any violation of subsection (b) or (d) by providing a description of the violation and copies of records documenting the violation to the Agency within 30 days following the occurrence of the violation;

- 7) All records required by this subsection (e) shall be retained by the source for at least three years and shall be made available to the Agency upon request.

f) Monitoring Requirements.

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- 1) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 218.187(b)(3) of this Subpart 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;
- 2) 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 218.187(b)(3) of this Subpart shall install, maintain, calibrate, and operate such monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 218.187(b)(3).

g) Testing Requirements.

- 1) Testing to demonstrate compliance with the requirements of this Section shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise specified in this Section. Such 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 the testing;
- 2) Testing to demonstrate compliance with the VOM content limitations in Section 218.187(b)(1) of this Subpart, and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted as follows:
 - A) 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 in Section 218.112 of this Part, shall be used to demonstrate compliance; or

- 873 B) The manufacturer's specifications for VOM content for cleaning
874 solvents may be used if such manufacturer's specifications are
875 based on results of tests of the VOM content conducted in
876 accordance with methods specified in Section 218.105(a) of this
877 Part; provided, however, Method 24 shall be used to determine
878 compliance;
879
- 880 3) Testing to determine the VOM composite partial vapor pressure of
881 cleaning solvents, cleaning solvent concentrates, and as-used cleaning
882 solutions shall be conducted in accordance with the applicable methods
883 and procedures specified in Section 218.110 of this Part;
884
- 885 4) For afterburners and carbon adsorbers, the methods and procedures of
886 Section 218.105(d) through (f) shall be used for testing to demonstrate
887 compliance with the requirements of Section 218.187(b)(3) of this
888 Subpart, as follows:
889
- 890 A) To select the sampling sites, Method 1 or 1A, as appropriate, 40
891 CFR 60, Appendix A, incorporated by reference in Section
892 218.112 of this Part;
893
- 894 B) To determine the volumetric flow rate of the exhaust stream,
895 Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A,
896 incorporated by reference in Section 218.112 of this Part;
897
- 898 C) To determine the VOM concentration of the exhaust stream
899 entering and exiting the emissions control system, Method 25 or
900 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by
901 reference in Section 218.112 of this Part. For thermal and catalytic
902 afterburners, Method 25 must be used except under the following
903 circumstances, in which case Method 25A must be used:
904
- 905 i) The allowable outlet concentration of VOM from the
906 emissions control system is less than 50 ppmv, as carbon;
907
- 908 ii) The VOM concentration at the inlet of the emissions
909 control system and the required level of control result in
910 exhaust concentrations of VOM of 50 ppmv, or less, as
911 carbon; and
912
- 913 iii) Due to the high efficiency of the emissions control system,
914 the anticipated VOM concentration at the emissions control
915 system exhaust is 50 ppmv or less, as carbon, regardless of

916 inlet concentration. If the source elects to use Method 25A
 917 under this option, the exhaust VOM concentration must be
 918 50 ppmv or less, as carbon, and the required destruction
 919 efficiency must be met for the source to have demonstrated
 920 compliance. If the Method 25A test results show that the
 921 required destruction efficiency apparently has been met, but
 922 the exhaust concentration is above 50 ppmv, as carbon, a
 923 retest is required. The retest shall be conducted using
 924 either Method 25 or Method 25A. If the retest is conducted
 925 using Method 25A and the test results again show that the
 926 required destruction efficiency apparently has been met, but
 927 the exhaust concentration is above 50 ppmv, as carbon, the
 928 source must retest using Method 25;

929
 930 D) During testing, the cleaning equipment shall be operated at
 931 representative operating conditions and flow rates;

932
 933 5) An owner or operator using an emissions control system other than an
 934 afterburner or carbon adsorber shall conduct testing to demonstrate
 935 compliance with the requirements of Section 218.187(b)(3) of this Subpart
 936 as set forth in the owner's or operator's plan approved by the Agency and
 937 USEPA as federally enforceable permit conditions pursuant to Section
 938 218.187(b)(3) of this Subpart.

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

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 942 **SUBPART F: COATING OPERATIONS**

943
 944 **Section 218.204 Emission Limitations**

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 946 Except as provided in Sections 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216 of
 947 this Subpart, no owner or operator of a coating line shall apply at any time any coating in which
 948 the VOM content exceeds the following emission limitations for the specified coating. Except as
 949 provided in ~~Sections~~Section 218.204(l) and 218.204(p), compliance with the emission limitations
 950 marked with an asterisk in this Section is required on and after March 15, 1996, and compliance
 951 with emission limitations not marked with an asterisk is required until March 15, 1996. The
 952 following emission limitations are expressed in units of VOM per volume of coating (minus
 953 water and any compounds which are specifically exempted from the definition of VOM) as
 954 applied at each coating applicator, except where noted. Compounds which are specifically
 955 exempted from the definition of VOM should be treated as water for the purpose of calculating
 956 the "less water" part of the coating composition. Compliance with this Subpart must be
 957 demonstrated through the applicable coating analysis test methods and procedures specified in
 958 Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in

959 Section 218.211(c) of this Subpart except where noted. (Note: The equation presented in Section
 960 218.206 of this Part shall be used to calculate emission limitations for determining compliance
 961 by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.)
 962 The emission limitations are as follows:
 963

a)	Automobile or Light-Duty Truck Coating	kg/l	lb/gal
1)	Prime coat	0.14 0.14*	(1.2) (1.2)*
2)	Primer surface coat	1.81 1.81*	(15.1) (15.1)*

(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) 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.)

3)	Topcoat	kg/l	lb/gal
		1.81 1.81*	(15.1) (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) 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.)

4)	Final repair coat	kg/l	lb/gal
		0.58 0.58*	(4.8) (4.8)*

964

b)	Can Coating	kg/l	lb/gal
	1) Sheet basecoat and overvarnish		
	A) Sheet basecoat	0.34 0.26*	(2.8) (2.2)*
	B) Overvarnish	0.34 0.34	(2.8) (2.8)*
	2) Exterior basecoat and overvarnish	0.34 0.25*	(2.8) (2.1)*
	3) Interior body spray coat		
	A) Two piece	0.51 0.44*	(4.2) (3.7)*
	B) Three piece	0.51 0.51*	(4.2) (4.2)*
	4) Exterior end coat	0.51 0.51*	(4.2) (4.2)*
	5) Side seam spray coat	0.66 0.66*	(5.5) (5.5)*
	6) End sealing compound coat	0.44 0.44*	(3.7) (3.7)*

965

c)	Paper Coating	kg/l	lb/gal
		0.35 0.28*	(2.9) (2.3)*

(Note: The paper coating limitation shall not apply to any owner or operator of any paper coating line on which flexographic, ~~or~~ rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in ~~Subpart H~~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.)

966

d)	Coil Coating	kg/l	lb/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		
	1) Air dried	0.36	(3.0)
		0.34*	(2.8)*
	2) Baked	0.36	(3.0)
		0.28*	(2.3)*
h)	Large Appliance Coating		
	1) Air dried	0.34	(2.8)
		0.34*	(2.8)*
	2) Baked	0.34	(2.8)
		0.28*	(2.3)*

BOARD NOTE: The limitation shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 l (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)	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	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	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-

975 borne epoxy coating applied via an electrodeposition
 976 process to a metal surface prior to spray coating, for the
 977 purpose of enhancing corrosion resistance.

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 979 ii) "Electrodeposition process" means, for purposes of
 980 subsection 218.204(j)(5) of this Section, a water-borne dip
 981 coating process in which opposite electrical charges are
 982 applied to the substrate and the coating. The coating is
 983 attracted to the substrate due to the electrochemical
 984 potential difference that is created.

985
 986 iii) "Marine engine coating" means, for purposes of subsection
 987 218.204(j)(5) of this Section, any extreme performance
 988 protective, decorative or functional coating applied to an
 989 engine that is used to propel watercraft.

990
 991 B) For purposes of subsection 218.204(j)(6) of this Section, "metallic
 992 coating" means a coating which contains more than ¼ lb/gal of
 993 metal particles, as applied.

994

k)	Heavy Off-Highway Vehicle Products Coating	kg/l	lb/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.		

995

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)

(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	2.0	(2.0)

conversion varnish topcoat

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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.

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

- 1032 reservoir. The owner or operator shall:
 1033
 1034 i) Monitor the viscosity of the coating in the reservoir with a
 1035 viscosity meter or by testing the viscosity of the initial
 1036 coating and retesting the coating in the reservoir each time
 1037 solvent is added;
 1038
 1039 ii) Collect and record the reservoir viscosity and the amount
 1040 and weight of VOM per weight of solids of coating and
 1041 solvent each time coating or solvent is added; and
 1042
 1043 iii) Maintain these records at the source for a period of three
 1044 years.
 1045

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

1046

n)	Plastic Parts Coating: Automotive/Transportation	kg/l	lb/gal
	1) Interiors		
	A) Baked		
	i) Color coat	0.49*	(4.1)*
	ii) Primer	0.46*	(3.8)*
	B) Air Dried		

	i)	Color coat	0.38*	(3.2)*
	ii)	Primer	0.42*	(3.5)*
2)		Exteriors (flexible and non-flexible)		
	A)	Baked		
	i)	Primer	0.60*	(5.0)*
	ii)	Primer non-flexible	0.54*	(4.5)*
	iii)	Clear coat	0.52*	(4.3)*
	iv)	Color coat	0.55*	(4.6)*
	B)	Air Dried		
	i)	Primer	0.66*	(5.5)*
	ii)	Clear coat	0.54*	(4.5)*
	iii)	Color coat (red & black)	0.67*	(5.6)*
	iv)	Color coat (others)	0.61*	(5.1)*
3)		Specialty		
	A)	Vacuum metallizing basecoats, texture base coats	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)*

1047	E) Headlamp lens coatings	0.89*	(7.4)*
	o) 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)*

1048
 1049 p) Flat Wood Paneling Coatings. On and after May 1, 2010, flat wood paneling
 1050 coatings shall comply with one of the following limitations:

- 1051
 1052 1) 0.25 kg VOM/1 of coatings (2.1 lb VOM/gal coatings); or
 1053
 1054 2) 0.35 kg VOM/1 solids (2.9 lb VOM/gal solids).

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 1056 (Source: Amended at 34 Ill. Reg. _____, effective _____)

1057
 1058 **Section 218.205 Daily-Weighted Average Limitations**

1059
 1060 No owner or operator of a coating line subject to the limitations of Section 218.204 of this
 1061 Subpart and complying by means of this Section shall operate the subject coating line unless the
 1062 owner or operator has demonstrated compliance with subsection (a), (b), (c), (d), (e), (f), (g), (h)
 1063 or (i) of this Section (depending upon the category of coating) through the applicable coating
 1064 analysis test methods and procedures specified in Section 218.105(a) of this Part and the
 1065 recordkeeping and reporting requirements specified in Section 218.211(d) of this Subpart:

- 1066
 1067 a) No owner or operator of a coating line subject to only one of the limitations from
 1068 among Section 218.204(a)(1), (a)(4), (c), (d), (e), (f), ~~or (i)~~, or (p) of this Subpart
 1069 shall apply coatings on any such coating line, during any day, whose daily-

- 1070 weighted average VOM content exceeds the emission limitation to which the
 1071 coatings are subject.
 1072
 1073 b) No owner or operator of a miscellaneous metal parts and products coating line
 1074 subject to the limitations of Section 218.204(j) of this Subpart shall apply coatings
 1075 to miscellaneous metal parts or products on the subject coating line unless the
 1076 requirements in subsection (b)(1) or (b)(2) of this Section are met.
 1077
 1078 1) For each coating line which applies multiple coatings, all of which are
 1079 subject to the same numerical emission limitation within Section
 1080 218.204(j) during the same day (e.g., all coatings used on the line are
 1081 subject to 0.42 kg/(l [3.5 lbs/gal])), the daily-weighted average VOM
 1082 content shall not exceed the coating VOM content limit corresponding to
 1083 the category of coating used, or
 1084
 1085 2) For each coating line which applies coatings subject to more than one
 1086 numerical emission limitation in Section 218.204(j) of this Subpart, during
 1087 the same day, the owner or operator shall have a site-specific proposal
 1088 approved by the Agency and approved by the USEPA as a SIP revision.
 1089 To receive approval, the requirements of USEPA's Emissions Trading
 1090 Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4,
 1091 1986), must be satisfied.
 1092
 1093 c) No owner or operator of a can coating line subject to the limitations of Section
 1094 218.204(b) of this Subpart shall operate the subject coating line using a coating
 1095 with a VOM content in excess of the limitations specified in Section 218.204(b)
 1096 of this Subpart unless all of the following requirements are met:
 1097
 1098 1) An alternative daily emission limitation shall be determined for the can
 1099 coating operation, i.e., for all of the can coating lines at the source,
 1100 according to subsection (c)(2) of this Section. Actual daily emissions shall
 1101 never exceed the alternative daily emission limitation and shall be
 1102 calculated by use of the following equation.
 1103

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

1105 where:

1106 E_d = Actual VOM emissions for the day in units of kg/day
 1107 (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).

1108
 1109 2) The alternative daily emission limitation (A_d) shall be determined for the
 1110 can coating operation, i.e., for all of the can coating lines at the source, on
 1111 a daily basis as follows:
 1112

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

1113
 1114 where:
 1115
 1116

- 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).

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- 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 (l)(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 (l)(3) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used, or

- 1151 2) For each coating line which applies coatings subject to more than one
 1152 numerical emission limitation in Section 218.204(l)(1) or (l)(3) of this
 1153 Subpart, during the same day, the owner or operator shall have a site
 1154 specific proposal approved by the Agency and approved by the USEPA as
 1155 a SIP revision. To receive approval, the requirements of USEPA's
 1156 Emissions Trading Policy Statement (and related policy) 51 Fed. Reg.
 1157 43814 (December 4, 1986), must be satisfied.
 1158
- 1159 f) No owner or operator of an existing diesel-electric locomotive coating line in
 1160 Cook County, subject to the limitations of Section 218.204(m) of this Subpart
 1161 shall apply coatings to diesel-electric locomotives on the subject coating line
 1162 unless the requirements of subsection (f)(1) or (f)(2) of this Section are met.
 1163
- 1164 1) For each coating line which applies multiple coatings, all of which are
 1165 subject to the same numerical emission limitation within Section
 1166 218.204(m) of this Subpart, during the same day (e.g., all coatings used on
 1167 the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average
 1168 VOM content shall not exceed the coating VOM content limit
 1169 corresponding to the category of coating used, or
 1170
- 1171 2) For each coating line which applies coatings subject to more than one
 1172 numerical emission limitation in Section 218.204(m) of this Subpart,
 1173 during the same day, the owner or operator shall have a site specific
 1174 proposal approved by the Agency and approved by the USEPA as a SIP
 1175 revision. To receive approval, the requirements of USEPA's Emissions
 1176 Trading Policy Statement (and related policy) must be satisfied.
 1177
- 1178 g) No owner or operator of a plastic parts coating line, subject to the limitations of
 1179 Section 218.204(n) or (o) of this Subpart shall apply coatings to business machine
 1180 or automotive/transportation plastic parts on the subject coating line unless the
 1181 requirements of subsection (g)(1) or (g)(2) of this Section are met:
 1182
- 1183 1) For each coating line which applies multiple coatings, all of which are
 1184 subject to the same numerical emission limitation within Section
 1185 218.204(n) or (o) of this Subpart, during the same day (e.g., all coatings
 1186 used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted
 1187 average VOM content shall not exceed the coating VOM content limit
 1188 corresponding to the category of coating used; or
 1189
- 1190 2) For each coating line which applies coatings subject to more than one
 1191 numerical emission limitation in Section 218.204(n) or (o) of this Subpart,
 1192 during the same day, the owner or operator shall have a site specific
 1193 proposal approved by the Agency and approved by the USEPA as a SIP

1194 revision. To receive approval, the requirements of USEPA's Emissions
 1195 Trading Policy Statement (and related policy) must be satisfied.
 1196

1197 h) No owner or operator of a metal furniture coating line, subject to the limitations
 1198 of Section 218.204(g) of this Subpart shall apply coatings on the subject coating
 1199 line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met:
 1200

1201 1) For each coating line which applies multiple coatings, all of which are
 1202 subject to the same numerical emission limitation within Section
 1203 218.204(g) of this Subpart, during the same day (e.g., all coatings used on
 1204 the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average
 1205 VOM content shall not exceed the coating VOM content limit
 1206 corresponding to the category of coating used; or
 1207

1208 2) For each coating line which applies coatings subject to more than one
 1209 numerical emission limitation in Section 218.204(g) of this Subpart,
 1210 during the same day, the owner or operator shall have a site specific
 1211 proposal approved by the Agency and approved by the USEPA as a SIP
 1212 revision. To receive approval, the requirements of USEPA's Emissions
 1213 Trading Policy Statement (and related policy) must be satisfied.
 1214

1215 i) No owner or operator of a large appliance coating line, subject to the limitations
 1216 of Section 218.204(h) of this Subpart shall apply coatings on the subject coating
 1217 line unless the requirements of subsection (i)(1) or (i)(2) of this Section are met:
 1218

1219 1) For each coating line which applies multiple coatings, all of which are
 1220 subject to the same numerical emission limitation within Section
 1221 218.204(h) of this Subpart, during the same day (e.g., all coatings used on
 1222 the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average
 1223 VOM content shall not exceed the coating VOM content limit
 1224 corresponding to the category of coating used, or
 1225

1226 2) For each coating line which applies coatings subject to more than one
 1227 numerical emission limitation in Section 218.204(h) of this Subpart,
 1228 during the same day, the owner or operator shall have a site specific
 1229 proposal approved by the Agency and approved by the USEPA as a SIP
 1230 revision. To receive approval, the requirements of USEPA's Emissions
 1231 Trading Policy Statement (and related policy) must be satisfied.
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1233 (Source: Amended at 34 Ill. Reg. _____, effective _____)
 1234

1235 **Section 218.207 Alternative Emission Limitations**
 1236

- 1237 a) Any owner or operator of a coating line subject to Section 218.204 of this Subpart
 1238 may comply with this Section, rather than with Section 218.204 of this Subpart, if
 1239 a capture system and control device are operated at all times the coating line is in
 1240 operation and the owner or operator demonstrates compliance with subsections
 1241 (c), (d), (e), (f), (g), (h), (i), (j), ~~(k)~~, or (l) of this Section (depending upon the
 1242 source category) through the applicable coating analysis and capture system and
 1243 control device efficiency test methods and procedures specified in Section
 1244 218.105 of this Part and the recordkeeping and reporting requirements specified in
 1245 Section 218.211(e) of this Subpart; and the control device is equipped with the
 1246 applicable monitoring equipment specified in Section 218.105(d) of this Part and
 1247 the monitoring equipment is installed, calibrated, operated and maintained
 1248 according to vendor specifications at all times the control device is in use. A
 1249 capture system and control device, which does not demonstrate compliance with
 1250 subsection (c), (d), (e), (f), (g), (h), (i), (j), ~~(k)~~, or (l) of this Section may be
 1251 used as an alternative to compliance with Section 218.204 of this Subpart only if
 1252 the alternative is approved by the Agency and approved by the USEPA as a SIP
 1253 revision.
 1254
- 1255 b) Alternative Add-On Control Methodologies
 1256
- 1257 1) The coating line is equipped with a capture system and control device that
 1258 provides 81 percent reduction in the overall emissions of VOM from the
 1259 coating line and the control device has a 90 percent efficiency, or
 1260
- 1261 2) The system used to control VOM from the coating line is demonstrated to
 1262 have an overall efficiency sufficient to limit VOM emissions to no more
 1263 than what is allowed under Section 218.204 of this Subpart. Use of any
 1264 control system other than an afterburner, carbon adsorption, condensation,
 1265 or absorption scrubber system can be allowed only if approved by the
 1266 Agency and approved by the USEPA as a SIP revision. The use of transfer
 1267 efficiency credits can be allowed only if approved by the Agency and
 1268 approved by the USEPA as a SIP revision. Baseline transfer efficiencies
 1269 and transfer efficiency test methods must be approved by the Agency and
 1270 the USEPA. Such overall efficiency is to be determined as follows:
 1271
- 1272 A) Obtain the emission limitation from the appropriate subsection in
 1273 Section 218.204 of this Subpart;
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- 1275 B) Calculate "S" according to the equation in Section 218.206 of this
 1276 Subpart;
 1277
- 1278 C) Calculate the overall efficiency required according to Section
 1279 218.105(e) of this Part. For the purposes of calculating this value,

1280 according to the equation in Section 218.105(e)(2) of this Part,
 1281 VOM_1 is equal to the value of "S" as determined above in
 1282 subsection (b)(2)(B) of this Section.
 1283

1284 c) No owner or operator of a coating line subject to only one of the emission
 1285 limitations from among Section 218.204(a)(1), (a)(4), (c), (d), (e), (f), or (i) of this
 1286 Subpart and equipped with a capture system and control device shall operate the
 1287 subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this
 1288 Section are met. No owner or operator of a coating line subject to Section
 1289 218.204(a)(2) or 218.204(a)(3) and equipped with a capture system and control
 1290 device shall operate the coating line unless the owner or operator demonstrates
 1291 compliance with such limitation in accordance with the topcoat protocol
 1292 referenced in Section 218.105(b).
 1293

1294 d) No owner or operator of a miscellaneous metal parts and products coating line
 1295 which applies one or more coatings during the same day, all of which are subject
 1296 to the same numerical emission limitation within Section 218.204(j) of this
 1297 Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 [3.5 lbs/gal],
 1298 and which is equipped with a capture system and control device shall operate the
 1299 subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this
 1300 Section are met.
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1302 e) No owner or operator of a heavy off-highway vehicle products coating line which
 1303 applies one or more coatings during the same day, all of which are subject to the
 1304 same numerical emission limitation within Section 218.204(k) of this Subpart
 1305 (e.g., all coatings used on the line are subject to 0.42 kg/1 [3.5 lbs/gal]), and
 1306 which is equipped with a capture system and control device shall operate the
 1307 subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this
 1308 Section are met.
 1309

1310 f) No owner or operator of an existing diesel-electric locomotive coating line in
 1311 Cook County which applies one or more coatings during the same day, all of
 1312 which are subject to the same numerical emission limitation within Section
 1313 218.204(m) of this Subpart (e.g., all coatings used on the line are subject to 0.42
 1314 kg/1 [3.5 lbs/gal]), and which is equipped with a capture system and control
 1315 device shall operate the subject coating line unless the requirements in subsection
 1316 (b)(1) or (b)(2) of this Section are met.
 1317

1318 g) No owner or operator of a wood furniture coating line which applies one or more
 1319 coatings during the same day, all of which are subject to the same numerical
 1320 emission limitation within Section 218.204(l) of this Subpart (e.g., all coatings
 1321 used on the line are subject to 0.67 kg/1 [5.6 lbs/gal]), and which is equipped with
 1322 a capture system and control device shall operate the subject coating line unless

1323 the requirements in subsection (b)(1) or (b)(2) of this Section are met. If
 1324 compliance is achieved by meeting the requirements in subsection (b)(2) of this
 1325 Section, then the provisions in the note to Section 218.204(l) of this Subpart must
 1326 also be met.

1327
 1328 h) No owner or operator of a can coating line which is equipped with a capture
 1329 system and control device shall operate the subject coating line unless the
 1330 requirements in subsection (h)(1) or (h)(2) of this Section are met.

1331
 1332 1) An alternative daily emission limitation shall be determined for the can
 1333 coating operation, i.e. for all of the can coating lines at the source,
 1334 according to Section 218.205(c)(2) of this Subpart. Actual daily emissions
 1335 shall never exceed the alternative daily emission limitation and shall be
 1336 calculated by use of the following equation:
 1337

1338
$$E_d = \sum_{i=1}^n V_i C_i (1 - F_i)$$

1339 where:
 1340
 1341

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 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 = 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.

1342
 1343 2) The coating line is equipped with a capture system and control device that

1344 provide 75 percent reduction in the overall emissions of VOM from the
1345 coating line and the control device has a 90 percent efficiency.
1346

1347 i) No owner or operator of a plastic parts coating line which applies one or more
1348 coatings during the same day, all of which are subject to the same numerical
1349 emission limitation within Section 218.204(n) or (o) of this Subpart (e.g., all
1350 coatings used on the line are subject to 0.42 kg/l [3.5 lbs/gal]), and which is
1351 equipped with a capture system and control device shall operate the subject
1352 coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section
1353 are met.
1354

1355 j) No owner or operator of a metal furniture coating line which applies one or more
1356 coatings during the same day, all of which are subject to the same numerical
1357 emission limitation within Section 218.204(g) of this Subpart (e.g., all coatings
1358 used on the line are subject to 0.34 kg/l [2.8 lbs/gal]), and which is equipped with
1359 a capture system and control device shall operate the subject coating line unless
1360 the requirements in subsection (b)(1) or (b)(2) of this Section are met.
1361

1362 k) No owner or operator of a large appliance coating line which applies one or more
1363 coatings during the same day, all of which are subject to the same numerical
1364 emission limitation within Section 218.204(h) of this Subpart (e.g., all coatings
1365 used on the line are subject to 0.34 kg/l [2.8 lbs/gal]), and which is equipped with
1366 a capture system and control device shall operate the subject coating line unless
1367 the requirements in subsection (b)(1) or (b)(2) of this Section are met.
1368

1369 l) No owner or operator of a flat wood paneling coating line that is equipped with a
1370 capture system and control device shall operate the subject coating line unless
1371 either:
1372

1373 1) The capture system and control device provide at least 90 percent
1374 reduction in the overall emissions of VOM from the coating line; or
1375

1376 2) The owner or operator of the flat wood paneling coating line complies
1377 with all requirements set forth in subsection (b)(2) of this Section.
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1379 (Source: Amended at 34 Ill. Reg. _____, effective _____)
1380

1381 **Section 218.210 Compliance Schedule**
1382

1383 Every owner or operator of a coating line (of a type included within Section 218.204 of this
1384 Subpart) shall comply with the requirements of Section 218.204, 218.205, 218.207 or 218.208
1385 and Section 218.211 or Sections 218.212 and 218.213 of this Subpart in accordance with the
1386 appropriate compliance schedule as specified in subsection (a), (b), (c), (d), (e), ~~(f)~~, or (g)

1387 below:

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- a) No owner or operator of a coating line 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.
- 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 contained in Section 218.204(p) of this Subpart shall operate that 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(p) or the alternative control options in Section 218.205 or 218.207, and the

requirements of Sections 218.211 and 218.217 of this Subpart, as applicable.

(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 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 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:

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

where:

T_e = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);

- m = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 218.104 of this Part (because they belong to the same category, e.g., can coating);
- j = Subscript denoting an individual coating line;
- n = Total number of coatings as applied each day on each coating line;
- i = Subscript denoting an individual coating;
- V_i = 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 in units of kg VOM/l (lbs VOM/gal); and
- B_i = 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 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 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 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:

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- 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 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)(2) or (a)(3) of this Subpart and complying by means of Section 218.204 of this Subpart shall comply with the following:

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- 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 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; and
 - D) For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.
 - 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 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(1)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied

- 1572 each day on each coating line and certified product data sheets for
1573 each coating; ~~and~~
1574
1575 D) On and after March 15, 1998, for wood furniture coating spray
1576 booths subject to the limitations of Section 218.204(i)(4)(A) of this
1577 Subpart, the weight of VOM per weight of solids in each strippable
1578 spray booth coating as applied each day on each spray booth and
1579 certified product data sheets for each coating; ~~and-~~
1580
1581 E) For coating lines subject to the limitations of Section 218.204(p) of
1582 this Subpart, the weight of VOM per volume of coatings or solids,
1583 as applicable, as applied each day on each coating line.
1584
1585 3) On and after a date consistent with Section 218.106 of this Part, the owner
1586 or operator of a subject coating line shall notify the Agency in the
1587 following instances:
1588
1589 A) Any record showing violation of Section 218.204 of this Subpart
1590 shall be reported by sending a copy of such record to the Agency
1591 within 30 days following the ~~occurrence~~ occurrence of the
1592 violation.
1593
1594 B) At least 30 calendar days before changing the method of
1595 compliance from Section 218.204 of this Subpart to Section
1596 218.205 or Section 218.207 of this Subpart, the owner or operator
1597 shall comply with all requirements of subsection (d)(1) or (e)(1) of
1598 this Section below, respectively. Upon changing the method of
1599 compliance from Section 218.204 of this Subpart to Section
1600 218.205 of this Subpart or Section 218.207 of this Subpart, the
1601 owner or operator shall comply with all requirements of subsection
1602 (d) or (e) of this Section, respectively.
1603
1604 d) Any owner or operator of a coating line subject to the limitations of Section
1605 218.204 of this Subpart and complying by means of Section 218.205 of this
1606 Subpart shall comply with the following:
1607
1608 1) By a date consistent with Section 218.106 of this Part, or upon initial start-
1609 up of a new coating line, or upon changing the method of compliance for
1610 an existing subject coating line from Section 218.204 or Section 218.207
1611 of this Subpart to Section 218.205 of this Subpart; the owner or operator
1612 of the subject coating line shall certify to the Agency that the coating line
1613 will be in compliance with Section 218.205 of this Subpart on and after a
1614 date consistent with Section 218.106 of this Part, or on and after the initial

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start-up date. 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(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(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.
 - ~~FE~~) 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.
 - GF) The method by which the owner or operator will create and maintain records each day as required in subsection (d)(2) of this Section.
 - HG) 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

1658 (minus water and any compounds which are specifically exempted
 1659 from the definition of VOM) as applied each day on each coating
 1660 line.

1661
 1662 C) On and after March 15, 1998, for coating lines subject to the
 1663 limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the
 1664 weight of VOM per weight of solids in each coating as applied
 1665 each day on each coating line.

1666
 1667 D) For coating lines subject to the limitations of Section 218.204(p) of
 1668 this Subpart, the weight of VOM per volume of coatings or solids,
 1669 as applicable, as applied each day on each coating line.

1670
 1671 ~~E~~D) The daily-weighted average VOM content of all coatings as
 1672 applied on each coating line as defined in Section 218.104 of this
 1673 Part.

1674
 1675 3) On and after a date consistent with Section 218.106 of this Part, the owner
 1676 or operator of a subject coating line shall notify the Agency in the
 1677 following instances:

1678
 1679 A) Any record showing violation of Section 218.205 of this Subpart
 1680 shall be reported by sending a copy of such record to the Agency
 1681 within 30 days following the occurrence of the violation.

1682
 1683 B) At least 30 calendar days before changing the method of
 1684 compliance with this Subpart from Section 218.205 of this Subpart
 1685 to Section 218.204 or Section 218.207 of this Subpart, the owner
 1686 or operator shall comply with all requirements of subsection (c)(1)
 1687 or (e)(1) of this Section, respectively. Upon changing the method
 1688 of compliance with this subpart from Section 218.205 to Section
 1689 218.204 or Section 218.207 of this Subpart, the owner or operator
 1690 shall comply with all requirements of subsection (c) or (e) of this
 1691 Section, respectively.

1692
 1693 e) Any owner or operator of a coating line subject to the limitations of Section
 1694 218.207 of this Subpart and complying by means of Section 218.207(c), (d), (e),
 1695 (f), (g), ~~or (h)~~, or (l) of this Subpart shall comply with the following:

1696
 1697 1) By a date consistent with Section 218.106 of this Part, or upon initial start-
 1698 up of a new coating line, or upon changing the method of compliance for
 1699 an existing coating line from Section 218.204 or Section 218.205 of this
 1700 Subpart to Section 218.207 of this Subpart, the owner or operator of the

- 1701 subject coating line shall perform all tests and submit to the Agency the
 1702 results of all tests and calculations necessary to demonstrate that the
 1703 subject coating line will be in compliance with Section 218.207 of this
 1704 Subpart on and after a date consistent with Section 218.106 of this Part, or
 1705 on and after the initial start-up date.
 1706
- 1707 2) On and after a date consistent with Section 218.106 of this Part, or on and
 1708 after the initial start-up date, the owner or operator of a subject coating
 1709 line shall collect and record all of the following information each day for
 1710 each coating line and maintain the information at the source for a period of
 1711 three years:
 1712
- 1713 A) The weight of VOM per volume of coating solids as applied each
 1714 day on each coating line, if complying pursuant to Section
 1715 218.207(b)(2) of this Subpart.
 - 1716
 - 1717 B) Control device monitoring data.
 - 1718
 - 1719 C) A log of operating time for the capture system, control device,
 1720 monitoring equipment and the associated coating line.
 1721
 - 1722 D) A maintenance log for the capture system, control device and
 1723 monitoring equipment detailing all routine and non-routine
 1724 maintenance performed including dates and duration of any
 1725 outages.
 1726
- 1727 3) On and after a date consistent with Section 218.106 of this Part, the owner
 1728 or operator of a subject coating line shall notify the Agency in the
 1729 following instances:
 1730
- 1731 A) Any record showing violation of Section 218.207 of this Subpart
 1732 shall be reported by sending a copy of such record to the Agency
 1733 within 30 days following the occurrence of the violation.
 1734
 - 1735 B) At least 30 calendar days before changing the method of
 1736 compliance with this Subpart from Section 218.207 of this Subpart
 1737 to Section 218.204 or Section 218.205 of this Subpart, the owner
 1738 or operator shall comply with all requirements of subsection (c)(1)
 1739 or (d)(1) of this Section, respectively. Upon changing the method
 1740 of compliance with this subpart from Section 218.207 of this
 1741 Subpart to Section 218.204 or Section 218.205 of this Subpart, the
 1742 owner or operator shall comply with all requirements of subsection
 1743 (c) or (d) of this Section, respectively.

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- f) Any owner or operator of a primer surfacer operation or topcoat operation subject to the limitations of Section 218.204(a)(2) or (a)(3) 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 certification shall include:
 - A) The name and identification number of each coating operation which will comply by means of Section 218.204(a)(2) and (a)(3) of this Subpart and the name and identification number of each coating line in each coating operation.
 - B) The name and identification number of each coating as applied on each coating line in the coating operation.
 - C) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
 - D) The transfer efficiency and control efficiency measured for each coating line.
 - E) Test reports, including raw data and calculations documenting the testing performed to measure transfer efficiency and control efficiency.
 - F) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.
 - G) The method by which the owner or operator will create and maintain records each day as required in subsection (f)(2) below.
 - H) An example format for presenting the records required in subsection (f)(2) below.
 - 2) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating

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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)(2) or (a)(3) of this Subpart including:
 - i) The name and identification number of each coating as applied on each coating operation.
 - ii) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating operation.

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

- 3) On and after a date consistent with Section 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)(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)(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.

1830 B) The owner or operator shall notify the Agency of any change to the
 1831 operation at least 30 days before the change is effected. The
 1832 Agency shall determine whether or not compliance testing is
 1833 required. If the Agency determines that compliance testing is
 1834 required, then the owner or operator shall submit a testing proposal
 1835 to the Agency within 30 days and test within 30 days of the
 1836 approval of the proposal by the Agency and USEPA.
 1837

1838 g) On and after a date consistent with Section 218.106(e) of this Part, or on and after
 1839 the initial start-up date, whichever is later, the owner or operator of a flat wood
 1840 paneling coating line subject to the requirements in Section 218.217 of this
 1841 Subpart shall comply with the following:
 1842

1843 1) By May 1, 2010, or upon initial start-up, whichever is later, submit a
 1844 certification to the Agency that includes a description of the practices and
 1845 procedures that the source will follow to ensure compliance with the
 1846 applicable requirements in Section 218.217(c) and 218.217(d) of this
 1847 Subpart; and
 1848

1849 2) Notify the Agency of any violation of Section 218.217 of this Subpart by
 1850 providing a description of the violation and copies of records documenting
 1851 such violation to the Agency within 30 days following the occurrence of
 1852 the violation.
 1853

1854 (Source: Amended at 34 Ill. Reg. _____, effective _____)
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1856 **Section 218.212 Cross-Line Averaging to Establish Compliance for Coating Lines**
 1857

1858 a) On and after March 15, 1996, any owner or operator of a coating line subject to
 1859 the limitations set forth in Section 218.204 of this Subpart, except coating lines
 1860 subject to the limitations in Section 218.204(p) of this Subpart, and with coating
 1861 lines in operation prior to January 1, 1991 ("pre-existing coating lines"), may, for
 1862 pre-existing coating lines only, elect to comply with the requirements of this
 1863 Section, rather than complying with the applicable emission limitations set forth
 1864 in Section 218.204, if an operational change of the type described below has been
 1865 made after January 1, 1991, to one or more pre-existing coating lines at the
 1866 source. An operational change occurs when a pre-existing coating line is replaced
 1867 with a line using lower VOM coating for the same purpose as the replaced line
 1868 ("replacement line"). A source electing to rely on this Section to demonstrate
 1869 compliance with the requirements of this Subpart shall operate pursuant to
 1870 federally enforceable permit conditions approved by the Agency and USEPA.
 1871

1872 b) An owner or operator of pre-existing coating lines subject to a VOM content

1873 limitation in Section 218.204 of this Subpart and electing to rely on this Section to
 1874 demonstrate compliance with this Subpart must establish, by use of the equations
 1875 in subsection (d) of this Section, that the calculated actual daily VOM emissions
 1876 from all participating coating lines, as defined below, are less than the calculated
 1877 daily allowable VOM emissions from the same group of coating lines. For any
 1878 pre-existing coating line to be aggregated for the purposes of Section 218.212,
 1879 218.213, or 218.214 of this Subpart ("participating coating lines"), the source
 1880 must establish that:

- 1881
- 1882 1) All coatings applied on the participating coating line shall, at all times,
 1883 have a VOM content less than or equal to the applicable VOM content
 1884 limitation for such coating listed in Appendix H of this Part; and
 1885
- 1886 2) On the date the source elects to rely on this Section to demonstrate
 1887 compliance with this Subpart, all coatings applied on the participating
 1888 coating line are not already in compliance with the VOM content
 1889 limitation for such coating effective on or after March 15, 1996; or the
 1890 participating coating line is a replacement line, as defined in subsection (a)
 1891 of this Section with an operational change occurring on or after January 1,
 1892 1991.

1893

1894 c) Notwithstanding subsection (a) of this Section, any owner or operator of a coating
 1895 line subject to the limitations set forth in Section 218.204 of this Subpart and
 1896 electing to rely on this Section to demonstrate compliance with this Subpart, may
 1897 also include as a participating coating line, until December 31, 1999, only, any
 1898 replacement line that satisfies all of the following conditions:

- 1899
- 1900 1) The replacement line is operated as a powder coating line;
- 1901
- 1902 2) The replacement line was added after July 1, 1988; and
- 1903
- 1904 3) The owner or operator also includes as a participating coating line one or
 1905 more coating lines that satisfy the criteria of a replacement line, as
 1906 described in subsection (a) of this Section.
- 1907

1908 d) To demonstrate compliance with this Section, a source shall establish the
 1909 following:

- 1910
- 1911 1) An alternative daily emission limitation shall be determined for all
 1912 participating coating lines at the source according to subsection (d)(2) of
 1913 this Section. All participating coating lines shall be factored in each day
 1914 to demonstrate compliance. Provided compliance is established pursuant
 1915 to the requirements in this subsection, nothing in this Section requires

1916 daily operation of each participating line. Actual daily emissions from all
 1917 participating coating lines ($E_{[d]}$) shall never exceed the alternative daily
 1918 emission limitation ($A_{[d]}$) and shall be calculated by use of the following
 1919 equation:
 1920

1921
$$E_d = \sum_{i=1}^n V_i C_i$$

1922 where:
 1923

- 1924
- 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).

1925
 1926 2) The alternative daily emission limitation ($A_{[d]}$) shall be determined for all
 1927 participating coating lines at the source on a daily basis as follows:
 1928

1929
$$A_d = A_1 + A_p$$

1930 where A_1 and A_p are defined in subsections (2)(A) and (2)(B) of this
 1931 Section.
 1932

1933
 1934 A) The portion of the alternative daily emissions limitation for coating
 1935 operations at a source using non-powder coating (A_1) shall be
 1936 determined for all such participating non-powder coating lines on a
 1937 daily basis as follows:
 1938

1939
$$A_1 = \sum_{i=1}^n V_i L_i \frac{(D_i - C_i)}{(D_i - L_i)}$$

1940
1941
1942

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:

1949

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

1950
1951
1952

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 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 218.217 Wood Furniture Coating and Flat Wood Paneling Coating Work Practice Standards

- a) Spray booth cleaning. Each owner or operator of a source subject to the

1960 limitations of Section 218.204(l) of this Subpart shall not use compounds
 1961 containing more than 8.0 percent, by weight, of VOM for cleaning spray booth
 1962 components other than conveyors, continuous coaters and their enclosures, and
 1963 metal filters, unless the spray booth is being refurbished. If the spray booth is
 1964 being refurbished, that is, the spray booth coating or other material used to cover
 1965 the booth is being replaced, the affected source shall use no more than 1.0 gallon
 1966 of organic solvent to prepare the booth prior to applying the booth coating.
 1967

1968 b) Application equipment requirements. No owner or operator of a source subject to
 1969 the limitations of Section 218.204(l) of this Subpart shall use conventional air
 1970 spray guns to apply coating materials to wood furniture under the circumstances
 1971 specified in subsections (b)(1) through (4) of this Section:
 1972

1973 1) To apply coating materials that have a VOM content no greater than 1.0
 1974 kg VOM/kg solids (1.0 lb VOM/lb solids), as applied;

1975
 1976 2) For repair coating under the following circumstances:

1977
 1978 A) The coating materials are applied after the completion of the
 1979 coating operation; or

1980
 1981 B) The coating materials are applied after the stain and before any
 1982 other type of coating material is applied, and the coating materials
 1983 are applied from a container that has a volume of no more than 2.0
 1984 gallons;

1985
 1986 3) If the spray gun is aimed and triggered automatically, rather than
 1987 manually; or

1988
 1989 4) If emissions from the finishing application station are directed to a control
 1990 device pursuant to Section 218.216 of this Subpart
 1991

1992 cb) Cleaning and storage requirements. Each owner or operator of a source subject to
 1993 the limitations of Section 218.204(l) or 218.204(p) of this Subpart shall:
 1994

1995 1) Keep, store, and dispose of all coating, cleaning, and washoff materials in
 1996 closed containers;

1997
 1998 2) Pump or drain all organic solvent used for line cleaning into closed
 1999 containers;

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 2001 3) Collect all organic solvent used to clean spray guns in closed containers;
 2002 and

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4) Control emissions from washoff operations by using closed tanks.

d) Additional cleaning and storage requirements for flat wood paneling coating lines. Every owner or operator of a source subject to the limitations of Section 218.204(p) of this Subpart shall:

1) Minimize spills of VOM-containing coatings, thinners, and cleaning materials and clean up spills immediately;

2) Minimize emissions of VOM during the cleaning of storage, mixing, and conveying equipment; and

3) Keep mixing vessels that contain VOM-containing coatings and other VOM-containing materials closed except when specifically in use.

e) ~~Application equipment requirements. No owner or operator of a source subject to the limitations of Section 218.204(l) of this Subpart shall use conventional air spray guns to apply coating materials to wood furniture except under the circumstances specified in subsections (c)(1) through (4) of this Section:~~

~~1) To apply coating materials that have a VOM content no greater than 1.0 kg VOM/kg solids (1.0 lb VOM/lb solids), as applied;~~

~~2) For repair coating under the following circumstances:~~

~~A) The coating materials are applied after the completion of the coating operation; or~~

~~B) The coating materials are applied after the stain and before any other type of coating material is applied, and the coating materials are applied from a container that has a volume of no more than 2.0 gallons;~~

~~3) If the spray gun is aimed and triggered automatically, rather than manually; or~~

~~4) If emissions from the finishing application station are directed to a control device pursuant to Section 218.216 of this Subpart.~~

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

SUBPART H: PRINTING AND PUBLISHING

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Section 218.401 Flexographic and Rotogravure Printing

- a) No owner or operator of a subject flexographic, ~~packaging rotogravure or publication~~ rotogravure printing line shall apply at any time any coating or ink unless the VOM content does not exceed the limitation specified in either subsection (a)(1) or (a)(2), as applicable below. Compliance with this Section must be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.404(c) of this Part. As an alternative to compliance with this subsection, a subject printing line may meet the requirements of subsection (b) or (c) ~~below~~.
 - 1) Prior to May 1, 2010, either:
 - A1) Forty percent VOM by volume of the coating and ink (minus water and any compounds which are specifically exempted from the definition of VOM);; or
 - B2) Twenty-five percent VOM by volume of the volatile content in the coating and ink; and-
 - 2) On and after May 1, 2010:
 - A) For owners operators of flexographic or rotogravure printing lines that do not print flexible packaging, either:
 - i) Forty percent VOM by volume of the coating and ink (minus water and any compounds that are specifically exempted from the definition of VOM); or
 - ii) Twenty-five percent VOM by volume of the volatile content in the coating and ink;
 - B) For owners or operators of flexographic or rotogravure printing lines that print flexible packaging, or that print flexible packaging and non-flexible packaging on the same line, either:
 - i) 0.8 kg VOM/kg (0.8 lbs VOM/lb) solids applied; or
 - ii) 0.16 kg VOM/kg (0.16 lbs VOM/lb) inks and coatings applied.

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b) Weighted averaging alternative.

1) Prior to May 1, 2010, no~~Ne~~ owner or operator of a subject flexographic,
~~packaging rotogravure or publication rotogravure~~ printing line shall apply
 coatings or inks on the subject printing line unless the weighted average,
 by volume, VOM content of all coatings and inks as applied each day on
 the subject printing line does not exceed the limitation specified in either
 subsection (a)(1)(A) (as determined by subsection (b)(1)(A)) or subsection
 (a)(~~12~~)(B) (as determined by subsection (b)(~~12~~)(B)). Compliance with
 this subsection must be demonstrated through the applicable coating or ink
 analysis test methods and procedures specified in Section 218.105(a) of
 this Part and the recordkeeping and reporting requirements specified in
 Section 218.404(d) of this Part.

A4) The following equation shall be used to determine if the weighted
 average VOM content of all coatings and inks as applied each day
 on the subject printing line exceeds the limitation specified in
 subsection (a)(1)(A) of this Section.

$$Vom_{(i)(A)} = \frac{\sum_{i=1}^n C_i L_i (V_{si} + V_{VOMi})}{\sum_{i=1}^n L_i (V_{si} + V_{VOMi})}$$

whereWhere:

VOM_{(i)(A)} = The weighted average VOM content in units of percent
 VOM by volume of all coatings and inks (minus water and
 any compounds which are specifically exempted from the
 definition of VOM) used each day;

i = Subscript denoting a specific coating or ink as applied;

n = The number of different coatings and/or inks as applied
 each day on a printing line;

C_i = The VOM content in units of percent VOM by volume of
 each coating or ink as applied (minus water and any
 compounds which are specifically exempted from the
 definition of VOM);

L_i = The liquid volume of each coating or ink as applied in units
 of l (gal);

V_{si} = The volume fraction of solids in each coating or ink as applied; and

V_{VOMi} = The volume fraction of VOM in each coating or ink as applied.

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B2) The following equation shall be used to determine if the weighted average VOM content of all coatings and inks as applied each day on the subject printing line exceeds the limitation specified in subsection (a)(~~12~~)(B) of this Section.

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$$Vom_{(i)(B)} = \frac{\sum_{i=1}^n C_i L_i V_{vmi}}{\sum_{i=1}^n L_i V_{vmi}}$$

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where:

$VOM_{(i)(B)}$ = The weighted average VOM content in units of percent VOM by volume of the volatile content of all coatings and inks used each day;

i = Subscript denoting a specific coating or ink as applied;

n = The number of different coatings and/or inks as applied each day on each printing line;

C_i = The VOM content in units of percent VOM by volume of the volatile matter in each coating or ink as applied;

L_i = The liquid volume of each coating or ink as applied in units of l (gal) and

V_{VOMi} = The volume fraction of volatile matter in each coating or ink as applied.

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2) On and after May 1, 2010, no owner or operator of a subject flexographic or rotogravure printing line that does not print flexible packaging shall apply coatings or inks on the subject printing line unless the weighted average, by weight, VOM content of all coatings and inks as applied each day on the subject printing line does not exceed the limitation specified in either subsection (a)(2)(A)(i) (calculated in accordance with the equation in subsection (b)(1)(A)) or subsection (a)(2)(A)(ii) (calculated in accordance with the equation in subsection (b)(1)(B)) of this Section. Compliance with this subsection (b)(2) shall be demonstrated through the

2132 applicable coating or ink analysis test methods and procedures specified in
 2133 Section 218.105(a) of this Part and the recordkeeping and reporting
 2134 requirements specified in Section 218.404(d) of this Subpart.

2136 3) On and after May 1, 2010, no owner or operator of a subject flexographic
 2137 or rotogravure printing line that prints flexible packaging, or that prints
 2138 flexible packaging and non-flexible packaging on the same line, shall
 2139 apply coatings or inks on the subject printing line unless the weighted
 2140 average, by weight, VOM content of all coatings and inks as applied each
 2141 day on the subject printing line does not exceed the limitation specified in
 2142 either subsection (a)(2)(B)(i) (calculated in accordance with the equation
 2143 in subsection (b)(3)(A)) or subsection (a)(2)(B)(ii) (calculated in
 2144 accordance with the equation in subsection (b)(3)(B)) of this Section.
 2145 Compliance with this subsection (b)(3) shall be demonstrated through the
 2146 applicable coating or ink analysis test methods and procedures specified in
 2147 Section 218.105(a) of this Part and the recordkeeping and reporting
 2148 requirements specified in Section 218.404(d) of this Subpart.

2150 A) The following equation shall be used to determine if the weighted
 2151 average VOM content of all coatings and inks as applied each day
 2152 on the subject printing line exceeds the limitation specified in
 2153 subsection (a)(2)(B)(i) of this Section.
 2154

2155
$$Vom_{(A)} = \frac{\sum_{i=1}^n C_i W_i}{\sum_{i=1}^n W_i}$$

2156 where:

- 2157 $VOM_{(A)}$ \equiv The weighted average VOM content in units of kg VOM
per kg (lbs VOM per lb) solids of all coatings and inks used
each day;
- 2158 i \equiv Subscript denoting a specific coating or ink as applied;
- n \equiv The number of different coatings and/or inks as applied
each day on a printing line;
- C_i \equiv The VOM content in units of kg VOM per kg (lbs VOM per
lb) solids of each coating or ink as applied;
- W_i \equiv Weight of solids in each coating or ink, as applied, in units
of kg/l (lb/gal).

2159
 2160 B) The following equation shall be used to determine if the weighted
 2161 average VOM content of all coatings and inks as applied each day
 2162 on the subject printing line exceeds the limitation specified in
 2163 subsection (a)(2)(B)(ii) of this Section.
 2164

2165
$$Vom_{(B)} = \frac{\sum_{i=1}^n C_i L_i}{\sum_{i=1}^n L_i}$$

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 2167 where:
 2168

- VOM_(B) ≡ The weighted average VOM content in units of kg (lbs)
 VOM per weight in kg (lbs) of all coatings or inks as
 applied each day;
- i ≡ Subscript denoting a specific coating or ink as applied;
- n ≡ The number of different coatings and/or inks as applied
 each day on each printing line;
- C_i ≡ The VOM content in units of kg (lbs) VOM per weight in
 kg (lbs) of each coating or ink as applied;
- L_i ≡ The weight of each coating or ink, as applied, in units of
 kg/l (lb/gal).

2169
 2170 c) Capture system and control device requirements.

2171
 2172 1) Prior to May 1, 2010, no owner or operator of a subject flexographic,
 2173 packaging rotogravure or publication rotogravure printing line equipped
 2174 with a capture system and control device shall operate the subject printing
 2175 line unless the owner or operator meets the requirements in subsection
 2176 (c)(1)(A), (c)(1)(B)(2), or (c)(13)(C), as well as and subsections (c)(14)(D),
 2177 (c)(5), and (c)(6) below.

2178
 2179 A One of:

2180
 2181 i)1) A carbon adsorption system is used thatwhich reduces the
 2182 captured VOM emissions by at least 90 percent by weight;
 2183 or

2184
 2185 ii)2) An incineration system is used thatwhich reduces the

2186 captured VOM emissions by at least 90 percent by weight;
 2187 or

2188
 2189 iii) An alternative VOM emission reduction system is used
 2190 ~~that~~^{which} is demonstrated to have at least a 90 percent
 2191 control device efficiency, approved by the Agency and
 2192 approved by USEPA as a SIP revision; and
 2193

2194 B4) The printing line is equipped with a capture system and control
 2195 device that provides an overall reduction in VOM emissions of at
 2196 least:

2197
 2198 iA) 75 percent where a publication rotogravure printing line is
 2199 employed; or

2200
 2201 iiB) 65 percent where a packaging rotogravure printing line is
 2202 employed; or

2203
 2204 iiiC) 60 percent where a flexographic printing line is employed;
 2205 and
 2206

2207 2) On and after May 1, 2010, no owner or operator of a flexographic or
 2208 rotogravure printing line that does not print flexible packaging and that is
 2209 equipped with a capture system and control device shall operate the
 2210 subject printing line unless the owner or operator meets the requirements
 2211 in subsection (c)(1)(A), (c)(1)(B), or (c)(1)(C), as well as subsections
 2212 (c)(1)(D), (c)(5), and (c)(6) of this Section;
 2213

2214 3) On and after May 1, 2010, no owner or operator of a flexographic or
 2215 rotogravure printing line that prints flexible packaging and that is
 2216 equipped with a capture system and control device shall operate the
 2217 subject printing line unless the owner or operator meets the requirements
 2218 in subsections (c)(5) and (c)(6) of this Section and the capture system and
 2219 control device provides an overall reduction in VOM emissions of at least:
 2220

2221 A) 65 percent in cases in which a subject printing line was first
 2222 constructed at the subject source prior to March 14, 1995 and
 2223 utilizes a control device that was first constructed at the subject
 2224 source prior to January 1, 2010; or
 2225

2226 B) 70 percent when a subject printing line was first constructed at the
 2227 subject source prior to March 14, 1995 and utilizes a control device

- 2228 that was first constructed at the subject source on or after January
 2229 1, 2010; or
 2230
 2231 C) 75 percent when a subject printing line was first constructed at the
 2232 subject source on or after March 14, 1995 and utilizes a control
 2233 device that was first constructed at the subject source prior to
 2234 January 1, 2010; or
 2235
 2236 D) 80 percent when a subject printing line was first constructed at the
 2237 subject source on or after March 14, 1995 and utilizes a control
 2238 device that was first constructed at the subject source on or after
 2239 January 1, 2010;
 2240
 2241 4) On and after May 1, 2010, the owner or operator of a flexographic or
 2242 rotogravure printing line that prints flexible packaging and non-flexible
 2243 packaging on the same line and that is equipped with a control device shall
 2244 be subject to the requirements of either subsection (c)(1)(D) or subsection
 2245 (c)(3) of this Section, whichever is more stringent, as well as subsections
 2246 (c)(5) and (c)(6) of this Section;
 2247
 2248 5) The control device is equipped with the applicable monitoring equipment
 2249 specified in Section 218.105(d)(2) of this Part and except as provided in
 2250 Section 218.105(d)(3) of this Part, the monitoring equipment is installed,
 2251 calibrated, operated and maintained according to vendor specifications at
 2252 all times the control device is in use; and
 2253
 2254 6) The capture system and control device are operated at all times when the
 2255 subject printing line is in operation. The owner or operator shall
 2256 demonstrate compliance with this subsection by using the applicable
 2257 capture system and control device test methods and procedures specified
 2258 in Section 218.105(c) through Section 218.105(f) of this Part and by
 2259 complying with the recordkeeping and reporting requirements specified in
 2260 Section 218.404(e) of this Part. The owner or operator of a printing line
 2261 subject to the requirements in Section 218.401(c)(2) or 218.401(c)(1)(D)
 2262 of this Section that performed all testing necessary to demonstrate
 2263 compliance with Section 218.401(c)(1)(D) prior to May 1, 2010 is not
 2264 required to retest pursuant to this subsection (c)(6). The owner or operator
 2265 of a printing line subject to the requirements in Section 218.401(c)(3) shall
 2266 perform testing in compliance with this subsection (c)(6), even if the
 2267 owner or operator already performed such testing prior to May 1, 2010,
 2268 unless the following conditions are met. Nothing in this subsection (c)(6),
 2269 however, shall limit the Agency's ability to require that the owner or
 2270 operator perform testing pursuant to 35 Ill. Adm. Code 201.282;

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- A) On or after May 1, 2000, the owner or operator of the subject printing line performed all testing necessary to demonstrate compliance with Section 218.401(c)(1)(D);
 - B) Such testing also demonstrated an overall control efficiency equal to or greater than the applicable control efficiency requirements in Section 218.401(c)(3);
 - C) The owner or operator submitted the results of such tests to the Agency, and the tests were not rejected by the Agency;
 - D) The same capture system and control device subject to the tests referenced in subsection (c)(6)(A) of this Section is still being used by the subject printing line; and
 - E) The owner or operator complies with all recordkeeping and reporting requirements in Section 218.404(e)(1)(B).
- d) No owner or operator of subject flexographic or rotogravure printing lines that print flexible packaging or print flexible packaging and non-flexible packaging on the same line shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with the subject flexographic or rotogravure printing lines to be kept, stored, or disposed of in any manner other than in closed containers, or conveyed from one location to another in any manner other than in closed containers or pipes, except when specifically in use.

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

Section 218.402 Applicability

- a) Except as otherwise provided in Section 218.401, theThe limitations of Section 218.401 of this SubpartPart apply to all flexographic and rotogravure printing lines at a subject source. Sources with flexographic and/or rotogravure printing lines are subject sources if:
 - 1) Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing linesline(s) (including solvents used for cleanup operations associated with flexographic and rotogravure printing linesline(s)) at the source ever exceed 90.7 Mg (100 tons) per calendar year and the flexographic and rotogravure printing linesline(s) (including solvents used for cleanup operations associated with flexographic and rotogravure printing linesline(s)) at the source are not limited to less than

2314 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of
2315 air pollution control equipment through production or capacity limitations
2316 contained in a federally enforceable permit or a SIP revision; or

2317
2318 2) The flexographic and rotogravure printing ~~lines~~line(s) (including solvents
2319 used for cleanup operations associated with flexographic and rotogravure
2320 printing ~~lines~~line(s)) at the source have a potential to emit 22.7 Mg (25
2321 tons) or more of VOM per year.

2322
2323 b) The limitations of Section 218.401(d) shall apply to all owners or operators of
2324 flexographic or rotogravure printing lines that print flexible packaging, or that
2325 print flexible packaging and non-flexible packaging on the same line, at a source
2326 where the combined emissions of VOM from all flexographic and rotogravure
2327 printing lines total 6.8 kg/day (15 lbs/day) or more (including solvents used for
2328 cleanup operations associated with flexographic and rotogravure printing lines), in
2329 the absence of air pollution control equipment.

2330
2331 ~~cb)~~ Upon achieving compliance with this Subpart, the flexographic and rotogravure
2332 printing lines are not required to meet Subpart G (Sections 218.301 or 218.302 of
2333 this Part). Flexographic and rotogravure printing lines exempt from this Subpart
2334 are subject to Subpart G (Sections 218.301 or 218.302 of this Part). Rotogravure
2335 or flexographic equipment used for both roll printing and paper coating is subject
2336 to this Subpart.

2337
2338 ~~de)~~ Once subject to the limitations of Section 218.401, a flexographic or rotogravure
2339 printing line is always subject to the limitations of Section 218.401 of this Part.

2340
2341 ~~ed)~~ Any owner or operator of any flexographic or rotogravure printing line that is
2342 exempt from any of the limitations of Section 218.401 of this Part because of the
2343 criteria in this Section is subject to the recordkeeping and reporting requirements
2344 specified in Section 218.404(b) and (f) of this Part, as applicable.

2345
2346 (Source: Amended at 34 Ill. Reg. _____, effective _____)

2347
2348 **Section 218.403 Compliance Schedule**

2349
2350 Every owner or operator of a flexographic and/or rotogravure printing line shall comply with the
2351 applicable requirements of Section 218.401 and Section 218.404 of this Part in accordance with
2352 the applicable compliance ~~schedules~~schedule specified in subsection (a), (b), (c) ~~or~~(d), (e), (f),
2353 or (g) below:

2354
2355 a) No owner or operator of a flexographic or rotogravure printing line ~~that~~which is
2356 exempt from the limitations of Section 218.401 of this Part because of the criteria

- 2357 in Section 218.402(a) of this Part shall operate said printing line on or after a date
 2358 consistent with Section 218.106 of this Part, unless the owner or operator has
 2359 complied with, and continues to comply with, Section 218.404(b) of this Part.
 2360
- 2361 b) No owner or operator of a flexographic or rotogravure printing line complying by
 2362 means of Section 218.401(a)(1) of this Part shall operate said printing line on or
 2363 after a date consistent with Section 218.106 of this Part, unless the owner or
 2364 operator has complied with, and continues to comply with, Section 218.401(a)(1)
 2365 and Section 218.404(c) of this Part.
 2366
- 2367 c) No owner or operator of a flexographic or rotogravure printing line complying by
 2368 means of Section 218.401(b)(1) of this Part shall operate said printing line on or
 2369 after a date consistent with Section 218.106 of this Part, unless the owner or
 2370 operator has complied with, and continues to comply with, Section 218.401(b)(1)
 2371 and Section 218.404(d) of this Part.
 2372
- 2373 d) No owner or operator of a flexographic or rotogravure printing line complying by
 2374 means of Section 218.401(c)(1)(D) of this Part shall operate said printing line on
 2375 or after a date consistent with Section 218.106 of this Part, unless the owner or
 2376 operator has complied with, and continues to comply with, the applicable
 2377 provisions in Sections Section 218.401(c) and Section 218.404(e) of this Part.
 2378
- 2379 e) No owner or operator of a flexographic or rotogravure printing line complying by
 2380 means of Section 218.401(a)(2), (b)(2), or (b)(3) or complying by means of
 2381 Section 218.401(c)(2), (c)(3), or (c)(4), shall operate the printing line on or after
 2382 May 1, 2010, unless the owner or operator has complied with, and continues to
 2383 comply with, Section 218.401(a)(2), (b)(2) or (b)(3), and Section 218.401(c), as
 2384 applicable, and all applicable provisions in Section 218.404 of this Part.
 2385
- 2386 f) No owner or operator of a flexographic or rotogravure printing line that prints
 2387 flexible packaging, or that prints flexible packaging and non-flexible packaging
 2388 on the same line, shall operate the printing line on or after May 1, 2010, unless the
 2389 owner or operator has complied with, and continues to comply with, Section
 2390 218.401(d) and Section 218.404(g) of this Part.
 2391
- 2392 g) No owner or operator of a flexographic or rotogravure printing line that prints
 2393 flexible packaging, or that prints flexible packaging and non-flexible packaging
 2394 on the same line, and that is exempt from the limitations of Section 218.401(d)
 2395 because of the criteria in Section 218.402(b) of this Part shall operate the printing
 2396 line on or after May 1, 2010, unless the owner or operator has complied with, and
 2397 continues to comply with, Section 218.402(b) and Section 218.404(f) of this Part.
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2399 (Source: Amended at 34 Ill. Reg. _____, effective _____)

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Section 218.404 Recordkeeping and Reporting

a) The VOM content of each coating and ink 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 printing line which is exempted from any of the limitations of Section 218.401 of this Part because of the criteria in Section 218.402(a) of this Part shall comply with the following:

1) By a date consistent with Section 218.106 of this Part or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, by May 1, 2010, the owner or operator of a flexographic ~~or~~ rotogravure printing line to which this subsection (b) is applicable shall certify to the Agency that the flexographic and rotogravure printing line is exempt under the provisions of Section 218.402(a) of this Part. Such certification shall include:

A) A declaration that the flexographic and rotogravure printing line is exempt from the limitations of the criteria in Section 218.401 of this Part because of Section 218.402(a) of this Part; and

B) Calculations which demonstrate that total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices. Total maximum theoretical emissions of VOM for a flexographic or rotogravure printing source is the sum of maximum theoretical emissions of VOM from each flexographic and rotogravure printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year before the application of capture systems and control devices for each flexographic and rotogravure printing line at the source:

$$E_p = A \times B + 1095 (C \times D \times F)$$

where:

- E_p = Total maximum theoretical emissions of VOM from one flexographic or rotogravure printing line in units of kg/year (lbs/year);
- A = Weight of VOM per volume of solids of the coating or ink with the highest VOM content as applied each year on the printing line in units of kg VOM/l (lbs VOM/gal) of coating or ink solids;
- B = Total volume of solids for all coatings and inks that can potentially be applied each year on the printing line in units of l/year (gal/year). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each coating and ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;
- C = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of ~~kg~~kg/l (lbs VOM/gal);
- D = The greatest volume of cleanup material or solvent used in any 8-hour period; ~~and~~
- F = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.

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- 2) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a flexographic and rotogravure printing line referenced in this subsection shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating and ink as applied on each printing line.
 - B) The VOM content and the volume of each coating and ink as applied each year on each printing line.
- 3) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a flexographic and rotogravure printing line exempted from the limitations of Section 218.401 of this Part because of the criteria in

2458 Section 218.402(a) of this Part shall notify the Agency of any record
2459 showing that total maximum theoretical emissions of VOM from all
2460 printing lines exceed 90.7 Mg (100 tons) in any calendar year before the
2461 application of capture systems and control devices by sending a copy of
2462 such record to the Agency within 30 days after the exceedance occurs.
2463

2464 c) Any owner or operator of a printing line subject to the limitations of Section
2465 218.401 of this Part and complying by means of Section 218.401(a) of this Part
2466 shall comply with the following:
2467

2468 1) By a date consistent with Section 218.106 of this Part, or Section
2469 218.403(e), as applicable, or upon initial start-up of a new printing line, or
2470 upon changing the method of compliance from an existing subject printing
2471 line from Section 218.401(b) or Section 218.401(c) of this Part to Section
2472 218.401(a) of this Part, the owner or operator of a subject printing line
2473 shall certify to the Agency that the printing line will be in compliance with
2474 Section 218.401(a) of this Part on and after a date consistent with Section
2475 218.106 of this Part, or Section 218.403(e), as applicable, or on and after
2476 the initial start-up date. The owner or operator of a printing line subject to
2477 the requirements in Section 218.401(a)(2)(B) shall certify in accordance
2478 with this subsection (c)(1) even if the owner or operator of such line
2479 submitted a certification prior to January 1, 2010. Such certification shall
2480 include:

2481
2482 A) The name and identification number of each coating and ink as
2483 applied on each printing line.
2484

2485 B) The VOM content of each coating and ink as applied each day on
2486 each printing line.
2487

2488 2) On and after a date consistent with Section 218.106 of this Part, or Section
2489 218.403(e), as applicable, or on and after the initial start-up date, the
2490 owner or operator of a printing line subject to the limitations of Section
2491 218.401 of this Part and complying by means of Section 218.401(a) of this
2492 Part shall collect and record all of the following information each day for
2493 each coating line and maintain the information at the source for a period of
2494 three years:

2495
2496 A) The name and identification number of each coating and ink as
2497 applied on each printing line.
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2499 B) The VOM content of each coating and ink as applied each day on
2500 each printing line.

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- 3) On and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 218.401(a) of this Part 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 Section 218.401 of this Part from Section 218.401(a) of this Part to Section 218.401(b) or (c) of this Part, the owner or operator shall comply with all requirements of subsection (d)(1) or (e)(1) of this Section, respectively. Upon changing the method of compliance with Section 218.401 of this Part from Section 218.401(a) of this Part to Section 218.401(b) or (c) of this Part, 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 printing line subject to the limitations of Section 218.401 of this Part and complying by means of Section 218.401(b) shall comply with the following:
 - 1) By a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing subject printing line from Section 218.401(a) or (c) of this Part to Section 218.401(b) of this Part, the owner or operator of the subject printing line shall certify to the Agency that the printing line will be in compliance with Section 218.401(b) of this Part on and after a date consistent with Section 218.106 of this Part, or Section 218.403(e), as applicable, or on and after the initial start-up date. The owner or operator of a printing line subject to the requirements in Section 218.401(b)(3) shall certify in accordance with this subsection (d)(1) even if the owner or operator of such line submitted a certification prior to January 1, 2010. Such certification shall include:
 - A) The name and identification number of each printing line which will comply by means of Section 218.401(b) of this Part.
 - B) The name and identification number of each coating and ink available for use on each printing line.
 - C) The VOM content of each coating and ink as applied each day on

- 2544 each printing line.
2545
2546 D) The instrument or method by which the owner or operator will
2547 accurately measure or calculate the volume, or weight of solids, as
2548 applicable, of each coating and ink as applied each day on each
2549 printing line.
2550
2551 E) The method by which the owner or operator will create and
2552 maintain records each day as required in subsection (d)(2) of this
2553 Section.
2554
2555 F) An example of the format in which the records required in
2556 subsection (d)(2) of this Section will be kept.
2557
2558 2) On and after a date consistent with Section 218.106 of this Part, or Section
2559 218.403(e), as applicable, or on and after the initial start-up date, the
2560 owner or operator of a printing line subject to the limitations of Section
2561 218.401 of this Part and complying by means of Section 218.401(b) of this
2562 Part shall collect and record all of the following information each day for
2563 each printing line and maintain the information at the source for a period
2564 of three years:
2565
2566 A) The name and identification number of each coating and ink as
2567 applied on each printing line.
2568
2569 B) The VOM content and the volume, or weight of solids, as
2570 applicable, of each coating and ink as applied each day on each
2571 printing line.
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2573 C) The daily-weighted average VOM content of all coatings and inks
2574 as applied on each printing line.
2575
2576 3) On and after a date consistent with Section 218.106 of this Part, or Section
2577 218.403(e), as applicable, the owner or operator of a subject printing line
2578 shall notify the Agency in the following instances:
2579
2580 A) Any record showing violation of Section 218.401(b) of this Part
2581 shall be reported by sending a copy of such record to the Agency
2582 within 30 days following the occurrence of the violation.
2583
2584 B) At least 30 calendar days before changing the method of
2585 compliance with Section 218.401 of this Part from Section
2586 218.401(b) of this Part to Section 218.401(a) or 218.401(c) of this

2587 Part, the owner or operator shall comply with all requirements of
 2588 subsection (c)(1) or (e)(1) of this Section, respectively. Upon
 2589 changing the method of compliance with Section 218.401 of this
 2590 Part from Section 218.401(b) of this Part to Section 218.401(a) or
 2591 (c) of this Part, the owner or operator shall comply with all
 2592 requirements of subsection (c) or (e) of this Section, respectively.
 2593

2594 e) Any owner or operator of a printing line subject to the limitations of Section
 2595 218.401 of this Part and complying by means of Section 218.401(c) of this Part
 2596 shall comply with the following:
 2597

2598 1) By a date consistent with Section 218.106 of this Part, or Section
 2599 218.403(e), as applicable, or upon initial start-up of a new printing line, or
 2600 upon changing the method of compliance for an existing printing line from
 2601 Section 218.401(a) or (b) of this Part to Section 218.401(c) of this Part, the
 2602 owner or operator of the subject printing line shall either:
 2603

2604 A) ~~Perform~~perform all tests and submit to the Agency the results of all
 2605 tests and calculations necessary to demonstrate that the subject
 2606 printing line will be in compliance with Section 218.401(c) of this
 2607 Part on and after a date consistent with Section 218.106 of this
 2608 Part, or Section 218.403(e), as applicable, or on and after the initial
 2609 start-up date; or
 2610

2611 B) If not required to perform such testing pursuant to Section
 2612 218.401(c)(6), submit a certification to the Agency that includes:
 2613

2614 i) A declaration that the owner or operator is not required to
 2615 perform testing pursuant to Section 218.401(c)(6);
 2616

2617 ii) The dates that testing demonstrating compliance with
 2618 Section 218.401(c)(3) was performed; and
 2619

2620 iii) The dates that the results of such testing were submitted to
 2621 the Agency.
 2622

2623 2) On and after a date consistent with Section 218.106 of this Part, or Section
 2624 218.403(e), as applicable, or on and after the initial start-up date, the
 2625 owner or operator of a printing line subject to the limitations of Section
 2626 218.401 of this Part and complying by means of Section 218.401(c) of this
 2627 Part shall collect and record all of the following information each day for
 2628 each printing line and maintain the information at the facility for a period
 2629 of three years:

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- A) Control device monitoring data.
 - B) A log of operating time for the capture system, control device, monitoring equipment and the associated printing line.
 - C) 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 Section 218.403(e), as applicable, the owner or operator of a subject printing line shall notify the Agency in the following instances:
- A) Any record showing violation of Section 218.401(c) of this Part, 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 Section 218.401 of this Part from Section 218.401(c) of this Part to Section 218.401(a) or (b) of this Part, 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 Section 218.401 of this Part from Section 218.401(c) of this Part to Section 218.401(a) or (b) of this Part, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.
- 4) By May 1, 2010, or upon initial start-up of a new printing line, whichever is later, the owner or operator of a printing line subject to the requirements in Section 218.401(c)(3) or (c)(4) shall submit to the Agency records documenting the date the printing line was constructed at the subject source and the date the control device for such printing line was constructed at the subject source.
- f) Any owner or operator of a flexographic or rotogravure printing line that prints flexible packaging, or that prints flexible packaging and non-flexible packaging on the same line, and that is exempt from the limitations of Section 218.401(d) because of the criteria in Section 218.402(b) shall:

- 2671 1) By May 1, 2010, or upon initial start-up of a new printing line, whichever
2672 is later, and upon modification of a printing line, submit a certification to
2673 the Agency that includes:
2674
2675 A) A declaration that the source is exempt from the requirements in
2676 Section 218.401(d) because of the criteria in Section 218.402(b);
2677
2678 B) Calculations that demonstrate that combined emissions of VOM
2679 from all flexographic and rotogravure printing lines (including inks
2680 and solvents used for cleanup operations associated with such
2681 printing lines) at the source never equal or exceed 6.8 kg/day (15
2682 lbs/day), in the absence of air pollution control equipment; and
2683
2684 2) Notify the Agency in writing if the combined emissions of VOM from all
2685 flexographic and rotogravure printing lines (including inks and solvents
2686 used for cleanup operations associated with the flexographic and
2687 rotogravure lines) at the source ever equal or exceed 6.8 kg/day (15
2688 lbs/day), in the absence of air pollution control equipment, within 30 days
2689 after the event occurs
2690
2691 g) Any owner or operator of a printing line subject to the limitations of Section
2692 218.401(d) shall:
2693
2694 1) By May 1, 2010, or upon initial start-up of a new printing line, whichever
2695 is later, submit a certification to the Agency describing the practices and
2696 procedures that the owner or operator will follow to ensure compliance
2697 with the limitations of Section 218.401(d); and
2698
2699 2) Notify the Agency of any violation of Section 218.401(d) by sending a
2700 description of the violation and copies of records documenting such
2701 violations to the Agency within 30 days following the occurrence of the
2702 violation.
2703
2704 h) All records required by subsections (f) and (g) of this Section shall be retained for
2705 at least three years and shall be made available to the Agency upon request.
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2707 (Source: Amended at 34 Ill. Reg. _____, effective _____)
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2709 **Section 218.405 Lithographic Printing: Applicability**
2710

- 2711 a) ~~Until March 15, 1996, the limitations of Section 218.406 of this Subpart apply to~~
2712 ~~all heatset web offset lithographic printing lines (including solvents used for~~
2713 ~~cleanup operations associated with the heatset web offset lithographic printing~~

- 2714 line(s)) at a source subject to the requirements of this Subpart. All sources with
2715 heatset web offset lithographic printing lines are sources subject to the
2716 requirements of this Subpart unless:
- 2717
- 2718 1) Total maximum theoretical emissions of VOM from all heatset web offset
2719 lithographic printing lines (including solvents used for cleanup operations
2720 associated with the heatset web offset lithographic printing line(s)) at the
2721 source never exceed 90.7 Mg (100 tons) per calendar year in the absence
2722 of air pollution control equipment; or
- 2723
- 2724 2) A federally enforceable permit or SIP revision for all heatset web offset
2725 lithographic printing line(s) at a source requires the owner or operator to
2726 limit production or capacity of these printing line(s) to reduce total VOM
2727 emissions from all heatset web offset lithographic printing line(s) to 90.7
2728 Mg (100 tons) per calendar year or less in the absence of air pollution
2729 control equipment.
- 2730
- 2731 b) Any owner or operator of any heatset web offset lithographic printing line that is
2732 exempt from the limitations in Section 218.406 of this Subpart because of the
2733 criteria in subsection (a) of this Section shall be subject to the recordkeeping and
2734 reporting requirements in Section 218.406(b)(1) of this Subpart.
- 2735
- 2736 ae) ~~Every~~On and after March 15, 1996, every owner or operator of lithographic
2737 printing ~~lines~~line(s) is subject to the recordkeeping and reporting requirements in
2738 Section 218.411 of this Subpart.
- 2739
- 2740 bd) ~~Prior to May 1, 2010,~~On and after March 15, 1996, Sections 218.407 through
2741 218.410 of this Subpart shall apply to:
- 2742
- 2743 1) All owners or operators of heatset web offset lithographic printing
2744 linesline(s) unless:
- 2745
- 2746 A) Total maximum theoretical emissions of VOM from all heatset
2747 web offset lithographic printing lines (including solvents used for
2748 cleanup operations associated with heatset web offset lithographic
2749 printing lines) at the source never exceed 90.7 Mg (100 tons) per
2750 calendar year before the application of capture systems and control
2751 devices. To determine a source's total maximum theoretical
2752 emissions of VOM for the purposes of this subsection, the owner
2753 or operator shall use the calculations set forth in Section
2754 218.411(a)(1)(C)~~218.406(b)(1)(A)(ii)~~ of this Subpart; or
- 2755
- 2756 B) Federally enforceable permit conditions or SIP revision for all

2757 heatset web offset lithographic printing ~~lines~~line(s) at the source
 2758 requires the owner or operator to limit production or capacity of
 2759 these printing ~~lines~~line(s) to total VOM emissions of 90.7 Mg/yr
 2760 (100 TPY) or less, before the application of capture systems and
 2761 control devices;

- 2762
- 2763 2) All owners or operators of ~~heatset web offset, non-heatset web offset, or~~
 2764 ~~sheet fed offset~~ lithographic printing ~~lines~~line(s), unless the combined
 2765 emissions of VOM from all lithographic printing ~~lines~~line(s) at the source
 2766 (including solvents used for cleanup operations associated with the
 2767 lithographic printing ~~lines~~line(s)) never exceed 45.5 kg/day (100 lbs/day),
 2768 as determined in accordance with Section 218.411(a)(1)(B), before the
 2769 application of capture systems and control devices.

2770

2771 c) On and after May 1, 2010:

- 2772
- 2773 1) The requirements in Section 218.407(a)(1)(B) through (a)(1)(E) and
 2774 218.407(b) and all applicable provisions in Sections 218.409 through
 2775 218.411 of this Subpart shall apply to all owners or operators of heatset
 2776 web offset lithographic printing lines, if the combined emissions of VOM
 2777 from all lithographic printing lines at the source (including solvents used
 2778 for cleanup operations associated with the lithographic printing lines) ever
 2779 exceed 45.5 kg/day (100 lbs/day), calculated in accordance with Section
 2780 218.411(b)(2)(B), before the application of capture systems and control
 2781 devices;
- 2782
- 2783 2) The requirements in Section 218.407(a)(1)(A) and 218.407(a)(2)
 2784 through(a)(5) and all applicable provisions in Sections 218.409 through
 2785 218.411 of this Subpart shall apply to all owners or operators of
 2786 lithographic printing lines if the combined emissions of VOM from all
 2787 lithographic printing lines at the source (including solvents used for
 2788 cleanup operations associated with the lithographic printing lines) ever
 2789 equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with
 2790 Section 218.411(b)(1)(B), before the application of capture systems and
 2791 control devices;
- 2792
- 2793 3) Notwithstanding subsection (c)(2) of this Section, at sources where the
 2794 combined emissions of VOM from all lithographic printing lines at the
 2795 source (including solvents used for cleanup operations associated with the
 2796 lithographic printing lines) equal or exceed 6.8 kg/day (15 lbs/day) but do
 2797 not exceed 45.5 kg/day (100 lbs/day), calculated in accordance with
 2798 Section 218.411(b)(1)(B), before the application of capture systems and
 2799 control devices, the following exclusions shall apply unless the owner or

2800 operator of the source certifies pursuant to Section 218.411(g)(1)(B) that
 2801 the source will not make use of any such exclusions:

2802
 2803 A) The requirements of Section 218.407(a)(1)(A), 218.407(a)(2), and
 2804 218.407(a)(3) of this Subpart shall not apply to lithographic
 2805 printing lines with a total fountain solution reservoir of less than
 2806 3.8 liters (1 gallon);

2807
 2808 B) The requirements of Section 218.407(a)(3) of this Subpart shall not
 2809 apply to sheet-fed offset lithographic printing lines with maximum
 2810 sheet size of 11x17 inches or smaller;

2811
 2812 C) The requirements of Section 218.407(a)(4) of this Subpart shall not
 2813 apply to up to a total of 416.3 liters (110 gallons) per year of
 2814 cleaning materials used on all lithographic printing lines at the
 2815 source;

2816
 2817 D) The requirements of Section 218.407(a)(4)(A)(i) shall not apply to
 2818 lithographic printing lines at the source. Instead, the requirements
 2819 of Section 218.407(a)(4)(A)(ii) shall apply to such lines.

2820
 2821 de) If a lithographic printing line at a source is or becomes subject to one or more of
 2822 the limitations in Section Sections 218.406 or 218.407 of this Subpart, the
 2823 lithographic printing linesline(s) at the source are always subject to the applicable
 2824 provisions of this Subpart.

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 2826 (Source: Amended at 34 Ill. Reg. _____, effective _____)

2827
 2828 **Section 218.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior to**
 2829 **March 15, 1996 (Repealed)**

2830
 2831 a) ~~Emission Standards and Limitations. No owner or operator of a heatset web~~
 2832 ~~offset printing line at a source that meets or exceeds the applicability levels in~~
 2833 ~~Section 218.405(a) of this Subpart may cause or allow the operation of such~~
 2834 ~~heatset web offset printing line(s) unless the owner or operator meets the~~
 2835 ~~requirements in subsections (a)(1) or (a)(2) of this Section and the requirements in~~
 2836 ~~subsections (a)(3) and (a)(4) of this Section. The owner or operator shall~~
 2837 ~~demonstrate compliance with this Section by using the applicable test methods~~
 2838 ~~and procedures specified in Section 218.105(a), (d), and (f) of this Part and by~~
 2839 ~~complying with the recordkeeping and reporting requirements specified in~~
 2840 ~~subsection (b) of this Section.~~

2841
 2842 1) ~~An afterburner system is installed and operated that reduces 90 percent of~~

- 2843 the VOM emissions (excluding methane and ethane) from the dryer
 2844 exhaust; or
 2845
 2846 2) The fountain solution contains no more than 8 percent, by weight, of
 2847 VOM and a condensation recovery system is installed and operated that
 2848 removes at least 75 percent of the non-isopropyl alcohol organic materials
 2849 from the dryer exhaust; and
 2850
 2851 3) The control device is equipped with the applicable monitoring equipment
 2852 specified in Section 218.105(d)(2) of this Part and the monitoring
 2853 equipment is installed, calibrated, operated and maintained according to
 2854 manufacturer's specifications at all times when the control device is in use;
 2855 and
 2856
 2857 4) The control device is operated at all times when the printing line is in
 2858 operation.
 2859
 2860 b) Recordkeeping and Reporting. ~~The VOM content of each fountain solution and~~
 2861 ~~ink and the efficiency of each control device shall be determined by the applicable~~
 2862 ~~test methods and procedures specified in Section 218.105 of this Part to establish~~
 2863 ~~the records required under this subsection.~~
 2864
 2865 1) Any owner or operator of a lithographic printing line which is exempted
 2866 from the limitations of subsection (a) of this Section because of the criteria
 2867 in 218.405(a) of this Subpart shall comply with the following:
 2868
 2869 A) By a date consistent with Section 218.106 of this Part, the owner or
 2870 operator of a heatset web offset lithographic printing line to which
 2871 subsection (b)(1) of this Section is applicable shall certify to the
 2872 Agency that the heatset web offset lithographic printing line is
 2873 exempt under the provisions of Section 218.405(a) of this Subpart.
 2874 Such certification shall include:
 2875
 2876 i) A declaration that the heatset web offset lithographic
 2877 printing line is exempt from the limitations of subsection
 2878 (a) of this Section because of the criteria in Section
 2879 218.405(a) of this Subpart; and
 2880
 2881 ii) Calculations which demonstrate that total maximum
 2882 theoretical emissions of VOM from all heatset web offset
 2883 lithographic printing lines at the source never exceed 90.7
 2884 Mg (100 tons) per calendar year before the application of
 2885 air pollution control equipment. Total maximum theoretical

2886 emissions of VOM for a heatset web offset lithographic
 2887 printing source is the sum of maximum theoretical
 2888 emissions of VOM from each heatset web offset
 2889 lithographic printing line at the source. The following
 2890 equation shall be used to calculate total maximum
 2891 theoretical emissions of VOM per calendar year in the
 2892 absence of air pollution control equipment for each heatset
 2893 web offset lithographic printing line at the source:
 2894

$$E_p = (R \times A \times B) + [(C \times D) + 1095 (F \times G \times H)]$$

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where:

- E_p = Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/yr (lb/yr);
- A = Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal) of solids;
- B = Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The instrument or method by which the owner or operator accurately measured or calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;
- C = Weight of VOM per volume of fountain solution with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal);

- D = The total volume of fountain solution that can potentially be used each year on the printing line in units of ℓ/yr (gal/yr). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;
- F = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of kg/ℓ (lb/gal) of such material;
- G = The greatest volume of cleanup material or solvent used in any 8-hour period; and
- H = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.
- R = The multiplier representing the amount of VOM not retained in the substrate being used. For paper, $R = 0.8$. For foil, plastic, or other impervious substrates, $R = 1.0$.

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- B) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
 - i) The name and identification of each fountain solution and ink as applied on each printing line; and
 - ii) The VOM content and the volume of each fountain solution and ink as applied each year on each printing line.
- C) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a source exempted from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart shall notify the Agency of any record

2916 showing that total maximum theoretical emissions of VOM from
 2917 all heatset web offset lithographic printing lines exceed 90.7 Mg
 2918 (100 tons) in any calendar year in the absence of air pollution
 2919 control equipment by sending a copy of such record to the Agency
 2920 within 30 days after the exceedence occurs.
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2922 2) Any owner or operator of a printing line subject to the limitations of
 2923 subsection (a) of this Section and complying by means of subsection (a)(1)
 2924 of this Section shall comply with the following:
 2925

2926 A) By a date consistent with Section 218.106 of this Part, or upon
 2927 initial start up of a new printing line, or upon changing the method
 2928 of compliance for an existing printing line from subsection (a)(2)
 2929 to (a)(1) of this Section, perform all tests and submit to the Agency
 2930 the results of all tests and calculations necessary to demonstrate
 2931 that the subject printing line will be in compliance with subsection
 2932 (a)(1) of this Section on and after a date consistent with Section
 2933 218.106 of this Part, or on and after the initial start up date;
 2934

2935 B) On and after a date consistent with Section 218.106 of this Part, or
 2936 on and after the initial start up date, collect and record the
 2937 following information each day for each printing line and maintain
 2938 the information at the source for a period of three years:
 2939

2940 i) Control device monitoring data;

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 2942 ii) A log of operating time for the control device, monitoring
 2943 equipment and the associated printing line; and
 2944

2945 iii) A maintenance log for the control device and monitoring
 2946 equipment detailing all routine and nonroutine maintenance
 2947 performed including dates and duration of any outages;
 2948

2949 C) On and after a date consistent with Section 218.106 of this Part,
 2950 notify the Agency in the following instances:
 2951

2952 i) Any violation of subsection (a)(1) of this Section shall be
 2953 reported to the Agency, in writing, within 30 days
 2954 following the occurrence of the violation;
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2956 ii) Any record showing a violation of subsection (a)(1) of this
 2957 Section shall be reported by sending a copy of such record
 2958 to the Agency within 30 days following the occurrence of

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the violation; and

iii) At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3) of this Section.

3) Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(2) of this Section shall:

A) By a date consistent with Section 218.106 of this Part, or upon initial start up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(1) to (a)(2) of this Section, perform all tests and submit to the Agency and the USEPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(2) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after the initial start up date;

B) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) The VOM content of the fountain solution used each day on each printing line;

ii) A log of operating time for the control device and the associated printing line; and

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

C) On and after a date consistent with Section 218.106 of this Part, notify the Agency in the following instances:

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- i) Any violation of subsection (a)(2) shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;
 - ii) Any record showing a violation of subsection (a)(2) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and
 - iii) At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2) of this Section.
- e) ~~Compliance Schedule. Every owner or operator of a heatset web offset lithographic printing line shall comply with the applicable requirements of subsections (a) and (b) of this Section in accordance with the applicable compliance schedule specified in subsections (c)(1), (c)(2), or (c)(3) of this Section:~~
- 1) ~~No owner or operator of a heatset web offset lithographic printing line which is exempt from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart shall operate said printing 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 218.405(a) and (b)(1) of this Subpart.~~
 - 2) ~~No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(1) of this Section shall operate said printing 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, subsections (a)(1), (a)(3), (a)(4) and (b)(2) of this Section.~~
 - 3) ~~No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(2) of this Section shall operate said printing 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, subsections (a)(2), (a)(3), (a)(4) and (b)(3) of this Section.

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

Section 218.407 Emission Limitations and Control Requirements for Lithographic Printing Lines ~~On and After March 15, 1996~~

a) ~~No~~ On and after March 15, 1996, no owner or operator of lithographic printing ~~lines~~ line(s) subject to the requirements of this Subpart shall:

1) Cause or allow the operation of any heatset web offset lithographic printing line unless:

A) The total VOM content in the as-applied fountain solution meets one of the following conditions:

- i) 1.6 percent or less, by weight~~volume~~;
- ii) 3 percent or less, by weight~~volume~~, and the temperature of the fountain solution is maintained below 15.6° C (60° F), measured at the reservoir or the fountain tray; or
- iii) 5 percent or less, by weight~~volume~~, and the as-applied fountain solution contains no alcohol;

B) The air pressure in the dryer is maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating;

C) An afterburner is installed and operated so that VOM emissions (excluding methane and ethane) from the press dryer exhaust(s) are reduced as follows

- i) Prior to May 1, 2010, by 90 percent, by weight, or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon); and
- ii) On and after May 1, 2010, by at least 90 percent, by weight, for afterburners first constructed at the source prior to January 1, 2010; by at least 95 percent, by weight, for afterburners first constructed at the source on or after

January 1, 2010; or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon);

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- D) The afterburner complies with all monitoring provisions specified in Section 218.410(c) of this Subpart ~~is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated, and maintained according to manufacturer's specifications at all times when the afterburner is in use; and~~
- E) The afterburner is operated at all times when the printing line is in operation, except the afterburner may be shut down between November 1 and April 1 as provided in Section 218.107 of this Part;
- 2) Cause or allow the operation of any non-heatset web offset lithographic printing line unless the VOM content of the as-applied fountain solution is 5 percent or less, by weight~~volume~~, and the as-applied fountain solution contains no alcohol;
- 3) Cause or allow the operation of any sheet-fed offset lithographic printing line unless:
 - A) The VOM content of the as-applied fountain solution is 5 percent or less, by weight~~volume~~; or
 - B) The VOM content of the as-applied fountain solution is 8.5 percent or less, by weight~~volume~~, and the temperature of the fountain solution is maintained below 15.6° C (60° F), measured at the reservoir or the fountain tray;
- 4) Cause or allow the use of a cleaning solution on any lithographic printing line unless:
 - A) The VOM content of the as-used cleaning solution is less than or equal to:
 - i) 30 percent, by weight; or
 - ii) On and after May 1, 2010, for owners or operators of sources that meet the applicability criteria in Section 218.405(c)(3) and do not certify pursuant to Section

218.411(g)(1)(B) that the source will not make use of any of the exclusions in Section 218.405(c)(3), 70 percent, by weight; or

B) The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20° C (68° F);

5) Cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers, except when specifically in use.

b) An owner or operator of a heatset web offset lithographic printing line subject to the requirements of subsection (a)(1)(C) of this Section may use a control device other than an afterburner, if:

1) The control device reduces VOM emissions from the press dryer exhaustexhaust(s) as follows

A) Prior to May 1, 2010, by at least 90 percent, by weight, or to a maximum control device exhaust outlet concentration of 20 ppmv (as carbon); and

B) On and after May 1, 2010:

i) By at least 90 percent, by weight, for control devices first constructed at the source prior to January 1, 2010;

ii) By at least 95 percent, by weight, for control devices first constructed at the source on or after January 1, 2010; or

iii) To a maximum control device exhaust outlet concentration of 20 ppmv (as carbon);

2) The owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; and

3) The use of the control device with testing, monitoring, and recordkeeping in accordance with this plan is approved by the Agency and USEPA as federally enforceable permit conditions.

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

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Section 218.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996 (Repealed)

- a) ~~Every owner or operator of a lithographic printing line subject to one or more of the control requirements of Section 218.407 of this Subpart shall comply with the applicable requirements of Sections 218.407 through 218.411 of this Subpart on and after March 15, 1996, or upon initial start-up, whichever is later.~~
- b) ~~No owner or operator of a lithographic printing line which is exempt from the limitations of Section 218.407 of this Subpart because of the criteria in Section 218.405(d) of this Subpart, shall operate said printing line on or after March 15, 1996, unless the owner or operator has complied with, and continues to comply with, Sections 218.405(d) and 218.411(a) of this Subpart.~~

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

Section 218.409 Testing for Lithographic Printing On and After March 15, 1996

- a) Testing to demonstrate compliance with the requirements of Section 218.407 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 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 testing to allow the Agency to be present during such testing.
- b) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.407(a)(1)(C) or (b)(1) 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 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;
 - 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 at Section 218.112 of this Part;
 - 3) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60,

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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:

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

- 4) Notwithstanding the criteria or requirements in Method 25 ~~that~~ ^{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);
- 5) During testing, the printing ~~lines~~ ^{line(s)} shall be operated at representative operating conditions and flow rates; and
- 6) During testing, an air flow direction indicating device, such as a smoke stick, shall be used to demonstrate 100 percent emissions capture efficiency for the dryer in accordance with Section 218.407(a)(1)(B) of this Subpart.

- c) Testing to demonstrate compliance with the VOM content limitations in Section 218.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A) of this Subpart, and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents,

3259 cleaning solutions, and inks (pursuant to the requirements of Section
 3260 218.411(a)(1)(B), (b)(1)(B), or (b)(2)(B) of this Subpart, as applicable, shall be
 3261 conducted upon request of the Agency or as otherwise specified in this Subpart, as
 3262 follows:

- 3263
- 3264 1) The applicable test methods and procedures specified in Section
 3265 218.105(a) of this Part shall be used; provided, however, Method 24,
 3266 incorporated by reference at Section 218.112 of this Part, shall be used to
 3267 demonstrate compliance; or
- 3268
- 3269 2) The manufacturer's specifications for VOM content for fountain solution
 3270 additives, cleaning solvents, and inks may be used if such manufacturer's
 3271 specifications are based on results of tests of the VOM content conducted
 3272 in accordance with methods specified in Section 218.105(a) of this Part;
 3273 provided, however, Method 24 shall be used to determine compliance.
- 3274
- 3275 d) Testing to demonstrate compliance with the requirements of Section 218.407(b)
 3276 of this Subpart shall be conducted as set forth in the owner or operator's plan
 3277 approved by the Agency and USEPA as federally enforceable permit conditions
 3278 pursuant to Section 218.407(b) of this Subpart.
- 3279
- 3280 e) Testing to determine the VOM composite partial vapor pressure of cleaning
 3281 solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be
 3282 conducted in accordance with the applicable methods and procedures specified in
 3283 Section 218.110 of this Part.

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3285 (Source: Amended at 34 Ill. Reg. _____, effective _____)

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3287 **Section 218.410 Monitoring Requirements for Lithographic Printing**

- 3288
- 3289 a) Fountain Solution Temperature.
- 3290
- 3291 1) The owner or operator of any lithographic printing linesline(s) relying on
 3292 the temperature of the fountain solution to demonstrate compliance shall
 3293 install, maintain, and continuously operate a temperature monitor of the
 3294 fountain solution in the reservoir or fountain tray, as applicable.
- 3295
- 3296 2) The temperature monitor must be capable of reading with an accuracy of
 3297 1° C or 2° C, and must be attached to an automatic, continuous recording
 3298 device such as a strip chart, recorder, or computer, with at least the same
 3299 accuracy, that is installed, calibrated and maintained in accordance with
 3300 the manufacturer's specifications. If the automatic, continuous recording
 3301 device malfunctions, the owner or operator shall record the temperature of

3302 the fountain solution at least once every two operating hours. The
3303 automatic, continuous recording device shall be repaired or replaced as
3304 soon as practicable.
3305

3306 b) Fountain Solution VOM Content. The owner or operator of any lithographic
3307 printing ~~lines~~line(s) subject to Section 218.407(a)(1)(A), (a)(2) or (a)(3) of this
3308 Subpart shall:
3309

3310 1) For a fountain solution to which VOM is not added automatically:
3311

3312 A) Maintain records of the VOM content of the fountain solution in
3313 accordance with Section 218.411(ee)(2)(C); or
3314

3315 B) Take a sample of the as-applied fountain solution from the fountain
3316 tray or reservoir, as applicable, each time a fresh batch of fountain
3317 solution is prepared or each time VOM is added to an existing
3318 batch of fountain solution in the fountain tray or reservoir, and
3319 shall determine compliance with the VOM content limitation of the
3320 as-applied fountain solution by using one of the following options:
3321

3322 i) With a refractometer or hydrometer with a visual, analog,
3323 or digital readout and with an accuracy of 0.5 percent. The
3324 refractometer or hydrometer must be calibrated with a
3325 standard solution for the type of VOM used in the fountain
3326 solution, in accordance with manufacturer's specifications,
3327 against measurements performed to determine compliance.
3328 The refractometer or hydrometer must be corrected for
3329 temperature at least once per 8-hour shift or once per batch
3330 of fountain solution prepared or modified, whichever is
3331 longer; or
3332

3333 ii) With a conductivity meter if it is demonstrated that a
3334 refractometer and hydrometer cannot distinguish between
3335 compliant and noncompliant fountain solution for the type
3336 and amount of VOM in the fountain solution. A source
3337 may use a conductivity meter if it demonstrates that both
3338 hydrometers and refractometers fail to provide significantly
3339 different measurements for standard solutions containing
3340 95 percent, 100 percent and 105 percent of the applicable
3341 VOM content limit. The conductivity meter reading for the
3342 fountain solution must be referenced to the conductivity of
3343 the incoming water. A standard solution shall be used to
3344 calibrate the conductivity meter for the type of VOM used

3345 in the fountain solution, in accordance with manufacturer's
3346 specifications;

- 3347
3348 2) For fountain solutions to which VOM is added at the source with
3349 automatic feed equipment, determine the VOM content of the as-applied
3350 fountain solution based on the setting of the automatic feed equipment
3351 which makes additions of VOM up to a pre-set level. Records must be
3352 retained of the VOM content of the fountain solution in accordance with
3353 Section 218.411(ee)(2)(D) of this Subpart. The equipment used to make
3354 automatic additions must be installed, calibrated, operated and maintained
3355 in accordance with manufacturer's specifications.
3356

- 3357 c) Afterburners For Heatset Web Offset Lithographic Printing LinesLine(s).
3358 If an afterburner is used to demonstrate compliance, the owner or operator of a
3359 heatset web offset lithographic printing line subject to Section 218.407(a)(1)(C)
3360 of this Subpart shall:

- 3361
3362 1) Install, calibrate, maintain, and operate temperature monitoring
3363 devicesdevice(s) with an accuracy of 3° C or 5° F on the afterburner in
3364 accordance with Section 218.105(d)(2) of this Part and in accordance with
3365 the manufacturer's specifications. Monitoring shall be performed at all
3366 times when the afterburner is operating; and
3367
3368 2) Install, calibrate, operate and maintain, in accordance with manufacturer's
3369 specifications, a continuous recorder on the temperature monitoring
3370 devicesdevice(s), such as a strip chart, recorder or computer, with at least
3371 the same accuracy as the temperature monitor.
3372

- 3373 d) Other Control Devices for Heatset Web Offset Lithographic Printing
3374 LinesLine(s).
3375 If a control device other than an afterburner is used to demonstrate compliance,
3376 the owner or operator of a heatset web offset lithographic printing line subject to
3377 this Subpart shall install, maintain, calibrate and operate such monitoring
3378 equipment as set forth in the owner or operator's plan approved by the Agency
3379 and USEPA pursuant to Section 218.407(b) of this Subpart.
3380

- 3381 e) Cleaning Solution

- 3382
3383 1) The owner or operator of any lithographic printing line relying on the
3384 VOM content of the cleaning solution to comply with Section
3385 218.407(a)(4)(A) of this Subpart must:

- 3386
3387 A) For cleaning solutions that are prepared at the source with

- 3388 equipment that automatically mixes cleaning solvent and water (or
 3389 other non-VOM):
 3390
 3391 i) Install, operate, maintain, and calibrate the automatic feed
 3392 equipment in accordance with manufacturer's specifications
 3393 to regulate the volume of each of the cleaning solvent and
 3394 water (or other non-VOM), as mixed; and
 3395
 3396 ii) Pre-set the automatic feed equipment so that the
 3397 consumption rates of the cleaning solvent and water (or
 3398 other non-VOM), as applied, comply with Section
 3399 218.407(a)(4)(A) of this Subpart;
 3400
 3401 B) For cleaning solutions that are not prepared at the source with
 3402 automatic feed equipment, keep records of the usage of cleaning
 3403 solvent and water (or other non-VOM) as set forth in Section
 3404 218.411(f)(2) of this Subpart.
 3405
 3406 2) The owner or operator of any lithographic printing line relying on the
 3407 vapor pressure of the cleaning solution to comply with Section
 3408 218.407(a)(4)(B) of this Subpart must keep records for such cleaning
 3409 solutions used on any such lines~~line(s)~~ as set forth in Section
 3410 218.411(f)(2)(C) of this Subpart.
 3411

3412 (Source: Amended at 34 Ill. Reg. _____, effective _____)
 3413

3414 **Section 218.411 Recordkeeping and Reporting for Lithographic Printing**
 3415

- 3416 a) Exempt units prior to May 1, 2010. An owner or operator of lithographic printing
 3417 lines~~line(s)~~ exempt from the limitations of Section 218.407 of this Subpart prior
 3418 to May 1, 2010, because of the criteria in Section 218.405(b)(1) of this Subpart,
 3419 shall comply with the following:
 3420
 3421 1) ~~Upon~~By March 15, 1996, upon initial start-up of a new lithographic
 3422 printing line, and upon modification of a lithographic printing line, submit
 3423 a certification to the Agency that includes:
 3424
 3425 A) A declaration that the source is exempt from the control
 3426 requirements in Section 218.407 of this Part because of the criteria
 3427 in Section 218.405(b)(1) of this Subpart;
 3428
 3429 B) Calculations ~~that~~which demonstrate that combined emissions of
 3430 VOM from all lithographic printing lines (including inks, fountain

- 3431 solutions, and solvents used for cleanup operations associated with
 3432 the lithographic printing lines) at the source never exceed 45.5
 3433 kg/day (100 lbs/day) before the use of capture systems and control
 3434 devices, as follows:
- 3435
 - 3436 i) To calculate daily emissions of VOM, the owner or
 3437 operator shall determine the monthly emissions of VOM
 3438 from all lithographic printing lines at the source (including
 3439 solvents used for cleanup operations associated with the
 3440 lithographic printing lines) and divide this amount by the
 3441 number of days during that calendar month that
 3442 lithographic printing lines at the source were in operation;
 3443
 - 3444 ii) To determine the VOM content of the inks, fountain
 3445 solution additives and cleaning solvents, the tests methods
 3446 and procedures set forth in Section 218.409(c) of this
 3447 Subpart shall be used;
 3448
 - 3449 iii) To determine VOM emissions from inks used on
 3450 lithographic printing ~~lines~~line(s) at the source, an ink
 3451 emission adjustment factor of 0.05 shall be used in
 3452 calculating emissions from all non-heatset inks except
 3453 when using an impervious substrate, and a factor of 0.80
 3454 shall be used in calculating emissions from all heatset inks
 3455 to account for VOM retention in the substrate except when
 3456 using an impervious substrate. For impervious substrates
 3457 such as metal or plastic, no emission adjustment factor is
 3458 used. The VOM content of the ink, as used, shall be
 3459 multiplied by this factor to determine the amount of VOM
 3460 emissions from the use of ink on the printing ~~lines~~line(s);
 3461 and
 3462
 - 3463 iv) To determine VOM emissions from fountain solutions and
 3464 cleaning solvents used on lithographic printing ~~lines~~line(s)
 3465 at the source, no retention factor is used;
 3466
 - 3467 C) Either a declaration that the source, through federally enforceable
 3468 permit conditions, has limited its maximum theoretical emissions
 3469 of VOM from all heatset web offset lithographic printing lines
 3470 (including solvents used for cleanup operations associated with
 3471 heatset web offset printing lines) at the source to no more than 90.7
 3472 Mg (100 tons) per calendar year before the application of capture
 3473 systems and control devices or calculations which demonstrate that

3474 the source's total maximum theoretical emissions of VOM do not
 3475 exceed 90.7 Mg/yr (100 TPY). Total maximum theoretical
 3476 emissions of VOM for a heatset web offset lithographic printing
 3477 source is the sum of maximum theoretical emissions of VOM from
 3478 each heatset web offset lithographic printing line at the source.
 3479 The following equation shall be used to calculate total maximum
 3480 theoretical emissions of VOM per calendar year in the absence of
 3481 air pollution control equipment for each heatset web offset
 3482 lithographic printing line at the source:~~To determine the source's~~
 3483 ~~total maximum theoretical emissions for the purposes of this~~
 3484 ~~subsection, the owner or operator shall use the calculations set~~
 3485 ~~forth in Section 218.406(b)(1)(A)(ii) of this Subpart; and~~

$$E_p = \frac{(R \times A \times B) + (C \times D) + 1095 (F \times G \times H)}{1000}$$

3488 where:

3489 E_p = Total maximum theoretical emissions of VOM from one heatset
 3490 web offset printing line in units of kg/yr (lb/yr);

A = Weight of VOM per volume of solids of ink with the highest VOM
content as applied each year on the printing line in units of kg/l
(lb/gal) of solids;

B = Total volume of solids for all inks that can potentially be applied
each year on the printing line in units of 1/yr (gal/yr). The method
by which the owner or operator accurately calculated the volume of
each ink as applied and the amount that can potentially be applied
each year on the printing line shall be described in the certification
to the Agency;

C = Weight of VOM per volume of fountain solution with the highest
VOM content as applied each year on the printing line in units of
kg/l (lb/gal);

D = The total volume of fountain solution that can potentially be used
each year on the printing line in units of 1/yr (gal/yr). The method
by which the owner or operator accurately calculated the volume of
each fountain solution used and the amount that can potentially be
used each year on the printing line shall be described in the
certification to the Agency;

F = Weight of VOM per volume of material for the cleanup material or

solvent with the highest VOM content as used each year on the printing line in units of kg/l (lb/gal) of such material;

G = The greatest volume of cleanup material or solvent used in any 8-hour period;

H = The highest fraction of cleanup material or solvent that is not recycled or recovered for offsite disposal during any 8-hour period;

R = The multiplier representing the amount of VOM not retained in the substrate being used. For paper, R = 0.8. For metal, plastic, or other impervious substrates, R = 1.0;

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D) A description and the results of all tests used to determine the VOM content of inks, fountain solution additives, and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 218.409(c)(1) of this Subpart;

2) Notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

b) Exempt units on and after May 1, 2010.

1) Lithographic printing lines exempt pursuant to Section 218.405(c)(2). By May 1, 2010, or upon initial start-up of a new lithographic printing line, whichever is later, and upon modification of a lithographic printing line, an owner or operator of lithographic printing lines exempt from the limitations in Section 218.407 of this Subpart because of the criteria in Section 218.405(c)(2) of this Subpart shall submit a certification to the Agency that includes the information specified in either subsections (b)(1)(A), (b)(1)(B), and (b)(1)(D) of this Section or subsections (b)(1)(A) and (b)(1)(C) of this Section, as applicable. An owner or operator complying with subsection (b)(1)(B) shall also comply with the requirements in subsection (b)(1)(E) of this Section. An owner or operator complying with subsection (b)(1)(C) shall also comply with the requirements in subsection (b)(1)(F) of this Section:

- 3521 A) A declaration that the source is exempt from the requirements in
3522 Section 218.407 of this Part because of the criteria in Section
3523 218.405(c)(2) of this Subpart;
3524
- 3525 B) Calculations that demonstrate that combined emissions of VOM
3526 from all lithographic printing lines (including inks, fountain
3527 solutions, and solvents used for cleanup operations associated with
3528 the lithographic printing lines) at the source do not equal or exceed
3529 6.8 kg/day (15 lbs/day), before the use of capture systems and
3530 control devices, as follows:
3531
- 3532 i) To calculate daily emissions of VOM, the owner or
3533 operator shall determine the monthly emissions of VOM
3534 from all lithographic printing lines at the source (including
3535 solvents used for cleanup operations associated with the
3536 lithographic printing lines) and divide this amount by the
3537 number of days during that calendar month that
3538 lithographic printing lines at the source were in operation;
3539
- 3540 ii) To determine the VOM content of the inks, fountain
3541 solution additives and cleaning solvents, the test methods
3542 and procedures set forth in Section 218.409(c) of this
3543 Subpart shall be used;
3544
- 3545 iii) To determine VOM emissions from inks used on
3546 lithographic printing lines at the source, an ink emission
3547 adjustment factor of 0.05 shall be used in calculating
3548 emissions from all non-heatset inks except when using an
3549 impervious substrate, and a factor of 0.80 shall be used in
3550 calculating emissions from all heatset inks to account for
3551 VOM retention in the substrate except when using an
3552 impervious substrate. For impervious substrates such as
3553 metal or plastic, no emission adjustment factor is used. The
3554 VOM content of the ink, as used, shall be multiplied by this
3555 factor to determine the amount of VOM emissions from the
3556 use of ink on the printing lines; and
3557
- 3558 iv) To determine VOM emissions from cleaning solutions used
3559 on lithographic printing lines at the source, an emission
3560 adjustment factor of 0.50 shall be used in calculating
3561 emissions from used shop towels if the VOM composite
3562 vapor pressure of each associated cleaning solution is less
3563 than 10 mmHg measured at 20° C (68° F) and the shop

3564 towels are kept in closed containers. For cleaning solutions
 3565 with VOM composite vapor pressures of equal to or greater
 3566 than 10 mmHg measured at 20° C (68° F) and for shop
 3567 towels that are not kept in closed containers, no emission
 3568 adjustment factor is used;

3569
 3570 C) As an alternative to the calculations in subsection (b)(1)(B), a
 3571 statement that the source uses less than the amount of material
 3572 specified in subsection (b)(1)(C)(i) or (ii), as applicable, during
 3573 each calendar month. A source may determine that it emits below
 3574 6.8 kg/day (15 lbs/day) of VOM based upon compliance with such
 3575 material use limitations. If the source exceeds this amount of
 3576 material use in a given calendar month, the owner or operator
 3577 must, within 15 days after the end of that month, complete the
 3578 emissions calculations of subsection (b)(1)(B) to determine daily
 3579 emissions for applicability purposes. If the source ever exceeds this
 3580 amount of material use for six consecutive calendar months, it is
 3581 no longer eligible to use this subsection (b)(1)(C) as an alternative
 3582 to the calculations in subsection (b)(1)(B). If a source has both
 3583 heatset web offset and either nonheatset web offset or sheetfed
 3584 lithographic printing operations, or has all three types of printing
 3585 operations, the owner or operator may not make use of this
 3586 alternative and must use the calculations in subsection (b)(1)(B).

3587
 3588 i) The sum of all sheetfed and nonheatset web offset
 3589 lithographic printing operations at the source: 242.3 liters
 3590 (64 gallons) of cleaning solvent and fountain solution
 3591 additives, combined; or

3592
 3593 ii) The sum of all heatset web offset lithographic printing
 3594 operations at the source: 204.1 kg (450 lbs) of ink, cleaning
 3595 solvent, and fountain solution additives, combined;

3596
 3597 D) A description and the results of all tests used to determine the
 3598 VOM content of inks, fountain solution additives, and cleaning
 3599 solvents, and a declaration that all such tests have been properly
 3600 conducted in accordance with Section 218.409(c)(1) of this
 3601 Subpart;

3602
 3603 E) For sources complying with subsection (b)(1)(B) of this Section,
 3604 notify the Agency in writing if the combined emissions of VOM
 3605 from all lithographic printing lines (including inks, fountain
 3606 solutions, and solvents used for cleanup operations associated with

3607 the lithographic printing lines) at the source ever equal or exceed
 3608 6.8 kg/day (15 lbs/day), before the use of capture systems and
 3609 control devices, within 30 days after the event occurs. If such
 3610 emissions of VOM at the source equal or exceed 6.8 kg/day (15
 3611 lbs/day) but do not exceed 45.5 kg/day (100 lbs/day), the source
 3612 shall comply with the requirements in subsection (b)(2) of this
 3613 Section;

3614
 3615 F) For sources complying with subsection (b)(1)(C) of this Section,
 3616 comply with the following:

3617
 3618 i) Maintain material use records showing that the source uses
 3619 less than the amount of material specified in subsections
 3620 (b)(1)(C)(i) and (b)(1)(C)(ii) during each calendar month,
 3621 or, if the source exceeds the material use limitations,
 3622 records showing that the source exceeded the limitations
 3623 but did not emit 6.8 kg/day (15 lbs/day) or more of VOM;

3624
 3625 ii) Notify the Agency in writing if the source exceeds the
 3626 material use limitations for six consecutive calendar
 3627 months, or if the source changes its method of compliance
 3628 from subsection (b)(1)(C) to subsection (b)(1)(B) of this
 3629 Section, within 30 days after the event occurs;

3630
 3631 2) Heatset web offset lithographic printing lines exempt pursuant to Section
 3632 218.405(c)(1) but not exempt pursuant to Section 218.405(c)(2). By May
 3633 1, 2010, or upon initial start-up of a new heatset web offset lithographic
 3634 printing line, whichever is later, and upon modification of a heatset web
 3635 offset lithographic printing line, an owner or operator of heatset web offset
 3636 lithographic printing lines that are exempt from the limitations in Section
 3637 218.407 of this Subpart pursuant to the criteria in Section 218.405(c)(1) of
 3638 this Subpart, but that are not exempt pursuant to the criteria in Section
 3639 218.405(c)(2) of this Subpart, shall submit a certification to the Agency
 3640 that includes the information specified in subsections (b)(2)(A) through
 3641 (b)(2)(C) of this Section. Such owner or operator shall also comply with
 3642 the requirements in subsection (b)(2)(D) of this Section:

3643
 3644 A) A declaration that the source is exempt from the control
 3645 requirements in Section 218.407 of this Part because of the criteria
 3646 in Section 218.405(c)(1) of this Subpart, but is not exempt
 3647 pursuant to the criteria in Section 218.405(c)(2) of this Subpart;
 3648

3649 B) Calculations that demonstrate that combined emissions of
3650 VOM from all lithographic printing lines (including inks,
3651 fountain solutions, and solvents used for cleanup operations
3652 associated with the lithographic printing lines) at the source
3653 never exceed 45.5 kg/day (100 lbs/day) before the use of
3654 capture systems and control devices, as follows (the
3655 following methodology shall also be used to calculate
3656 whether a source exceeds 45.5 kg/day (100 lbs/day) for
3657 purposes of determining eligibility for the exclusions set
3658 forth in Section 218.415(c)(3), in accordance with Sections
3659 218.411(g)(2)(A)(i):

3660
3661 i) To calculate daily emissions of VOM, the owner or
3662 operator shall determine the monthly emissions of
3663 VOM from all lithographic printing lines at the
3664 source (including solvents used for cleanup
3665 operations associated with the lithographic printing
3666 lines) and divide this amount by the number of days
3667 during that calendar month that lithographic
3668 printing lines at the source were in operation;

3669
3670 ii) To determine the VOM content of the inks, fountain
3671 solution additives and cleaning solvents, the test
3672 methods and procedures set forth in Section
3673 218.409(c) of this Subpart shall be used;

3674
3675 iii) To determine VOM emissions from inks used on
3676 lithographic printing lines at the source, an ink
3677 emission adjustment factor of 0.05 shall be used in
3678 calculating emissions from all non-heatset inks
3679 except when using an impervious substrate, and a
3680 factor of 0.80 shall be used in calculating emissions
3681 from all heatset inks to account for VOM retention
3682 in the substrate except when using an impervious
3683 substrate. For impervious substrates such as metal
3684 or plastic, no emission adjustment factor is used.
3685 The VOM content of the ink, as used, shall be
3686 multiplied by this factor to determine the amount of
3687 VOM emissions from the use of ink on the printing
3688 lines;

3689
3690 iv) To determine VOM emissions from cleaning
3691 solvents used on lithographic printing lines at the

3692 source, an emission adjustment factor of 0.50 shall
3693 be used in calculating emissions from cleaning
3694 solution in shop towels if the VOM composite
3695 vapor pressure of such cleaning solution is less than
3696 10 mmHg measured at 20° C (68° F) and the shop
3697 towels are kept in closed containers. For cleaning
3698 solutions with VOM composite vapor pressures of
3699 equal to or greater than 10 mmHg measured at 20°
3700 C (68° F) and for shop towels that are not kept in
3701 closed containers, no emission adjustment factor is
3702 used;

3703
3704 C) A description and the results of all tests used to determine
3705 the VOM content of inks, fountain solution additives, and
3706 cleaning solvents, and a declaration that all such tests have
3707 been properly conducted in accordance with Section
3708 218.409(c)(1) of this Subpart;

3709
3710 D) Notify the Agency in writing if the combined emissions of
3711 VOM from all lithographic printing lines (including inks,
3712 fountain solutions, and solvents used for cleanup operations
3713 associated with the lithographic printing lines) at the source
3714 ever exceed 45.5 kg/day (100 lbs/day), before the use of
3715 capture systems and control devices, within 30 days after
3716 the event occurs.

3717
3718 c2) Unless complying with subsections (b)(1)(C) and (b)(1)(F) of this Section, an
3719 owner or operator of lithographic printing lines subject to the requirements of
3720 subsection (a) or (b) of this Section shall~~On and after March 15, 1996,~~ collect and
3721 record either the information specified in subsection (c)(1) or (c)(2)(a)(2)(A) or
3722 (a)(2)(B) of this Section for all lithographic printing lines at the source:

3723
3724 1A) Standard recordkeeping, including the following:

3725
3726 Ai) The name and identification of each fountain solution additive,
3727 lithographic ink, and cleaning solvent used on any lithographic
3728 printing line, recorded each month;

3729
3730 Bi) A daily record which shows whether a lithographic printing line at
3731 the source was in operation on that day;

3732
3733 Ciii) The VOM content and the volume of each fountain solution
3734 additive, lithographic ink, and cleaning solvent used on any

- 3735 lithographic printing line, recorded each month;
3736
3737 ~~Div~~) The total VOM emissions at the source each month, determined as
3738 the sum of the product of usage and VOM content for each
3739 fountain solution additive, cleaning solvent, and lithographic ink
3740 (with the applicable ink VOM emission adjustment) used at the
3741 source, calculated each month; ~~and~~
3742
3743 ~~Eiv~~) The VOM emissions in lbs/day for the month, calculated in
3744 accordance with Section 218.411(a)(1)(B), 218.411(b)(1)(B), or
3745 218.411(b)(2)(B) of this Subpart, as applicable;
3746
3747 2B) Purchase and inventory recordkeeping, including the following:
3748
3749 Ai) The name, identification, and VOM content of each fountain
3750 solution additive, lithographic ink, and cleaning solvent used on
3751 any lithographic printing line, recorded each month;
3752
3753 Bii) Inventory records from the beginning and end of each month
3754 indicating the total volume of each fountain solution additive,
3755 lithographic ink, and cleaning solvent to be used on any
3756 lithographic printing line at the source;
3757
3758 Ciii) Monthly purchase records for each fountain solution additive,
3759 lithographic ink, and cleaning solvent used on any lithographic
3760 printing line at the source;
3761
3762 ~~Div~~) A daily record which shows whether a lithographic printing line at
3763 the source was in operation on that day;
3764
3765 ~~Eiv~~) The total VOM emissions at the source each month, determined as
3766 the sum of the product of usage and VOM content for each
3767 fountain solution additive, cleaning solvent, and lithographic ink
3768 (with the applicable ink VOM emission adjustment) used at the
3769 source, calculated each month based on the monthly inventory and
3770 purchase records required to be maintained pursuant to subsections
3771 (c)(2)(A), (c)(2)(B), and (c)(2)(C)(a)(2)(B)(i), (a)(2)(B)(ii) and
3772 (a)(2)(B)(iii) of this Section; ~~and~~
3773
3774 ~~Fvi~~) The VOM emissions in lbs/day for the month, calculated in
3775 accordance with Section 218.411(a)(1)(B), 218.411(b)(1)(B), or
3776 218.411(b)(2)(B) of this Subpart, as applicable.;
3777

- 3778 3) ~~On and after March 15, 1996, notify the Agency in writing if the~~
 3779 ~~combined emissions of VOM from all lithographic printing lines~~
 3780 ~~(including inks, fountain solutions, and solvents used for cleanup~~
 3781 ~~operations associated with the lithographic printing lines) at the source~~
 3782 ~~ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems~~
 3783 ~~and control devices, within 30 days after the event occurs. Such~~
 3784 ~~notification shall include a copy of all records of such event.~~
 3785
- 3786 db) An owner or operator of a heatset web offset lithographic printing lines~~line(s)~~
 3787 subject to the control requirements of Section 218.407(a)(1)(C) or (b)(1) of this
 3788 Subpart shall comply with the following:
 3789
- 3790 1) By ~~May 1, 2010~~~~March 15, 1996~~, upon initial start-up of a new printing
 3791 line, and upon initial start-up of a new control device for a heatset web
 3792 offset printing line, submit a certification to the Agency that includes the
 3793 following:
 3794
- 3795 A) An identification of each heatset web offset lithographic printing
 3796 line at the source;
 3797
- 3798 B) A declaration that each heatset web offset lithographic printing line
 3799 is in compliance with the requirements of Section
 3800 218.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) or (b) of this
 3801 Subpart, as appropriate;
 3802
- 3803 C) The type of afterburner or other approved control device used to
 3804 comply with the requirements of Section 218.407(a)(1)(C) or
 3805 (b)(1) of this Subpart and the date that such device was first
 3806 constructed at the source;
 3807
- 3808 D) The control requirements in Section 218.407(a)(1)(C) or (b)(1) of
 3809 this Subpart with which the lithographic printing line is complying;
 3810
- 3811 E) The results of all tests and calculations necessary to demonstrate
 3812 compliance with the control requirements of Section
 3813 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and
 3814
- 3815 F) A declaration that the monitoring equipment required under
 3816 Section 218.407(a)(1)(D) or (b) of this Subpart, as applicable, has
 3817 been properly installed and calibrated according to manufacturer's
 3818 specifications;
 3819
- 3820 2) If testing of the afterburner or other approved control device is conducted

3821 pursuant to Section 218.409(b) of this Subpart, the owner or operator
 3822 shall, within 90 days after conducting such testing, submit a copy of all
 3823 test results to the Agency and shall submit a certification to the Agency
 3824 that includes the following:

3825
 3826 A) A declaration that all tests and calculations necessary to
 3827 demonstrate whether the lithographic printing ~~lines~~line(s) is in
 3828 compliance with Section 218.407(a)(1)(C) or (b)(1) of this
 3829 Subpart, as applicable, have been properly performed;

3830
 3831 B) A statement whether the lithographic printing ~~lines~~line(s) is or is
 3832 not in compliance with Section 218.407(a)(1)(C) or (b)(1) of this
 3833 Subpart, as applicable; and

3834
 3835 C) The operating parameters of the afterburner or other approved
 3836 control device during testing, as monitored in accordance with
 3837 Section 218.410(c) or (d) of this Subpart, as applicable;

3838
 3839 3) ~~Except as provided in subsection (d)(3)(D)(ii) of this Section, On and after~~
 3840 ~~March 15, 1996,~~ collect and record daily the following information for
 3841 each heatset web offset lithographic printing line subject to the
 3842 requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart:

3843
 3844 A) Afterburner or other approved control device monitoring data in
 3845 accordance with Section 218.410(c) or (d) of this Subpart, as
 3846 applicable;

3847
 3848 B) A log of operating time for the afterburner or other approved
 3849 control device, monitoring equipment, and the associated printing
 3850 line;

3851
 3852 C) A maintenance log for the afterburner or other approved control
 3853 device and monitoring equipment detailing all routine and non-
 3854 routine maintenance performed, including dates and duration of
 3855 any outages; and

3856
 3857 D) A log detailing checks on the air flow direction or air pressure of
 3858 the dryer and press room to ~~ensure~~insure compliance with the
 3859 requirements of Section 218.407(a)(1)(B) of this Subpart as
 3860 follows:

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 3862 i) Prior to May 1, 2010, at least once per 24-hour period
 3863 while the line is operating; and

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- ii) On and after May 1, 2010, at least once per calendar month while the line is operating
 - 4) ~~Notify~~On and after March 15, 1996, notify the Agency in writing of any violation of Section 218.407(a)(1)(C) or (b)(1) of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation;
 - 5) If changing its method of compliance between subsections (a)(1)(C) and (b) of Section 218.407 of this Subpart, certify compliance for the new method of compliance in accordance with subsection (b)(1) of this Section at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing ~~lines~~line(s) will be in compliance with the requirements of Section 218.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) of this Subpart, or Section 218.407(b) of this Subpart, as applicable.
- ee) An owner or operator of a lithographic printing line subject to Section 218.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart, shall:
- 1) By ~~May 1, 2010~~March 15, 1996, and upon initial start-up of a new lithographic printing line, certify to the Agency that fountain solutions used on each lithographic printing line will be in compliance with the applicable VOM content limitation. Such certification shall include:
 - A) Identification of each lithographic printing line at the source, by type, e.g., heatset web offset, non-heatset web offset, or sheet-fed offset;
 - B) Identification of each centralized fountain solution reservoir and each lithographic printing line that it serves;
 - C) A statement that the fountain solution will comply with the VOM content limitations in Section 218.407(a)(1)(A), (a)(2), or (a)(3), as applicable. ~~The VOM content limitation with which each fountain solution will comply;~~
 - D) Initial documentation that each type of fountain solution will comply with the applicable VOM content ~~limitations~~limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;

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- E) Identification of the ~~methods~~method that will be used to demonstrate continuing compliance with the applicable limitation, e.g., a refractometer, hydrometer, conductivity meter, or recordkeeping procedures with detailed description of the compliance methodology; and
 - F) A sample of the records that will be kept pursuant to Section 218.411(ee)(2) of this Subpart.
- 2) ~~Collect~~~~On and after March 15, 1996, collect~~ and record the following information for each fountain solution:
- A) The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing ~~line~~line(s) or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch;
 - B) If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to Section 218.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in Section 218.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart:
 - i) The date and time of preparation, and each subsequent modification, of the batch;
 - ii) The results of each measurement taken in accordance with Section 218.410(b) of this Subpart;
 - iii) Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and
 - iv) Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;
 - C) If the VOM content of the fountain solution is determined pursuant to Section 218.410(b)(1)(A) of this Subpart, for each batch of as-applied fountain solution:

- 3950 i) Date and time of preparation and each subsequent
3951 modification of the batch;
- 3952
- 3953 ii) Volume or weight, as applicable, and VOM content of each
3954 component used in, or subsequently added to, the fountain
3955 solution batch;
- 3956
- 3957 iii) Calculated VOM content of the as-applied fountain
3958 solution; and
- 3959
- 3960 iv) Any other information necessary to demonstrate
3961 compliance with the applicable VOM content limits in
3962 Section 218.407(a)(1)(A), (a)(2) and (a)(3) of this Subpart,
3963 as specified in the source's operating permit;
- 3964
- 3965 D) If the VOM content of the fountain solution is determined pursuant
3966 to Section 218.410(b)(2) of this Subpart, for each setting:
- 3967
- 3968 i) VOM content limit corresponding to each setting;
- 3969
- 3970 ii) Date and time of initial setting and each subsequent setting;
- 3971
- 3972 iii) Documentation of the periodic calibration of the automatic
3973 feed equipment in accordance with the manufacturer's
3974 specifications; and
- 3975
- 3976 iv) Any other information necessary to demonstrate
3977 compliance with the applicable VOM content limits in
3978 Sections 218.407(a)(1)(A), (a)(2) and (a)(3) of this Subpart,
3979 as specified in the source's operating permit;
- 3980
- 3981 E) If the owner or operator relies on the temperature of the fountain
3982 solution to comply with the requirements in Section
3983 218.407(a)(1)(A)(ii) or (a)(3)(B) of this Subpart:
- 3984
- 3985 i) The temperature of the fountain solution at each printing
3986 line, as monitored in accordance with Section 218.410(a);
3987 and
- 3988
- 3989 ii) A maintenance log for the temperature monitoring devices
3990 and automatic, continuous temperature recorders detailing
3991 all routine and non-routine maintenance performed,
3992 including dates and duration of any outages;

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- 3) Notify the Agency in writing of any violation of Section 218.407 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation, ~~and~~
- 4) ~~If changing its method of demonstrating compliance with the applicable VOM content limitations in Section 218.407 of this Subpart, or changing the method of demonstrating compliance with the VOM content limitations for fountain solutions pursuant to Section 218.409 of this Subpart, certify compliance for such new method(s) in accordance with subsection (c)(1) of this Section within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 218.407 of this Subpart.~~

fd) For lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the requirements of Section 218.407 of this Subpart shall:

- 1) By ~~May 1, 2010~~ March 15, 1996, and upon initial start-up of a new lithographic printing line, certify to the Agency that all cleaning solutions, other than those excluded pursuant to Section 218.405(c)(3)(C), and the handling of all cleaning materials, will be in compliance with the requirements of Section 218.407(a)(4)(A) or (a)(4)(B) and (a)(5) of this Subpart, and such certification shall also include:
 - A) ~~Identification of each VOM containing cleaning solution used on each lithographic printing line;~~
 - AB) A statement that the cleaning solution will comply with the limitations in Section 218.407(a)(4); The limitation with which each VOM containing cleaning solution will comply, i.e., the VOM content or vapor pressure;
 - C) ~~Initial documentation that each VOM containing cleaning solution will comply with the applicable limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;~~
 - BD) Identification of the ~~methods~~method that will be used to demonstrate continuing compliance with the applicable limitations;
 - CE) A sample of the records that will be kept pursuant to Section

218.411(f)(2) of this Subpart; and

DF) A description of the practices that ensure that VOM-containing cleaning materials are kept in closed containers;

2) ~~Collect~~ On and after March 15, 1996, collect and record the following information for each cleaning solution used on each lithographic printing line:

A) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.407(a)(4)(A) of this Subpart and ~~that~~ which is prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.409(c) of this Subpart;

iii) 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);

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

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

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

B) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.407(a)(4)(A) of this Subpart, and which is not prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) Date and time of preparation, and each subsequent

- 4079 modification, of the batch;
4080
4081 iii) The VOM content of each cleaning solvent in the cleaning
4082 solution, as determined in accordance with Section
4083 218.409(c) of this Subpart;
4084
4085 iv) The total amount of each cleaning solvent and water (or
4086 other non-VOM) used to prepare the as-used cleaning
4087 solution; and
4088
4089 v) The VOM content of the as-used cleaning solution, with
4090 supporting calculations. For cleaning solutions that are
4091 used as purchased, the manufacturer's specifications for
4092 VOM content may be used if such manufacturer's
4093 specifications are based on results of tests of the VOM
4094 content conducted in accordance with methods specified in
4095 Section 218.105(a) of this Part;
4096
4097 C) For each batch of cleaning solution for which the owner or
4098 operator relies on the vapor pressure of the cleaning solution to
4099 demonstrate compliance with Section 218.407(a)(4)(B) of this
4100 Subpart:
4101
4102 i) The name and identification of each cleaning solution;
4103
4104 ii) Date and time of preparation, and each subsequent
4105 modification, of the batch;
4106
4107 iii) The molecular weight, density, and VOM composite partial
4108 vapor pressure of each cleaning solvent, as determined in
4109 accordance with Section 218.409(e) of this Subpart. For
4110 cleaning solutions that are used as purchased, the
4111 manufacturer's specifications for VOM composite partial
4112 vapor pressure may be used if such manufacturer's
4113 specifications are based on results of tests conducted in
4114 accordance with methods specified in Sections 218.105(a)
4115 and 218.110 of this Part;
4116
4117 iv) The total amount of each cleaning solvent used to prepare
4118 the as-used cleaning solution; and
4119
4120 v) The VOM composite partial vapor pressure of each as-used
4121 cleaning solution, as determined in accordance with Section

4122 218.409(e) of this Subpart. For cleaning solutions that are
4123 used as purchased, the manufacturer's specifications for
4124 VOM composite partial vapor pressure may be used if such
4125 manufacturer's specifications are based on results of tests
4126 conducted in accordance with methods specified in
4127 Sections 218.105(a) and 218.110 of this Part;
4128

4129 D) The date, time and duration of scheduled inspections performed to
4130 confirm the proper use of closed containers to control VOM
4131 emissions, and any instances of improper use of closed containers,
4132 with descriptions of actual practice and corrective action taken, if
4133 any;
4134

4135 3) ~~Notify~~ On and after March 15, 1996, notify the Agency in writing of any
4136 violation of Section 218.407 of this Subpart within 30 days after the
4137 occurrence of such violation. Such notification shall include a copy of all
4138 records of such violation. ~~;~~ and
4139

4140 4) ~~If changing its method of demonstrating compliance with the requirements~~
4141 ~~of Section 218.407(a)(4) of this Subpart, or changing between automatic~~
4142 ~~and manual methods of preparing cleaning solutions, certify compliance~~
4143 ~~for such new method in accordance with subsection (d)(1) of this Section,~~
4144 ~~within 30 days after making such change, and perform all tests and~~
4145 ~~calculations necessary to demonstrate that such printing line(s) will be in~~
4146 ~~compliance with the applicable requirements of Section 218.407(a)(4) of~~
4147 ~~this Subpart.~~
4148

4149 g) The owner or operator of lithographic printing lines subject to one or more of the
4150 exclusions set forth in Section 218.405(c)(3) shall:
4151

4152 1) By May 1, 2010, or upon initial start-up of a new lithographic printing line
4153 that is subject to one or more of the exclusions set forth in Section
4154 218.405(c)(3), whichever is later, submit a certification to the Agency that
4155 includes either:
4156

4157 A) A declaration that the source is subject to one or more of the
4158 exclusions set forth in Section 218.405(c)(3) and a statement
4159 indicating which such exclusions apply to the source; or
4160

4161 B) A declaration that the source will not make use of any of the
4162 exclusions set forth in Section 218.405(c)(3);
4163

- 4164 2) Unless the source has certified in accordance with subsection (g)(1)(B) of
4165 this Section that it will not make use of any of the exclusions set forth in
4166 Section 218.405(c)(3):
4167
4168 A) Collect and record the following information for all lithographic
4169 printing lines at the source:
4170
4171 i) Calculations that demonstrate that combined emissions of
4172 VOM from all lithographic printing lines (including inks,
4173 fountain solutions, and solvents used for cleanup operations
4174 associated with the lithographic printing lines) at the source
4175 never exceed 45.5 kg/day (100 lbs/day) before the use of
4176 capture systems and control devices, determined in
4177 accordance with the calculations in Section
4178 218.411(b)(2)(B) of this Subpart;
4179
4180 ii) The amount of cleaning materials used on lithographic
4181 printing lines at the source that does not comply with the
4182 cleaning material limitations in Section 218.407(a)(4) of
4183 this Subpart;
4184
4185 B) Notify the Agency in writing if the combined emissions of VOM
4186 from all lithographic printing lines (including inks, fountain
4187 solutions, and solvents used for cleanup operations associated with
4188 the lithographic printing lines) at the source ever exceed 45.5
4189 kg/day (100 lbs/day), before the use of capture systems and control
4190 devices, within 30 days after the event occurs;
4191
4192 3) If changing from utilization of the exclusions set forth in Section
4193 218.405(c)(3) to opting out of such exclusions pursuant to subsection
4194 (g)(1)(B) of this Section, or if there is a change at the source such that the
4195 exclusions no longer apply, certify compliance in accordance with
4196 subsection (g)(1)(B) of this Section within 30 days after making such
4197 change, and perform all tests and calculations necessary to demonstrate
4198 that such printing lines will be in compliance with the applicable
4199 requirements of Section 218.407 of this Subpart;
4200
4201 4) If changing from opting out of the exclusions set forth in Section
4202 218.405(c)(3) pursuant to subsection (g)(1)(B) of this Section to utilization
4203 of such exclusions, certify compliance in accordance with subsection
4204 (g)(1)(A) of this Section within 30 days after making such change.
4205
4206 he) The owner or operator shall maintain all records required by this Section at the

4207 source for a minimum period of three years and shall make all records available to
 4208 the Agency upon request.

4209
 4210 i) Provisions for calculation of emissions from heatset web offset lithographic
 4211 printing operations. To calculate VOM emissions from heatset web offset
 4212 lithographic printing operations for purposes other than the applicability
 4213 thresholds specified in Section 218.405 of this Subpart, sources may use the
 4214 following emission adjustment factors (for Annual Emissions Reports or permit
 4215 limits, for example):

4216
 4217 1) A factor of 0.80 may be used in calculating emissions from all heatset inks
 4218 to account for VOM retention in the substrate except when using an
 4219 impervious substrate. For impervious substrates such as metal or plastic,
 4220 no emission adjustment factor is used. The VOM content of the ink, as
 4221 used, shall be multiplied by this factor to determine the amount of VOM
 4222 emissions from the use of ink on the printing lines;

4223
 4224 2) To determine VOM emissions from fountain solutions that contain no
 4225 alcohol, an emission adjustment factor may be used to account for
 4226 carryover into the dryer, except when using an impervious substrate. The
 4227 VOM emitted from the fountain solution shall be calculated using the
 4228 following equation:

4229
 4230
$$\underline{Vom_{fs} = 0.30 \times Vom_{tot} + (0.70 \times Vom_{tot}) \times (1 - DE)}$$

4231 where:

4232 VOM_{tot} = Total VOM in the fountain solution;

4233 VOM_{fs} = VOM emitted from the fountain solution;

DE = Destruction efficiency of the control device on the associated
dryer, in decimal form (i.e., 95% control is represented as 0.95).
If no control device is present, DE = 0;

4234
 4235 For fountain solutions that contain alcohol, impervious substrates such as
 4236 metal or plastic, or non-heatset lithographic presses, no emission
 4237 adjustment factor is used;

4238
 4239 3) To determine VOM emissions from cleaning solutions used on heatset
 4240 web offset lithographic printing lines at the source, an emission
 4241 adjustment factor of 0.50 may be used in calculating emissions from used
 4242 shop towels if the VOM composite vapor pressure of each associated

4243 cleaning solution is less than 10 mmHg measured at 20° C (68° F) and the
 4244 shop towels are kept in closed containers. To determine VOM emissions
 4245 from automatic blanket wash solution with a VOM composite vapor
 4246 pressure of less than 10 mmHg measured at 20° C (68° F), an emission
 4247 adjustment factor may be used to account for carryover into the dryer,
 4248 except when using an impervious substrate. The VOM emitted from the
 4249 automatic blanket wash solution shall be calculated using the following
 4250 equation.

4251
 4252
$$Vom_{bw} = \frac{0.60 \times Vom_{tot} + (0.40 \times Vom_{tot}) \times (1 - DE)}{1}$$

4253
 4254 where:
 4255

DE = Destruction efficiency of the control device on the associated
dryer, in decimal form (i.e., 95% control is represented as 0.95).
If no control device is present, DE = 0;

4256
 4257 For cleaning solutions with VOM composite vapor pressures of equal to or
 4258 greater than 10 mmHg measured at 20° C (68° F), for shop towels that are
 4259 not kept in closed containers, and for impervious substrates such as metal
 4260 or plastic, no emission adjustment factor is used.

4261
 4262 (Source: Amended at 34 Ill. Reg. _____, effective _____)

4263
 4264 **Section 218.412 Letterpress Printing Lines: Applicability**
 4265

- 4266 a) Except as provided in subsection (b) of this Section, on and after May 1, 2010, the
 4267 limitations in Sections 218.413 through 218.416 of this Subpart shall apply to:
 4268
- 4269 1) All heatset web letterpress printing lines at a source if all heatset web
 4270 letterpress printing lines (including solvents used for cleanup operations
 4271 associated with heatset web letterpress printing lines) at the source have a
 4272 total potential to emit 22.7 Mg (25 tons) or more of VOM per year; and
 4273
 - 4274 2) All letterpress printing lines at a source where the combined emissions of
 4275 VOM from all letterpress printing lines at the source (including solvents
 4276 used for cleanup operations associated with the letterpress printing lines)
 4277 ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air
 4278 pollution control equipment, calculated in accordance with Section
 4279 218.417(b)(1)(B).
 4280

- 4281 b) Notwithstanding subsection (a) of this Section, the requirements of Section
4282 218.413(a)(2) of this Subpart shall not apply to up to 416.3 liters (110 gallons) per
4283 year of cleaning materials used on letterpress printing lines at a subject source.
4284
- 4285 c) On and after May 1, 2010, the recordkeeping and reporting requirements in
4286 Section 218.417 of this Subpart shall apply to all owners or operators of
4287 letterpress printing lines.
4288
- 4289 d) If a letterpress printing line at a source is or becomes subject to one or more of the
4290 limitations in Section 218.413 of this Subpart, the letterpress printing lines at the
4291 source are always subject to the applicable provisions of this Subpart.
4292

4293 (Source: Added at 34 Ill. Reg. _____, effective _____)
4294

4295 **Section 218.413 Emission Limitations and Control Requirements for Letterpress Printing**
4296 **Lines**
4297

- 4298 a) No owner or operator of letterpress printing lines subject to the requirements of
4299 this Subpart shall:
4300
- 4301 1) Cause or allow the operation of any heatset web letterpress printing line
4302 that meets the applicability requirements of Section 218.412(a)(1) unless:
4303
- 4304 A) The air pressure in the dryer is maintained lower than the air
4305 pressure of the press room, such that air flow through all openings
4306 in the dryer, other than the exhaust, is into the dryer at all times
4307 when the printing line is operating;
4308
- 4309 B) An afterburner is installed and operated so that VOM emissions
4310 (excluding methane and ethane) from the press dryer exhausts are
4311 reduced as follows:
4312
- 4313 i) By 90 percent, by weight, for afterburners first constructed
4314 at the source prior to January 1, 2010;
4315
- 4316 ii) By 95 percent, by weight, for afterburners first constructed
4317 at the source on or after January 1, 2010; or
4318
- 4319 iii) To a maximum afterburner exhaust outlet concentration of
4320 20 ppmv (as carbon);
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- 4322 C) The afterburner complies with all monitoring provisions specified
4323 in Section 218.416(a) of this Subpart; and

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- D) The afterburner is operated at all times when the printing line is in operation, except the afterburner may be shut down between November 1 and April 1 as provided in Section 218.107 of this Part;
- 2) Cause or allow the use of a cleaning solution on any letterpress printing line unless:
 - A) The VOM content of the as-used cleaning solution is less than or equal to 70 percent, by weight; or
 - B) The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20° C (68° F);
- 3) Cause or allow VOM-containing cleaning materials, including used cleaning towels, associated with any letterpress printing line to be kept, stored, or disposed of in any manner other than in closed containers, except when specifically in use.
- b) An owner or operator of a heatset web letterpress printing line subject to the requirements of subsection (a)(1)(B) of this Section may use a control device other than an afterburner, if:
 - 1) The control device reduces VOM emissions from the press dryer exhausts as follows:
 - A) By 90 percent, by weight, for control devices first constructed at the source prior to January 1, 2010;
 - B) By 95 percent, by weight, for control devices first constructed at the source on or after January 1, 2010; or
 - C) To a maximum control device exhaust outlet concentration of 20 ppmv (as carbon);
 - 2) The owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; and
 - 3) The use of the control device in accordance with this plan is approved by the Agency and USEPA as federally enforceable permit conditions.

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

Section 218.415 Testing for Letterpress Printing Lines

a) Testing to demonstrate compliance with the requirements of Section 218.413 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 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 testing to allow the Agency to be present during such testing.

b) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.413(a)(1)(B) or (b)(1) 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. 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;

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 control device, 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 control device is less than 50 ppmv, as carbon;

B) 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

C) 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

4410 elects to use Method 25A under this option, the exhaust VOM
4411 concentration must be 50 ppmv or less, as carbon, and the required
4412 destruction efficiency must be met for the source to have
4413 demonstrated compliance. If the Method 25A test results show
4414 that the required destruction efficiency apparently has been met,
4415 but the exhaust concentration is above 50 ppmv, as carbon, a retest
4416 is required. The retest shall be conducted using either Method 25
4417 or Method 25A. If the retest is conducted using Method 25A and
4418 the test results again show that the required destruction efficiency
4419 apparently has been met, but the exhaust concentration is above 50
4420 ppmv, as carbon, the source must retest using Method 25;

- 4421
- 4422 4) Notwithstanding the criteria or requirements in Method 25 which specifies
4423 a minimum probe temperature of 129° C (265° F), the probe must be
4424 heated to at least the gas stream temperature of the dryer exhaust, typically
4425 close to 176.7° C (350° F);
- 4426
- 4427 5) During testing, the printing lines shall be operated at representative
4428 operating conditions and flow rates; and
- 4429
- 4430 6) During testing, an air flow direction indicating device, such as a smoke
4431 stick, shall be used to demonstrate 100 percent emissions capture
4432 efficiency for the dryer in accordance with Section 218.413(a)(1)(A) of
4433 this Subpart.

4434

4435 c) Testing to demonstrate compliance with the VOM content limitations in Section
4436 218.413(a)(2)(A) of this Subpart, and to determine the VOM content of cleaning
4437 solvents, cleaning solutions, and inks (pursuant to the requirements of Section
4438 218.417(b)(1)(B) of this Subpart), shall be conducted upon request of the Agency,
4439 or as otherwise specified in this Subpart, as follows:

- 4440
- 4441 1) The applicable test methods and procedures specified in Section
4442 218.105(a) of this Part shall be used; provided, however, Method 24,
4443 incorporated by reference in Section 218.112 of this Part, shall be used to
4444 demonstrate compliance; or
- 4445
- 4446 2) The manufacturer's specifications for VOM content for cleaning solvents
4447 and inks may be used if such manufacturer's specifications are based on
4448 results of tests of the VOM content conducted in accordance with methods
4449 specified in Section 218.105(a) of this Part; provided, however, Method 24
4450 shall be used to determine compliance.
- 4451

4452 d) Testing to demonstrate compliance with the requirements of Section 218.413(b)
4453 of this Subpart shall be conducted as set forth in the owner or operator's plan
4454 approved by the Agency and USEPA as federally enforceable permit conditions
4455 pursuant to Section 218.413(b) of this Subpart.

4456
4457 e) Testing to determine the VOM composite partial vapor pressure of cleaning
4458 solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be
4459 conducted in accordance with the applicable methods and procedures specified in
4460 Section 218.110 of this Part.

4461 (Source: Added at 34 Ill. Reg. _____, effective _____)

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4463
4464 **Section 218.416 Monitoring Requirements for Letterpress Printing Lines**

4465
4466 a) Afterburners for heatset web letterpress printing lines. If an afterburner is used to
4467 demonstrate compliance, the owner or operator of a heatset web letterpress
4468 printing line subject to Section 218.413(a)(1)(B) of this Subpart shall:

4469
4470 1) Install, calibrate, maintain, and operate temperature monitoring devices
4471 with an accuracy of 3° C or 5° F on the afterburner in accordance with
4472 Section 218.105(d)(2) of this Part and in accordance with the
4473 manufacturer's specifications. Monitoring shall be performed at all times
4474 when the afterburner is operating; and

4475
4476 2) Install, calibrate, operate, and maintain, in accordance with manufacturer's
4477 specifications, a continuous recorder on the temperature monitoring
4478 devices, such as a strip chart, recorder or computer, with at least the same
4479 accuracy as the temperature monitor.

4480
4481 b) Other control devices for heatset web letterpress printing lines. If a control device
4482 other than an afterburner is used to demonstrate compliance, the owner or
4483 operator of a heatset web letterpress printing line subject to this Subpart shall
4484 install, maintain, calibrate, and operate such monitoring equipment as set forth in
4485 the owner or operator's plan approved by the Agency and USEPA pursuant to
4486 Section 218.413(b) of this Subpart.

4487
4488 c) Cleaning solution.

4489
4490 1) The owner or operator of any letterpress printing line relying on the VOM
4491 content of the cleaning solution to comply with Section 218.413(a)(2)(A)
4492 of this Subpart must:

4493

- 4494 A) For cleaning solutions that are prepared at the source with
4495 equipment that automatically mixes cleaning solvent and water (or
4496 other non-VOM):
- 4497
- 4498 i) Install, operate, maintain, and calibrate the automatic feed
4499 equipment in accordance with manufacturer's specifications
4500 to regulate the volume of each of the cleaning solvent and
4501 water (or other non-VOM), as mixed; and
- 4502
- 4503 ii) Pre-set the automatic feed equipment so that the
4504 consumption rates of the cleaning solvent and water (or
4505 other non-VOM), as applied, comply with Section
4506 218.413(a)(2)(A) of this Subpart;
- 4507
- 4508 B) For cleaning solutions that are not prepared at the source with
4509 automatic feed equipment, keep records of the usage of cleaning
4510 solvent and water (or other non-VOM) as set forth in Section
4511 218.417(c)(2) of this Subpart.
- 4512
- 4513 2) The owner or operator of any letterpress printing line relying on the vapor
4514 pressure of the cleaning solution to comply with Section 218.413(a)(2)(B)
4515 of this Subpart must keep records for such cleaning solutions used on any
4516 such lines as set forth in Section 218.417(e)(2)(C) of this Subpart.

4517
4518 (Source: Added at 34 Ill. Reg. _____, effective _____)

4519

4520 **Section 218.417 Recordkeeping and Reporting for Letterpress Printing Lines**

- 4521
- 4522 a) By May 1, 2010, or upon initial start-up of a new heatset web letterpress printing
4523 line, whichever is later, and upon modification of a heatset web letterpress
4524 printing line, an owner or operator of a heatset web letterpress printing line
4525 exempt from any of the limitations of Section 218.413 of this Subpart because of
4526 the criteria in Section 218.412(a)(1) shall submit a certification to the Agency that
4527 includes:
- 4528
- 4529 1) A declaration that the source is exempt from the requirements in Section
4530 218.413 of this Subpart because of the criteria in Section 218.412(a)(1) of
4531 this Subpart;
- 4532
- 4533 2) Calculations which demonstrate that the source's total potential to emit
4534 VOM does not equal or exceed 22.7 Mg (25 tons) per year.
- 4535

- 4536 b) An owner or operator of a letterpress printing line exempt from any of the
4537 limitations of Section 218.413 of this Subpart because of the criteria in Section
4538 218.412(a)(2) shall:
4539
- 4540 1) By May 1, 2010, or upon initial start-up of a new letterpress printing line,
4541 whichever is later, and upon modification of a letterpress printing line,
4542 submit a certification to the Agency that includes the information specified
4543 in either subsections (b)(1)(A) through (b)(1)(C) of this Section, or
4544 subsections (b)(1)(A) and (b)(1)(D) of this Section, as applicable:
4545
- 4546 A) A declaration that the source is exempt from the control
4547 requirements in Section 218.413 of this Part because of the criteria
4548 in Section 218.412(a)(2) of this Subpart;
4549
- 4550 B) Calculations that demonstrate that combined emissions of VOM
4551 from all letterpress printing lines (including inks and solvents used
4552 for cleanup operations associated with the letterpress printing
4553 lines) at the source never equal or exceed 6.8 kg/day (15 lbs/day),
4554 in the absence of air pollution control equipment, as follows:
4555
- 4556 i) To calculate daily emissions of VOM, the owner or
4557 operator shall determine the monthly emissions of VOM
4558 from all letterpress printing lines at the source (including
4559 solvents used for cleanup operations associated with the
4560 letterpress printing lines) and divide this amount by the
4561 number of days during that calendar month that letterpress
4562 printing lines at the source were in operation;
4563
- 4564 ii) To determine the VOM content of the inks and cleaning
4565 solvents, the tests methods and procedures set forth in
4566 Section 218.415(c) of this Subpart shall be used;
4567
- 4568 iii) To determine VOM emissions from inks used on letterpress
4569 printing lines at the source, an ink emission adjustment
4570 factor of 0.05 shall be used in calculating emissions from
4571 all non-heatset inks except when using an impervious
4572 substrate, and a factor of 0.80 shall be used in calculating
4573 emissions from all heatset inks to account for VOM
4574 retention in the substrate except when using an impervious
4575 substrate. For impervious substrates such as metal or
4576 plastic, no emission adjustment factor is used. The VOM
4577 content of the ink, as used, shall be multiplied by this factor

4578 to determine the amount of VOM emissions from the use of
 4579 ink on the printing lines; and

4581 iv) To determine VOM emissions from cleaning solutions used
 4582 on letterpress printing lines at the source, an emission
 4583 adjustment factor of 0.50 shall be used in calculating
 4584 emissions from used shop towels if the VOM composite
 4585 vapor pressure of each associated cleaning solution is less
 4586 than 10 mmHg measured at 20° C (68° F) and the shop
 4587 towels are kept in closed containers. Otherwise, no
 4588 retention factor is used;

4590 C) A description and the results of all tests used to determine the
 4591 VOM content of inks and cleaning solvents, and a declaration that
 4592 all such tests have been properly conducted in accordance with
 4593 Section 218.415(c)(1) of this Subpart;

4595 D) As an alternative to the calculations in subsection (b)(1)(B), a
 4596 statement that the source uses less than the amount of material
 4597 specified in subsections (b)(1)(D)(i) or (b)(1)(D)(ii), as applicable,
 4598 during each calendar month. A source may determine that it emits
 4599 below 6.8 kg/day (15 lbs/day) of VOM based upon compliance
 4600 with such material use limitations. If the source exceeds this
 4601 amount of material use in a given calendar month, the owner or
 4602 operator must, within 15 days of the end of that month, complete
 4603 the emissions calculations of subsection (b)(1)(B) to determine
 4604 daily emissions for applicability purposes. If the source ever
 4605 exceeds this amount of material use for six consecutive calendar
 4606 months, it is no longer eligible to use this subsection as an
 4607 alternative to the calculations in subsection (b)(1)(B).

4609 i) The sum of all sheetfed and nonheatset web letterpress
 4610 printing operations at the source: 242.3 liters (64 gallons)
 4611 of cleaning solvent; or

4613 ii) The sum of all heatset web letterpress printing operations at
 4614 the source: 204.1 kg (450 lbs) of ink and cleaning solvent;

4616 2) For sources complying with subsection (b)(1)(B) of this Section, notify the
 4617 Agency in writing if the combined emissions of VOM from all letterpress
 4618 printing lines (including inks and solvents used for cleanup operations
 4619 associated with the letterpress printing lines) at the source ever equal or

- 4620 exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control
4621 equipment, within 30 days after the event occurs;
4622
- 4623 3) For sources complying with subsection (b)(1)(D) of this Section, comply
4624 with the following:
4625
- 4626 A) Maintain material use records showing that the source uses less
4627 than the amount of material specified in subsections (b)(1)(D)(i)
4628 and (b)(1)(D)(ii) during each calendar month, or, if the source
4629 exceeds the material use limitations, records showing that the
4630 source exceeded the limitations but did not emit 6.8 kg/day (15
4631 lbs/day) or more of VOM;
4632
- 4633 B) Notify the Agency in writing if the source exceeds the material use
4634 limitations for six consecutive calendar months, or if the source
4635 changes its method of compliance from subsection (b)(1)(D) to
4636 subsection (b)(1)(B) of this Section, within 30 days after the event
4637 occurs.
4638
- 4639 c) Unless complying with subsection (b)(1)(D) and (b)(3) of this Section, on and
4640 after May 1, 2010, an owner or operator of a letterpress printing line subject to the
4641 requirements in subsections (a) or (b) of this Section shall collect and record
4642 either the information specified in subsection (c)(1) or (c)(2) of this Section for all
4643 letterpress printing lines at the source:
4644
- 4645 1) Standard recordkeeping, including the following:
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- 4647 A) The name and identification of each letterpress ink and cleaning
4648 solvent used on any letterpress printing line, recorded each month;
4649
- 4650 B) A daily record that shows whether a letterpress printing line at the
4651 source was in operation on that day;
4652
- 4653 C) The VOM content and the volume of each letterpress ink and
4654 cleaning solvent used on any letterpress printing line, recorded
4655 each month;
4656
- 4657 D) The total VOM emissions at the source each month, determined as
4658 the sum of the product of usage and VOM content for each
4659 cleaning solvent and letterpress ink (with the applicable ink VOM
4660 emission adjustment) used at the source, calculated each month;
4661 and
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- E) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.417(b)(1)(B) of this Subpart;
 - 2) Purchase and inventory recordkeeping, including the following:
 - A) The name, identification, and VOM content of each letterpress ink and cleaning solvent used on any letterpress printing line, recorded each month;
 - B) Inventory records from the beginning and end of each month indicating the total volume of each letterpress ink, and cleaning solvent to be used on any letterpress printing line at the source;
 - C) Monthly purchase records for each letterpress ink and cleaning solvent used on any letterpress printing line at the source;
 - D) A daily record that shows whether a letterpress printing line at the source was in operation on that day;
 - E) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each cleaning solvent and letterpress ink (with the applicable ink VOM emission adjustment factor) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to subsections (c)(2)(A), (c)(2)(B), and (c)(2)(C) of this Section; and
 - F) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.417(b)(1)(B) of this Subpart;
 - d) An owner or operator of a heatset web letterpress printing lines subject to the control requirements of Section 218.413(a)(1)(B) or (b)(1) of this Subpart shall comply with the following:
 - 1) By May 1, 2010, or upon initial start-up of a new printing line, whichever is later, and upon initial start-up of a new control device for a heatset web printing line, submit a certification to the Agency that includes the following:
 - A) An identification of each heatset web letterpress printing line at the source;

- 4705 B) A declaration that each heatset web letterpress printing line is in
4706 compliance with the requirements of Section 218.413 (a)(1) or (b)
4707 of this Subpart, as appropriate;
4708
- 4709 C) The type of afterburner or other approved control device used to
4710 comply with the requirements of Section 218.413(a)(1)(B) or
4711 (b)(1) of this Subpart, and the date that such device was first
4712 constructed at the subject source;
4713
- 4714 D) The control requirements in Section 218.413(a)(1)(B) or (b)(1) of
4715 this Subpart with which the letterpress printing line is complying;
4716
- 4717 E) The results of all tests and calculations necessary to demonstrate
4718 compliance with the control requirements of Section
4719 218.413(a)(1)(B) or (b)(1) of this Subpart, as applicable; and
4720
- 4721 F) A declaration that the monitoring equipment required under
4722 Section 218.413(a)(1)(C) or (b) of this Subpart, as applicable, has
4723 been properly installed and calibrated according to manufacturer's
4724 specifications;
4725
- 4726 2) If testing of the afterburner or other approved control device is conducted
4727 pursuant to Section 218.415(b) of this Subpart, the owner or operator
4728 shall, within 90 days after conducting such testing, submit a copy of all
4729 test results to the Agency and shall submit a certification to the Agency
4730 that includes the following:
4731
- 4732 A) A declaration that all tests and calculations necessary to
4733 demonstrate whether the letterpress printing lines is in compliance
4734 with Section 218.413(a)(1)(B) or (b)(1) of this Subpart, as
4735 applicable, have been properly performed;
4736
- 4737 B) A statement whether the heatset web letterpress printing lines is or
4738 is not in compliance with Section 218.413(a)(1)(B) or (b)(1) of this
4739 Subpart, as applicable; and
4740
- 4741 C) The operating parameters of the afterburner or other approved
4742 control device during testing, as monitored in accordance with
4743 Section 218.416(a) or (b) of this Subpart, as applicable;
4744
- 4745 3) Except as provided in subsection (d)(3)(D) of this Section, collect and
4746 record daily the following information for each heatset web letterpress

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printing line subject to the requirements of Section 218.413(a)(1)(B) or (b)(1) of this Subpart:

- A) Afterburner or other approved control device monitoring data in accordance with Section 218.416(a) or (b) of this Subpart, as applicable;
- B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated printing line;
- 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; and
- D) A log detailing checks on the air flow direction or air pressure of the dryer and press room to ensure compliance with the requirements of Section 218.413(a)(1)(A) of this Subpart at least once per calendar month while the line is operating;

- 4) Notify the Agency in writing of any violation of Section 218.413(a)(1)(B) or (b)(1) of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation;
- 5) If changing the method of compliance between Sections 218.413(a)(1)(B) and 218.413(b) of this Subpart, certify compliance for the new method of compliance in accordance with Section 218.413(b) at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing lines will be in compliance with the requirements of Section 218.413(a)(1) of this Subpart, or Section 218.413(b) of this Subpart, as applicable.

e) For letterpress printing line cleaning operations, an owner or operator of a letterpress printing line subject to the requirements of Section 218.413 of this Subpart shall:

- 1) By May 1, 2010, or upon initial start-up of a new letterpress printing line, whichever is later, certify to the Agency that all cleaning solutions, other than those excluded pursuant to Section 218.412(b), and the handling of all cleaning materials will be in compliance with the requirements of

4789 Section 218.413(a)(2)(A) or (a)(2)(B) and (a)(3) of this Subpart. Such
4790 certification shall include:

- 4791
- 4792 A) A statement that the cleaning solution will comply with the
4793 limitations in Section 218.413(a)(2);
- 4794
- 4795 B) Identification of the methods that will be used to demonstrate
4796 continuing compliance with the applicable limitations;
- 4797
- 4798 C) A sample of the records that will be kept pursuant to Section
4799 218.417(e)(2) of this Subpart; and
- 4800
- 4801 D) A description of the practices that ensure that VOM-containing
4802 cleaning materials are kept in closed containers;
- 4803

4804 2) Collect and record the following information for each cleaning solution
4805 used on each letterpress printing line:

- 4806
- 4807 A) For each cleaning solution for which the owner or operator relies
4808 on the VOM content to demonstrate compliance with Section
4809 218.413(a)(2)(A) of this Subpart and that is prepared at the source
4810 with automatic equipment:
 - 4811
 - 4812 i) The name and identification of each cleaning solution;
 - 4813
 - 4814 ii) The VOM content of each cleaning solvent in the cleaning
4815 solution, as determined in accordance with Section
4816 218.415(c) of this Subpart;
 - 4817
 - 4818 iii) Each change to the setting of the automatic equipment, with
4819 date, time, description of changes in the cleaning solution
4820 constituents (e.g., cleaning solvents), and a description of
4821 changes to the proportion of cleaning solvent and water (or
4822 other non-VOM);
 - 4823
 - 4824 iv) The proportion of each cleaning solvent and water (or other
4825 non-VOM) used to prepare the as-used cleaning solution;
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 - 4827 v) The VOM content of the as-used cleaning solution, with
4828 supporting calculations; and
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 - 4830 vi) A calibration log for the automatic equipment, detailing
4831 periodic checks;

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- B) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.413(a)(2)(A) of this Subpart, and that is not prepared at the source with automatic equipment:
- i) The name and identification of each cleaning solution;
 - ii) Date and time of preparation, and each subsequent modification, of the batch;
 - iii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.415(c) of this Subpart;
 - iv) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
 - v) The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM content may be used if such 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;
- C) 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 218.413(a)(2)(B) of this Subpart:
- i) The name and identification of each cleaning solution;
 - ii) Date and time of preparation, and each subsequent modification, of the batch;
 - iii) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 218.415(e) of this Subpart. For cleaning solutions that are used as purchased, the manufacturer's specifications for VOM composite partial vapor pressure may be used if such manufacturer's

- 4875 specifications are based on results of tests conducted in
4876 accordance with methods specified in Sections 218.105(a)
4877 and 218.110 of this Part;
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4879 iv) The total amount of each cleaning solvent used to prepare
4880 the as-used cleaning solution; and
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4882 v) The VOM composite partial vapor pressure of each as-used
4883 cleaning solution, as determined in accordance with Section
4884 218.415(e) of this Subpart. For cleaning solutions that are
4885 used as purchased, the manufacturer's specifications for
4886 VOM composite partial vapor pressure may be used if such
4887 manufacturer's specifications are based on results of tests
4888 conducted in accordance with methods specified in
4889 Sections 218.105(a) and 218.110 of this Part;
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4891 D) The date, time, and duration of scheduled inspections performed to
4892 confirm the proper use of closed containers to control VOM
4893 emissions, and any instances of improper use of closed containers,
4894 with descriptions of actual practice and corrective action taken, if
4895 any;
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4897 E) The amount of cleaning materials used on letterpress printing lines
4898 at the source that do not comply with the cleaning material
4899 limitations set forth in Section 218.413(a)(2) of this Subpart;
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4901 3) Notify the Agency in writing of any violation of Section 218.413 of this
4902 Subpart within 30 days after the occurrence of such violation. Such
4903 notification shall include a copy of all records of such violation.
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4905 f) The owner or operator shall maintain all records required by this Section at the
4906 source for a minimum period of three years and shall make all records available to
4907 the Agency upon request.
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(Source: Added at 34 Ill. Reg. _____, effective _____)