

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

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

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

SOURCE: Adopted in R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg.

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

## **SUBPART A: GENERAL PROVISIONS**

### **Section 219.106 Compliance Dates**

- a) Except as provided in subsection (b) or (c) below, compliance with the requirements of this Part is required by May 15, 1992, consistent with the provisions of Section 219.103 of this Part.
- b) As this Part is amended from time to time, compliance dates included in the specific Subparts supersede the requirements of this Section except as limited by Section 219.101(b) of this Subpart.
- c) Any owner or operator of a source subject to the requirements of Section 219.204(o) of this Part shall comply with the requirements in Section 219.204(o), as well as all applicable requirements in Sections 219.205 through 219.211, 219.214, and 219.217, by May 1, 2010.

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## **SUBPART E: SOLVENT CLEANING**

### **Section 219.181 Solvent Cleaning Degreasing Operations~~in General~~**

The requirements of Sections 219.182, 219.183, 219.184, and 219.186 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 \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.187 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 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 219.182, 219.183, or 219.184;

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; and
- xv) Cleaning of numismatic dies.

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 does not exceed the following emissions limitations:

<u>A) Product cleaning during manufacturing process or surface preparation for coating, adhesive, or ink application:</u>	<u>kg/l</u>	<u>lb/gal</u>
<u>i) Electrical apparatus components and electronic components</u>	<u>0.10</u>	<u>0.83</u>
<u>ii) Medical device and pharmaceutical manufacturing</u>	<u>0.80</u>	<u>6.7</u>
<u>B) Repair and maintenance cleaning:</u>	<u>kg/l</u>	<u>lb/gal</u>
<u>i) Electrical apparatus components and electronic components</u>	<u>0.10</u>	<u>0.83</u>
<u>ii) Medical device and pharmaceutical manufacturing: tools, equipment, and machinery</u>	<u>0.80</u>	<u>6.7</u>
<u>iii) Medical device and pharmaceutical manufacturing: general work surfaces</u>	<u>0.60</u>	<u>5.0</u>
<u>C) Cleaning of ink application equipment:</u>	<u>kg/l</u>	<u>lb/gal</u>
<u>i) Rotogravure printing that does not print flexible packaging</u>	<u>0.10</u>	<u>0.83</u>
<u>ii) Screen printing and digital printing</u>	<u>0.50</u>	<u>4.2</u>
<u>iii) Ultraviolet ink and electron beam ink application equipment, except screen printing and digital printing</u>	<u>0.65</u>	<u>5.4</u>

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

D) All other cleaning operations not subject to a specific limitation in subsections (b)(1)(A) through (b)(1)(C) of this Section kg/l lb/gal  
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 219.187(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 219.187(a)(1);

ii) Calculations which 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. Such notification shall include calculations showing the daily emissions of VOM from cleaning operations at the source for the day(s) in which emissions equaled or exceeded 6.8 kg/day (15 lbs/day);

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) The limitation with which each subject cleaning operation will comply (i.e., the emissions control system requirement, VOM content limitation, or vapor pressure limitation), and 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) 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 219.187(d); and
  - vii) A description of each cleaning operation exempt pursuant to Section 219.187(a)(2), if any, and a listing of the emission unit(s) on which the exempt cleaning operation is performed;
- B) At least 30 calendar days before changing the method of compliance between subsections (b)(1), (b)(2), and (b)(3) of this Section, notify the Agency in writing of such change. Such 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 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 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 219.105(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 219.110 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 219.110 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 219.187(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 219.187(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 219.187(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 219.187(b)(3) of this Subpart; and
  - iii) The operating parameters of the emissions control system during testing, as monitored in accordance with Section 219.187(f) of this Subpart;
- C) Collect and record daily the following information for each cleaning operation subject to the requirements of Section 219.187(b)(3) of this Subpart:
- i) Emissions control system monitoring data in accordance with Section 219.187(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 (b) or (d) 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;
- 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 219.187(b)(3) of this Subpart shall:
    - A) Install, calibrate, operate, and maintain temperature monitoring device(s) with an accuracy of 3° C or 5° F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and
    - B) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device(s), 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 219.187(b)(3) of 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 219.187(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. 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;
- 2) Testing to demonstrate compliance with the VOM content limitations in Section 219.187(b)(1) of this Subpart, and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted upon request of the Agency, as follows:
  - A) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used, provided, however, Method 24, incorporated by reference in Section 219.112 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 219.105(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 219.110 of this Part;
- 4) For afterburners and carbon adsorbers, the methods and procedures of Section 219.105(d) through (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.187(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 219.112 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 219.112 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 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:
- i) The allowable outlet concentration of VOM from the 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 219.187(b)(3) of this Subpart as set forth in the owner or operator's plan approved by the Agency and USEPA as federally enforceable permit conditions pursuant to Section 219.187(b)(3) of this Subpart.

(Source: Added at \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **SUBPART F: COATING OPERATIONS**

#### Section 219.204 Emission Limitations

Except as provided in Sections 219.205, 219.207, 219.208, 219.212, 219.215 and 219.216 of this Subpart, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. Except as provided in Sections 219.204(l) and 219.204(o), compliance with the emission limitations marked with an asterisk in this Section is required on and after March 15, 1996, and compliance with emission limitations not marked with an asterisk is required until March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with this Subpart must be demonstrated through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(c) of this Subpart except where noted. (Note: The equation presented in Section 219.206 of this Part shall be used to calculate emission limitations for determining compliance by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.) The emission limitations are as follows:

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

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

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

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

		kg/l	lb/gal
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 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)*
		kg/l	lb/gal
c)	Paper Coating	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 219.401~~ of this Part. In addition, screen printing on paper is not regulated as paper coating, but is regulated under Subpart TT of this Part.)

		kg/l	lb/gal
d)	Coil Coating	0.31 0.20*	(2.6) (1.7)*
e)	Fabric Coating	0.35 0.28*	(2.9) (2.3)*
f)	Vinyl Coating	0.45 0.28*	(3.8) (2.3)*
g)	Metal Furniture Coating		

1)	Air dried	0.36	(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 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.)

		kg/l	lb/gal
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
		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)		Metallic Coating		
	A)	Air Dried	0.42	(3.5)
			0.42*	(3.5)*
	B)	Baked	0.36	(3.0)
			0.36	(3.0)*
6)		For purposes of subsection 219.204(j)(5) of this Section, "metallic coating" means a coating which contains more than 1/4 lb/gal of metal particles, as applied.		
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.		
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.)

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

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

iii)	Acid-cured alkyd amino vinyl sealer	2.3	(2.3)
iv)	Acid-cured alkyd amino conversion varnish topcoat	2.0	(2.0)

- C) Meet the provisions of Section 219.215 of this Subpart for use of an averaging approach;
- D) Achieve a reduction in emissions equivalent to the requirements of Section 219.204(1)(2)(A) or (B) of this Subpart, as calculated using Section 219.216 of this Subpart; or
- E) Use a combination of the methods specified in Section 219.204(1)(2)(A) through (D) of this Subpart.

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

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

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

- A) No source subject to the limitations of subsection (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 219.217 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)	Plastic Parts Coating: Automotive/Transportation	kg/l	lb/gal
	1) Interiors		
	A) Baked		
	i) Color coat	0.49*	(4.1)*
	ii) Primer	0.46*	(3.8)*
	B) Air Dried		
	i) Color coat	0.38*	(3.2)*
	ii) Primer	0.42*	(3.5)*
	2) Exteriors (flexible and non-flexible)		

A)	Baked		
	i) Primer	0.60*	(5.0)*
	ii) Primer non-flexible	0.54*	(4.5)*
	iii) Clear coat	0.52*	(4.3)*
	iv) Color coat	0.55*	(4.6)*
B)	Air Dried		
	i) Primer	0.66*	(5.5)*
	ii) Clear coat	0.54*	(4.5)*
	iii) Color coat (red & black)	0.67*	(5.6)*
	iv) Color coat (others)	0.61*	(5.1)*
3)	Specialty		
A)	Vacuum metallizing basecoats, texture basecoats	0.66*	(5.5)*
B)	Black coatings, reflective argent coatings, air bag cover coatings, and soft coatings	0.71*	(5.9)*
C)	Gloss reducers, vacuum metallizing topcoats, and texture topcoats	0.77*	(6.4)*
D)	Stencil coatings, adhesion primers, ink pad coatings, electrostatic prep coatings, and resist coatings	0.82*	(6.8)*

	E)	Head lamp lens coatings	0.89*	(7.4)*
n)		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)*
<u>o) Flat Wood Paneling Coatings. On and after May 1, 2010, flat wood paneling coatings shall comply with one of the following limitations:</u>				
	<u>1) 0.25 kg VOM/l of coatings (2.1 lb VOM/gal coatings); or</u>			
	<u>2) 0.35 kg VOM/l solids (2.9 lb VOM/gal solids).</u>			

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 219.205 Daily-Weighted Average Limitations**

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

- a) No owner or operator of a coating line subject to only one of the limitations from among Section 219.204(a)(1), (a)(4), (c), (d), (e), (f), or

(i), or (o) 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 219.204(j) of this Subpart shall apply coatings to miscellaneous metal parts or products on the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

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

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

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

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

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

where:

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

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

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

where:

- $A_d$  = The VOM emissions allowed for the day in units of kg/day (lbs/day);
- $i$  = Subscript denoting a specific coating applied;
- $n$  = Total number of surface coatings applied in the can coating operation;
- $C_i$  = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);
- $D_i$  = The density of VOM in each coating applied. For the purposes of calculating  $A_d$ , the density is

0.882 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 219.204(b) of this Subpart in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

d) No owner or operator of a heavy off-highway vehicle products coating line subject to the limitations of Section 219.204(k) of this Subpart shall apply coatings to heavy off-highway vehicle products on the subject coating line unless the requirements of subsection (d)(1) or (d)(2) of this Section are met.

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

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

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

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

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

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

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

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

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

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

- 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used, or
  - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(g) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- h) No owner or operator of a large appliance coating line subject to the limitations of Section 219.204(h) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met.
- 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used, or
  - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(h) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective\_\_\_\_\_)

**Section 219.207      Alternative Emission Limitations**

- a) Any owner or operator of a coating line subject to Section 219.204 of this Subpart may comply with this Section, rather than with Section 219.204 of

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

b) Alternative Add-On Control Methodologies

- 1) The coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency, or
- 2) The system used to control VOM from the coating line is demonstrated to have an overall efficiency sufficient to limit VOM emissions to no more than what is allowed under Section 219.204 of this Subpart. Use of any control system other than an afterburner, carbon adsorption, condensation, or absorption scrubber system can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. The use of transfer efficiency credits can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. Baseline transfer efficiencies and transfer efficiency test methods must be approved by the Agency and the USEPA. Such overall efficiency is to be determined as follows:
  - A) Obtain the emission limitation from the appropriate subsection in Section 219.204 of this Subpart;
  - B) Calculate "S" according to the equation in Section 219.206 of this Subpart;

- C) Calculate the overall efficiency required according to Section 219.105(e) of this Part. For the purposes of calculating this value, according to the equation in Section 219.105(e)(2) of this Part,  $VOM_1$  is equal to the value of "S" as determined above in subsection (b)(2)(B) of this Section.
- c) No owner or operator of a coating line subject to only one of the emission limitations from among Section 219.204(a)(1), (a)(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 219.204(a)(2) or (a)(3) of this Part and equipped with a capture system and control device shall operate the coating line unless the owner or operator demonstrates compliance with such limitation in accordance with the topcoat protocol referenced in Section 219.105(b) of this Part.
- 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 219.204(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 [3.5 lbs/gal]), and which 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 219.204(k) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 [3.5 lbs/gal]), and which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- f) No owner or operator of a wood furniture coating line which applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/1 [5.6 lbs/gal]), and which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. If compliance is achieved by meeting the requirements in subsection (b)(2) of this Section, then the

provisions in the note to Section 219.204(l) of this Subpart must also be met.

- g) No owner or operator of a can coating line and equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (g)(1) or (g)(2) of this Section are met.
- 1) An alternative daily emission limitation for the can coating operation, i.e. for all of the can coating lines at the source, shall be determined according to Section 219.205(c)(2) of this Subpart. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation:

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

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.

- 2) The coating line is equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.
- h) No owner or operator of a plastic parts coating line which applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l [3.5 lbs/gal]), and which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- i) No owner or operator of a metal furniture coating line which applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l [2.8 lbs/gal]), and which is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- j) No owner or operator of a large appliance coating line which applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l [2.8 lbs/gal]), and which 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 flat wood paneling coating line which 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 \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

### **Section 219.210      Compliance Schedule**

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

- a) No owner or operator of a coating line which is exempt from the limitations of Section 219.204 of this Subpart because of the criteria in Section 219.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.211(b) of this Subpart.
- b) No owner or operator of a coating line complying by means of Section 219.204 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.204 and 219.211(c) of this Subpart.
- c) No owner or operator of a coating line complying by means of Section 219.205 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.205 and 219.211(d) of this Subpart.
- d) No owner or operator of a coating line complying by means of Section 219.207 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.207 and 219.211(e) of this Subpart.
- e) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.204, 219.205 or 219.207 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with, respectively, the applicable requirements in Section 219.204, or the alternative control options in Sections 219.205 or 219.207 and the requirements of Section 219.211.

- f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.212 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with the requirements of Sections 219.212 and 219.213 of this Subpart.
- g) No owner or operator of a coating line subject to the emission limitations contained in Section 219.204(o) of this Subpart shall operate said coating line on or after a date consistent with Section 219.106(c) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.204(o) or the alternative control options in Section 219.205 or 219.207, and the requirements of Sections 219.211 and 219.217 of this Subpart, as applicable.

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

#### **Section 219.211 Recordkeeping and Reporting**

- a) The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in Section 219.105 of this Part to establish the records required under this Section.
- b) Any owner or operator of a coating line which is exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) or (b) of this Subpart shall comply with the following:
  - 1) For sources exempt from Section 219.208(a) of this Subpart, by a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the coating line or group of coating lines is exempt under the provisions of Section 219.208(a) of this Subpart. Such certification shall include:
    - A) A declaration that the coating line is exempt from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart; and
    - B) Calculations which demonstrate that the combined VOM emissions from the coating line and all other coating lines

in the same category never exceed 6.8 kg (15 lbs) per day before the application of capture systems and control devices. The following equation shall be used to calculate total VOM emissions:

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

where:

- $T_e$  = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);
- $m$  = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 219.104 of this Part (because they belong to the same category, e.g., can coating);
- $j$  = Subscript denoting an individual coating line;
- $n$  = Number of different coatings as applied each day on each coating line;
- $i$  = Subscript denoting an individual coating;
- $A_i$  = Weight of VOM per volume of each coating (minus water and any compounds 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);
- $B_i$  = 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.

2) For sources exempt under Section 219.208(b) of this Subpart, by

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

- A) A declaration that the source is exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart; and
  - B) Calculations which demonstrate that the source meets the criteria of exemption because of Section 219.208(b) of this Subpart.
- 3) For sources exempt under Section 219.208(a) of this Subpart, on and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of lines referenced in this subsection 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 219.208(b) of this Subpart, on and after March 15, 1998, the owner or operator of a coating line or group of coating lines referenced in this subsection (b) shall collect and record all of the following information for each coating line and maintain the information at the source for a period of three years:
- A) The name and identification number of each coating as applied on each coating line; and
  - B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line on a monthly basis.

- 5) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart shall notify the Agency of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by sending a copy of such record to the Agency within 30 days after the exceedance occurs.
  - 6) On and after March 15, 1998, any owner or operator of a source exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart shall notify the Agency if the source's VOM emissions exceed the limitations of Section 219.208(b) of this Subpart by sending a copy of calculations showing such an exceedance within 30 days after the change occurs.
- c) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart other than Section 219.204(a)(2) and (a)(3) of this Subpart and complying by means of Section 219.204 of this Subpart shall comply with the following:
- 1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from Section 219.205, Section 219.207, Section 219.215, or Section 219.216 of this Subpart to Section 219.204 of this Subpart; the owner or operator of a subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. Such certification shall include:
    - A) The name and identification number of each coating as applied on each coating line;
    - B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line; and

- C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line; and-
  - D) For coating lines subject to the limitations of Section 219.204(o) 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 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
- A) The name and identification number of each coating as applied on each coating line;
  - B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;
  - C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line and certified product data sheets for each coating; and
  - D) On and after March 15, 1998, for wood furniture coating spray booths subject to the limitation of Section 219.204(l)(4)(A) of this Subpart, the weight of VOM per weight of solids in each strippable spray booth coating as applied each day on each spray booth and certified product data sheets for each coating; and-
  - E) For coating lines subject to the limitations of Section 219.204(o) 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 219.106 of this Part, the

owner or operator of a subject coating line shall notify the Agency in the following instances:

- A) Any record showing violation of Section 219.204 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
  - B) At least 30 calendar days before changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d)(1) or (e)(1) below, respectively. Upon changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d) or (e) of this Section, respectively.
- d) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of Section 219.205 of this Subpart shall comply with the following:
- 1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing subject coating line from Section 219.204 or Section 219.207 to Section 219.205 of this Subpart; the owner or operator of the subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.205 on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. Such certification shall include:
    - A) The name and identification number of each coating line which will comply by means of Section 219.205 of this Subpart.
    - B) The name and identification number of each coating as applied on each coating line.
    - C) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

- D) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.
- E) For coating lines subject to the limitations of Section 219.204(o) 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 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

- A) The name and identification number of each coating as applied on each coating line.
- B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.
- D) For coating lines subject to the limitations of Section 219.204(o) of this Subpart, the weight of VOM per volume

of coatings or solids, as applicable, as applied each day on each coating line.

- ED) The daily-weighted average VOM content of all coatings as applied on each coating line as defined in Section 219.104 of this Part.
- 3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
- A) Any record showing violation of Section 219.205 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
  - B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (e)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (e) of this Section, respectively.
- e) Any owner or operator of a coating line subject to the limitations of Section 219.207 and complying by means of Section 219.207(c), (d), (e), (f), (g), ~~or (h)~~, or (k) of this Subpart shall comply with the following:
- 1) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing coating line from Section 219.204 or Section 219.205 to Section 219.207 of this Subpart, the owner or operator of the subject coating line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 219.207 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.
  - 2) On and after a date consistent with Section 219.106 of this Part, or

on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

- A) The weight of VOM per volume of coating solids as applied each day on each coating line, if complying pursuant to Section 219.207(b)(2) of this Subpart.
- B) Control device monitoring data.
- C) A log of operating time for the capture system, control device, monitoring equipment and the associated coating line.
- D) A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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

- A) Any record showing violation of Section 219.207 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
- B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (d)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart Part from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.

f) Any owner or operator of a primer surfacer operation or topcoat operation subject to the limitations of Section 219.204(a)(2) or (a)(3) of this Subpart shall comply with the following:

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

subject coating operation shall collect and record all of the following information each day for each topcoat or primer surfacer coating operation and maintain the information at the source for a period of three years:

- A) All information necessary to calculate the daily-weighted average VOM emissions from the coating operations in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted, and approved pursuant to Section 219.204(a)(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(s) is used to control VOM emissions, control device monitoring data; a log of operating time for the capture system, control device, monitoring equipment and the associated coating operation; and a maintenance log for the capture system, control device and monitoring equipment, detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- 3) On and after a date consistent with Section 219.106 of this Part or on and after the initial start-up date, the owner or operator of a subject coating operation shall determine and record the daily VOM emissions in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted and approved pursuant to Section 219.204(a)(2) or (a)(3) of this Subpart within 10 days from the end of the month and maintain this information at the source for a period of three years.
- 4) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating operation shall notify the Agency in the following instances:
- A) Any record showing a violation of Section 219.204(a)(2) or (a)(3) of this Subpart shall be reported by sending a copy of

such record to the Agency within 15 days from the end of the month in which the violation occurred.

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

g) On and after a date consistent with Section 219.106(c) 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 219.217 of this Subpart shall comply with the following:

- 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 219.217(c) and 219.217(d) of this Subpart; and
- 2) Notify the Agency of any violation of Section 219.217 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 \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

- a) On and after March 15, 1996, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart, except coating lines subject to the limitations in Section 219.204(o) of this Subpart, and with coating lines in operation prior to January 1, 1991 ("pre-existing coating lines"), may, for pre-existing coating lines only, elect to comply with the requirements of this Section, rather than complying with the applicable emission limitations set forth in Section 219.204, if an operational change of the type described below has been made after January 1, 1991, to one or more pre-existing coating lines at the source. An operational change occurs when a pre-existing coating line is replaced

with a line using lower VOM coating for the same purpose as the replaced line ("replacement line"). A source electing to rely on this Section to demonstrate compliance with the requirements of this Subpart shall operate pursuant to federally enforceable permit conditions approved by the Agency and USEPA.

- b) An owner or operator of pre-existing coating lines subject to a VOM content limitation in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart must establish, by use of the equations in subsection (d) of this Section, that the calculated actual daily VOM emissions from all participating coating lines, as defined below, are less than the calculated daily allowable VOM emissions from the same group of coating lines. For any pre-existing coating line to be aggregated for the purposes of Section 219.212, 219.213, or 219.214 of this Subpart ("participating coating lines"), the source must establish that:
- 1) All coatings applied on the participating coating line shall, at all times, have a VOM content less than or equal to the applicable VOM content limitation for such coating listed in Appendix H of this Part; and
  - 2) On the date the source elects to rely on this Section to demonstrate compliance with this Subpart, all coatings applied on the participating coating line are not already in compliance with the VOM content limitation for such coating effective on or after March 15, 1996; or the participating coating line is a replacement line, as defined in subsection (a) of this Section with an operational change occurring on or after January 1, 1991.
- c) Notwithstanding subsection (a) of this Section, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart, may also include as a participating coating line, until December 31, 1999, only, any replacement line that satisfies all of the following conditions:
- 1) The replacement line is operated as a powder coating line;
  - 2) The replacement line was added after July 1, 1988; and

- 3) The owner or operator also includes as a participating coating line one or more coating lines that satisfy the criteria of a replacement line, as described in subsection (a) of this Section.
- d) To demonstrate compliance with this Section, a source shall establish the following:
- 1) An alternative daily emission limitation shall be determined for all participating coating lines at the source according to subsection (d)(2) of this Section. All participating coating lines shall be factored in each day to demonstrate compliance. Provided compliance is established pursuant to the requirements in this subsection, nothing in this Section requires daily operation of each participating line. Actual daily emissions from all participating coating lines ( $E_d$ ) shall never exceed the alternative daily emission limitation ( $A_d$ ) and shall be calculated by use of the following equation:

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

where:

- $E_d$  = Actual daily VOM emissions from participating coating lines in units of kg/day (lbs/day);
- $i$  = Subscript denoting a specific coating applied;
- $n$  = Total number of coatings applied by all participating coating lines at the source;
- $V_i$  = Volume of each coating applied for the day in units of 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).

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

$$A_d = A_1 + A_p$$

where  $A_1$  and  $A_p$  are defined in subsections (2)(A) and (2)(B) of this subsection.

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

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

where:

- $A_1$  = 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  $A_1$ , 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 219.204 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;
- $L_j$  = The VOM emission limitation for each coating applied, as specified in Section 219.204 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 219.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid and powder. Tests methods and recordkeeping requirements shall be approved by the Agency and USEPA and contained in the source's operating permit as federally enforceable permit conditions, subject to the following restrictions:

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

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

**Section 219.217      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 limitations of Section 219.204(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 219.204(l) of this Subpart shall use conventional air spray guns to apply coating materials to wood furniture except under the circumstances specified in subsections (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 219.216 of this Subpart.
- cb) Cleaning and storage requirements. Each owner or operator of a source subject to the limitations of Section 219.204(l) or 219.204(o) 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 219.204(o) 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 219.204(1) of this Subpart shall use conventional air spray guns to apply coating materials to wood furniture except under the circumstances specified in subsections (e)(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 219.216 of this Subpart.~~

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART H: PRINTING AND PUBLISHING

### Section 219.401 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) below, as applicable. Compliance with this Section must be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 219.105(a) and the recordkeeping and reporting requirements specified in Section 219.404(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:

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:-

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 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.

1) Prior to May 1, 2010, no~~No~~ 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~~) of this Section). Compliance with this subsection must be demonstrated through the applicable coating or ink analysis test methods and procedures

specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.404(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;
- $C_i$  = 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;
$V_{VOMi}$	=	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;
$C_i$	=	$C_i$ = 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);

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

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 shall be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.404(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 shall be demonstrated through the applicable coating or ink analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.404(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 Section.

$$\sum_{i=1}^n C_i W_i$$

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

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.

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

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<sub>i</sub> = The VOM content in units of kg (lbs) VOM per weight in kg (lbs) of each coating or ink as applied;

L<sub>i</sub> = The weight of each coating or ink, as applied, in units of kg/l (lb/gal).

c) Capture System and Control Device Requirements.

1) Prior to May 1, 2010, no~~No~~ owner or operator of a subject flexographic, ~~packaging rotogravure~~ or publication 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)(~~13~~)(C), as well as ~~and~~ subsections (c)(~~14~~)(D), (c)(5), and (c)(6) below.

A1) A carbon adsorption system is used which reduces the captured VOM emissions by at least 90 percent by weight, or

B2) An incineration system is used which reduces the captured VOM emissions by at least 90 percent by weight, or

C3) An alternative VOM emission reduction system is used which 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

D4) The printing line is equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least:

iA) 75 percent where a publication rotogravure printing line is employed, or



flexible packaging on the same line and that is equipped with a control device shall be subject to the requirements of either subsection (c)(1)(D) or subsection (c)(3) of this Section, whichever is more stringent, as well as subsections (c)(5) and (c)(6) of this Section;

- 5) The control device is equipped with the applicable monitoring equipment specified in Section 219.105(d)(2) of this Part and, except as provided in Section 219.105(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 219.105(c) of this Part through Section 219.105(f) of this Part and by complying with the recordkeeping and reporting requirements specified in Section 219.404(e) of this Part. The owner or operator of a printing line subject to the requirements in Section 219.401(c)(2) or 219.401(c)(1)(D) of this Section that performed all testing necessary to demonstrate compliance with Section 219.401(c)(1)(D) prior to May 1, 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 219.401(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 201.282:
  - 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 219.401(c)(1)(D);
  - B) Such testing also demonstrated an overall control efficiency equal to or greater than the applicable control efficiency requirements in Section 219.401(c)(3);

- C) The owner or operator submitted the results of such test(s) to the Agency, and the test(s) was 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 219.404(e)(1)(B);
- d) No owner or operator of subject flexographic or rotogravure printing line(s) 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) 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 \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

## **Section 219.402      Applicability**

- a) Except as otherwise provided in Section 219.401, the~~The~~ limitations of Section 219.401 of this SubpartPart apply to all flexographic and rotogravure printing lines at a subject source. All sources with flexographic and/or rotogravure printing lines are subject sources unless:
  - 1) Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing line(s) (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)), at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices, or
  - 2) A federally enforceable permit or SIP revision for all flexographic and rotogravure 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 flexographic and rotogravure printing line(s) to 90.7 Mg (100 tons) or less per calendar year before the application of capture systems and control devices.

- b) The limitations of Section 219.401(d) shall apply to all owners or operators of flexographic or rotogravure printing line(s) 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)), in the absence of air pollution control equipment.
- ~~c~~b) Upon achieving compliance with this Subpart, the flexographic and rotogravure printing lines are not required to meet Subpart G (Sections 219.301 or 219.302 of this Part). Flexographic and rotogravure printing lines exempt from this Subpart are subject to Subpart G (Sections 219.301 or 219.302 of this Part). Rotogravure or flexographic equipment used for both roll printing and paper coating is subject to this Subpart.
- ~~d~~e) Once subject to the limitations of Section 219.401 of this Part, a flexographic or rotogravure printing line is always subject to the limitations of Section 219.401 of this Part.
- ~~e~~d) Any owner or operator of any flexographic or rotogravure printing line that is exempt from any of the limitations of Section 219.401 of this Part because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 219.404(b) and (f) of this Part, as applicable.

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 219.403      Compliance Schedule**

Every owner or operator of a flexographic and/or rotogravure printing line shall comply with the applicable requirements of Section 219.401 and Section 219.404 of this Part in accordance with the applicable compliance schedule(s) 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 is exempt from the limitations of Section 219.401 of this Part because of the criteria in Section 219.402(a) of this Part shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.404(b) of this Part.

- b) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 219.401(a)(1) of this Part shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.401(a)(1) of this Part and Section 219.404(c) of this Part.
- c) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 219.401(b)(1) of this Part shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.401(b)(1) and Section 219.404(d) of this Part.
- d) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 219.401(c)(1)(D) of this Part shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, the applicable provisions in Sections 219.401(c) and Section 219.404(e) of this Part.
- ~~e) No owner or operator of a flexographic or rotogravure printing line complying by means of Section 219.401(a)(2), (b)(2), or (b)(3) or complying by means of Section 219.401(c)(2), (c)(3), or (c)(4), shall operate said printing line on or after May 1, 2010, unless the owner or operator has complied with, and continues to comply with, Section 219.401(a)(2), (b)(2) or (b)(3), and Section 219.401(c), as applicable, and all applicable provisions in Section 219.404 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 printing line on or after May 1, 2010, unless the owner or operator has complied with, and continues to comply with, Section 219.401(d) and Section 219.404(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 is exempt from the limitations of Section 219.401(d) because of the criteria in Section 219.402(b) of this Part shall operate said printing line on or after May 1, 2010, unless the owner or operator has complied with, and continues to comply with, Section 219.402(b) and Section 219.404(f) of this Part.~~

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## Section 219.404 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 219.105 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 219.401 of this Part because of the criteria in Section 219.402(a) of this Part shall comply with the following:
  - 1) By a date consistent with Section 219.106 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 is applicable shall certify to the Agency that the flexographic and rotogravure printing line is exempt under the provisions of Section 219.402(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 219.401 because of Section 219.402(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 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/gal (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.

- 2) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a facility 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 219.106 of this Part, the owner or operator of a facility exempted from the limitations of Section 219.401 of this Part because of the criteria in Section 219.402(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 219.401 of this Part and complying by means of Section 219.401(a) of this Part shall comply with the following:
- 1) By a date consistent with Section 219.106 of this Part, or Section 219.403(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 219.401(b) or Section 219.401(c) to Section 219.401(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 219.401(a) of this Part on and after a date consistent with Section 219.106 of this Part, or Section 219.403(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 219.401(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 219.106 of this Part, or Section 219.403(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 219.401 of this Part and complying by means of Section 219.401(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) 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 219.106 of this Part, or Section 219.403(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 219.401(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 219.401 of this Part from Section 219.401(a) to Section 219.401(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 219.401 of this Part from Section 219.401(a) to Section 219.401(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 219.401 of this Part and complying by means of Section 219.401(b) of this Part shall comply with the following:
- 1) By a date consistent with Section 219.106 of this Part, or Section 219.403(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 219.401(a) or (c) to Section 219.401(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 219.401(b) of this Part on and after a date consistent with Section 219.106 of this Part, or Section 219.403(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 219.401(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 219.401(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 219.106 of this Part, or Section 219.403(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 219.401 and complying by means of Section 219.401(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) 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 219.106 of this Part, or Section 219.403(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 219.401(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 219.401 of this Part from Section 219.401(b) to Section 219.401(a) or 219.401(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 219.401 of this Part from Section 219.401(b) to Section 219.401(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 219.401 of this Part and complying by means of Section 219.401(c) of this Part shall comply with the following:
- 1) By a date consistent with Section 219.106 of this Part, or Section 219.403(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 219.401(a) or (b) to Section 219.401(c) of this Part, the owner or operator of the subject printing line shall either:
    - A) Pperform 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 219.401(c) of this Part on and after a date consistent with

Section 219.106 of this Part, or Section 219.403(e), as applicable, or on and after the initial start-up date; or-

B) If not required to perform such testing pursuant to Section 219.401(c)(6), submit a certification to the Agency that includes:

i) A declaration that the owner or operator is not required to perform testing pursuant to Section 219.401(c)(6);

ii) The date(s) that testing demonstrating compliance with Section 219.401(c)(3) was performed; and

iii) The date(s) that the results of such testing were submitted to the Agency;

2) On and after a date consistent with Section 219.106 of this Part, or Section 219.403(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 219.401 of this Part and complying by means of Section 219.401(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) 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 219.106 of this Part, or Section 219.403(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 219.401(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 219.401 of this Part from Section 219.401(c) to Section 219.401(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 219.401 of this Part from Section 219.401(c) to Section 219.401(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 219.401(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 which is exempt from the limitations of Section 219.401(d) because of the criteria in Section 219.402(b) shall:

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 declaration that the source is exempt from the requirements in Section 219.401(d) because of the criteria in Section 219.402(b);

B) Calculations which 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. Such notification shall include calculations showing the daily emissions of VOM from all flexographic and rotogravure printing lines at the source for the day(s) in which emissions equaled or exceeded 6.8 kg/day (15 lbs/day).

- g) Any owner or operator of a printing line subject to the limitations of Section 219.401(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 219.401(d); and
  - 2) Notify the Agency of any violation of Section 219.401(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 \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 219.405 Lithographic Printing: Applicability

- a) ~~Until March 15, 1996, the limitations of Section 219.406 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 219.406 of this Subpart because of the criteria in subsection (a) of this Section shall be subject to the recordkeeping and reporting requirements in Section 219.406(b)(1) of this Subpart.~~
- ae) ~~On and after March 15, 1996, Every~~every owner or operator of lithographic printing line(s) is subject to the recordkeeping and reporting requirements in Section 219.411 of this Subpart.
- bd) ~~On and after March 15, 1996, Prior to May 1, 2010,~~ Sections 219.407 through 219.410 of this Subpart shall apply to:
  - 1) All owners or operators of heatset web offset lithographic printing line(s) unless:
    - 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 219.411(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) at the source requires the owner or operator to limit production or capacity of these printing line(s) 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), unless the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day), as determined in accordance with Section 219.411(a)(1)(B), before the application of capture systems and control devices.

c) On and after May 1, 2010:

- 1) The requirements in Sections 219.407(a)(1)(B) through (a)(1)(E) and 219.407(b) and all applicable provisions in Sections 219.408 through 219.411 of this Subpart shall apply to all owners or operators of heatset web offset lithographic printing line(s), if the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) ever exceed 45.5 kg/day (100 lbs/day), calculated in accordance with Section 219.411(b)(2)(B), before the application of capture systems and control devices;
- 2) The requirements in Sections 219.407(a)(1)(A) and 219.407(a)(2) through (a)(5) and all applicable provisions in Sections 219.408 through 219.411 of this Subpart shall apply to all owners or operators of lithographic printing line(s) if the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) ever equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with Section 219.411(b)(1)(B), before the application of capture systems and control devices;
- 3) Notwithstanding subsection (c)(2) of this Section, at sources where the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) 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 219.411(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 219.411(g)(1)(B) that the source will not make use of any such exclusions:

- A) The requirements of Sections 219.407(a)(1)(A), 219.407(a)(2), and 219.407(a)(3) of this Subpart shall not apply to lithographic printing line(s) with a total fountain solution reservoir of less than 3.8 liters (1 gallon);
- B) The requirements of Section 219.407(a)(3) of this Subpart shall not apply to sheet-fed offset lithographic printing line(s) with maximum sheet size of 11x17 inches or smaller;
- C) The requirements of Section 219.407(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 219.407(a)(4)(A)(i) shall not apply to lithographic printing lines at the source. Instead, the requirements of Section 219.407(a)(4)(A)(ii) shall apply to such lines.

de) If a lithographic printing line at a source is or becomes subject to one or more of the limitations in Sections 219.406 or 219.407 of this Subpart, the lithographic printing line(s) at the source are always subject to the applicable provisions of this Subpart.

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

~~Section 219.406 — Provisions Applying to Heatset Web Offset Lithographic Printing Prior to March 15, 1996~~

~~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 219.405(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 219.105(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 219.105(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 219.105 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 219.405(a) of this Subpart shall comply with the following:~~
    - A) ~~By a date consistent with Section 219.106 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 219.405(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 219.405(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 219.106 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 219.106 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 219.405(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 219.106 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 219.106 of this Part, or on and after the initial start up date;~~
  - B) ~~On and after a date consistent with Section 219.106 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 non-~~

routine maintenance performed including dates and duration of any outages;

- C) ~~On and after a date consistent with Section 219.106 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 219.106 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 219.106 of this Part, or on and after the initial start up date;~~
  
  - B) ~~On and after a date consistent with Section 219.106 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 219.106 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 (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 219.405(a) of this Subpart shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.405(a) and 219.406(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 219.106 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 219.106 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 \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

Section 219.407      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) 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);
- D) The afterburner complies with all monitoring provisions specified in Section 219.410(c) of this Subpart~~is equipped with the applicable monitoring equipment specified in Section 219.105(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 219.107 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 219.405(c)(3) and do not certify pursuant to Section 219.411(g)(1)(B) that the source will not make use of any of the exclusions in Section 219.405(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 Section 219.407(a)(1)(C) of this Subpart may use a control device other than an afterburner, if:
- 1) The control device reduces VOM emissions from the press dryer exhaust(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 \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.408 — ~~Compliance Schedule for Lithographic Printing On and After March 15, 1996~~**

- a) ~~Every owner or operator of a lithographic printing line subject to one or more of the control requirements of Section 219.407 of this Subpart shall comply with the applicable requirements of Sections 219.407 through 219.411 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 219.407 of this Subpart because of the criteria in Section 219.405(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 219.405(d) and 219.411(a) of this Subpart.~~

(Source: Repealed at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.409      ~~Testing for Lithographic Printing On and After March 15, 1996~~**

- a) Testing to demonstrate compliance with the requirements of Section 219.407 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency. 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 219.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.407(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 219.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;
  - 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 219.112 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 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:
    - A) The allowable outlet concentration of VOM from the 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 219.407(a)(1)(B) of this Subpart.
- c) Testing to demonstrate compliance with the VOM content limitations in Section 219.407(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 219.411(a)(1)(B) of this Subpart), shall be conducted upon request of the Agency, as follows:
- 1) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 219.112 of this Part, shall be used to demonstrate compliance; or
  - 2) 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 219.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.

- d) Testing to demonstrate compliance with the requirements of Section 219.407(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 219.407(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 219.110 of this Part.

(Source: Amended at \_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_)

#### Section 219.411 Recordkeeping and Reporting for Lithographic Printing

- a) Exempt units prior to May 1, 2010. An owner or operator of lithographic printing line(s) exempt from the limitations of Section 219.407 of this Subpart prior to May 1, 2010, because of the criteria in Section 219.405(b) 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 219.407 of this Part because of the criteria in Section 219.405(b) of this Subpart;
    - B) Calculations which 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 219.409(c) of this Subpart shall be used;
  - iii) To determine VOM emissions from inks used on lithographic printing line(s) 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); and
  - iv) To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing line(s) 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~~

~~219.406(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 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 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 219.409(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 219.405(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) exempt from the limitations in Section 219.407 of this Subpart because of the criteria in Section 219.405(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 219.407 of this Part because of the criteria in Section 219.405(c)(2) of this Subpart;
- B) Calculations which demonstrate that combined emissions of VOM from all lithographic printing line(s) (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing line(s)) 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 219.409(c) of this Subpart shall be used;
  - iii) To determine VOM emissions from inks used on lithographic printing line(s) 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); and

iv) To determine VOM emissions from cleaning solutions used on lithographic printing line(s) 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 subsections (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 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 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: 132.5

liters (35 gallons) of cleaning solvent and fountain solution additives, combined; or

ii) The sum of all heatset web offset lithographic printing operations at the source: 113.4 kg (250 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 219.409(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. Such notification shall include calculations pursuant to Section 219.411(b)(1)(B) showing the daily emissions of VOM from all lithographic printing lines at the source for the month in which emissions equaled or exceeded 6.8 kg/day (15 lbs/day). 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 219.405(c)(1) but not exempt pursuant to Section 219.405(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) that are exempt from the limitations in Section 219.407 of this Subpart pursuant to the criteria in Section 219.405(c)(1) of this Subpart, but that are not exempt pursuant to the criteria in Section 219.405(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 219.407 of this Part because of the criteria in Section 219.405(c)(1) of this Subpart, but is not exempt pursuant to the criteria in Section 219.405(c)(2) of this Subpart;

B) Calculations which 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 219.405(c)(3), in accordance with Section 219.411(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 methods and procedures set forth in Section 219.409(c) of this Subpart shall be used;

iii) To determine VOM emissions from inks used on lithographic printing line(s) 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).

iv) To determine VOM emissions from cleaning solvents used on lithographic printing line(s) 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 219.409(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. Such notification shall include calculations pursuant to Section 219.411(b)(2)(B) showing the daily emissions of VOM from all lithographic printing lines at the source for the month in which emissions exceeded 45.5 kg/day (100 lbs/day).

c2) Unless complying with subsections (b)(1)(C) and (b)(1)(F) of this Section, an owner or operator of lithographic printing line(s) 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:

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

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

Ciii) 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;

Div) 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~~

Ev) The VOM emissions in lbs/day for the month, calculated in accordance with Section 219.411(a)(1)(B), 219.411(b)(1)(B), or 219.411(b)(2)(B) of this Subpart, as applicable;

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

Ai) 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;

Bii) 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;

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

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

Ev) 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

Fvi) The VOM emissions in lbs/day for the month, calculated in accordance with Section 219.411(a)(1)(B), 219.411(b)(1)(B), or 219.411(b)(2)(B) of this Subpart, as applicable;

~~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.~~

- db) An owner or operator of a heatset web offset lithographic printing line(s) subject to the control requirements of Section 219.407(a)(1)(C) or (b)(1) of this Subpart shall comply with the following:
- 1) By ~~May 1, 2010, March 15, 1996~~, 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 219.407 (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 219.407(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 219.407(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 219.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and
    - F) A declaration that the monitoring equipment required under Section 219.407(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 219.409(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) is in compliance with Section 219.407(a)(1)(C) or (b)(1) of this Subpart, as applicable, have been properly performed;
  - B) A statement whether the lithographic printing line(s) is or is not in compliance with Section 219.407(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 219.410(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 219.407(a)(1)(C) or (b)(1) of this Subpart:
- A) Afterburner or other approved control device monitoring data in accordance with Section 219.410(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 ~~ensure~~insure compliance with the requirements of Section 219.407(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 219.407(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 219.407 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) will be in compliance with the requirements of Section 219.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) of this Subpart, or Section 219.407(b) of this Subpart, as applicable.

ee) An owner or operator of a lithographic printing line subject to Section 219.407(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 219.407(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), including copies of manufacturer's specifications, test results, if any, formulation data and calculations;
  - E) Identification of the method(s) 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 219.411(ee)(2) of this Subpart.
- 2) ~~On and after March 15, 1996, Collecte~~ 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) 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 219.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in Section 219.407(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 219.410(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 219.410(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 219.407(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 219.410(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
  - iii) Any other information necessary to demonstrate compliance with the applicable VOM content limits in Sections 219.407(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 219.407(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 219.410(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 219.407 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 219.407 of this Subpart, or changing the method of demonstrating compliance with the VOM content limitations for fountain solutions pursuant to Section 219.409 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 219.407 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 219.407 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 219.405(c)(3)(C), and the handling of all cleaning materials, will be in compliance with the requirements of Section 219.407(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 219.407(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 method(s) 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 219.411(f)(2) of this Subpart; and
- ~~DF)~~ A description of the practices that ~~ensure~~ assure that VOM-containing cleaning materials are kept in closed containers;

2) ~~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 219.407(a)(4)(A) of this Subpart and 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 219.409(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 219.407(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 219.409(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;

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 219.407(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 219.409(e) of this Subpart;
  - 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 219.409(e) of this Subpart;
- 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, Notif~~ notify the Agency in writing of any violation of Section 219.407 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 219.407(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 219.407(a)(4) of this Subpart.~~
- g) The owner or operator of lithographic printing line(s) subject to one or more of the exclusions set forth in Section 219.405(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 219.405(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 219.405(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 219.405(c)(3);
- 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 219.405(c)(3):
- A) Collect and record the following information for all lithographic printing lines at the source:
    - i) Calculations which 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 219.411(b)(2)(B) of this Subpart;
    - ii) The amount of cleaning materials used on lithographic printing lines at the source that do not comply with the cleaning material limitations in Section 219.407(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. Such notification shall include calculations pursuant to Section 219.411(b)(2)(B) showing the daily emissions of VOM from all lithographic printing

lines at the source for the month in which emissions exceeded 45.5 kg/day (100 lbs/day).

- 3) If changing from utilization of the exclusions set forth in Section 219.405(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) will be in compliance with the applicable requirements of Section 219.407 of this Subpart.
  - 4) If changing from opting out of the exclusions set forth in Section 219.405(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.
- he) 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 219.405 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);
  - 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:

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

Where: \_\_\_\_\_

VOM<sub>tot</sub> = Total VOM in the fountain solution;

VOM<sub>fs</sub> = 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) 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.

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

Where: \_\_\_\_\_

VOM<sub>tot</sub> = Total VOM in the blanket wash;

VOM<sub>bw</sub> = 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 = 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 \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.412 Letterpress Printing Lines: Applicability**

- a) Except as provided in subsection (b) of this Section, on and after May 1, 2010, the limitations in Sections 219.413 through 219.416 of this Subpart shall apply to:
- 1) All heatset web letterpress printing line(s) at a source if all heatset web letterpress printing line(s) (including solvents used for cleanup operations associated with heatset web letterpress printing line(s)) 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) at a source where the combined emissions of VOM from all letterpress printing line(s) at the source (including solvents used for cleanup operations associated with the letterpress printing line(s)) ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, calculated in accordance with Section 219.417(b)(1)(B).
- b) Notwithstanding subsection (a) of this Section, the requirements of Section 219.413(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 219.417 of this Subpart shall apply to all owners or operators of letterpress printing line(s).
- d) If a letterpress printing line at a source is or becomes subject to one or more of the limitations in Section 219.413 of this Subpart, the letterpress printing line(s) at the source are always subject to the applicable provisions of this Subpart.

(Source: Added at \_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.413 Emission Limitations and Control Requirements for Letterpress Printing Lines**

- a) No owner or operator of letterpress printing line(s) 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 219.412(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) 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 219.416(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 219.107 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) 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 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.415 Testing for Letterpress Printing Lines**

- a) Testing to demonstrate compliance with the requirements of Section 219.413 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency. 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 219.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.413(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 219.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;
  - 2) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part;
  - 3) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference in Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:
    - A) The allowable outlet concentration of VOM from the 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 219.413(a)(1)(A) of this Subpart.
- c) Testing to demonstrate compliance with the VOM content limitations in Section 219.413(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 219.417(b)(1)(B) of this Subpart), shall be conducted upon request of the Agency, as follows:
- 1) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference in Section 219.112 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 219.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.
- d) Testing to demonstrate compliance with the requirements of Section 219.413(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 219.413(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 219.110 of this Part.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.416 Monitoring Requirements for Letterpress Printing Lines**

- a) Afterburners For Heatset Web Letterpress Printing Line(s). If an afterburner is used to demonstrate compliance, the owner or operator of a heatset web letterpress printing line subject to Section 219.413(a)(1)(B) of this Subpart shall:
- 1) Install, calibrate, maintain, and operate temperature monitoring device(s) with an accuracy of 3° C or 5° F on the afterburner in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the 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), 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). 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 219.413(b) of this Subpart.
- c) Cleaning Solution.
- 1) The owner or operator of any letterpress printing line relying on the VOM content of the cleaning solution to comply with Section 219.413(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 219.413(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 219.417(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 219.413(a)(2)(B) of this Subpart must keep records for such cleaning solutions used on any such line(s) as set forth in Section 219.417(e)(2)(C) of this Subpart.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 219.417 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 219.413 of this Subpart because of the criteria in Section 219.412(a)(1) shall submit a certification to the Agency that includes:
  - 1) A declaration that the source is exempt from the requirements in Section 219.413 of this Subpart because of the criteria in Section 219.412(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 219.413 of this Subpart because of the criteria in Section 219.412(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 219.413 of this Part because of the criteria in Section 219.412(a)(2) of this Subpart;
  - B) Calculations which 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 219.415(c) of this Subpart shall be used;
    - iii) To determine VOM emissions from inks used on letterpress printing line(s) 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); and

iv) To determine VOM emissions from cleaning solutions used on letterpress printing line(s) 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 219.415(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: 132.5 liters (35 gallons) of cleaning solvent; or
  - ii) The sum of all heatset web letterpress printing operations at the source: 113.4 kg (250 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. Such notification shall include calculations pursuant to Section 219.417(b)(1)(B) showing the daily emissions of VOM from all letterpress printing lines at the source for the month in which emissions equaled or exceeded 6.8 kg/day (15 lbs/day).
- 3) For sources complying with subsection (b)(1)(D) 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)(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;
  - 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)(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 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 219.417(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 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 219.417(b)(1)(B) of this Subpart;

d) An owner or operator of a heatset web letterpress printing line(s) subject to the control requirements of Section 219.413(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 219.413 (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 219.413(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 219.413(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 219.413(a)(1)(B) or (b)(1) of this Subpart, as applicable; and

F) A declaration that the monitoring equipment required under Section 219.413(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 219.415(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) is in compliance with Section 219.413(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) is or is not in compliance with Section 219.413(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 219.416(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 219.413(a)(1)(B) or (b)(1) of this Subpart:
- A) Afterburner or other approved control device monitoring data in accordance with Section 219.416(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 219.413(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 219.413(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 219.413(a)(1)(B) and 219.413(b) of this Subpart, certify compliance for the new method of compliance in accordance with Section 219.413(b) at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the requirements of Section 219.413(a)(1) of this Subpart, or Section 219.413(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 219.413 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 219.412(b), and the handling of all cleaning materials will be in compliance with the requirements of Section 219.413(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 219.413(a)(2);
    - B) Identification of the method(s) 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 219.417(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 219.413(a)(2)(A) of this Subpart and 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 219.415(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 219.413(a)(2)(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 219.415(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;
- 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 219.413(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 219.415(e) of this Subpart;
  - 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 219.415(e) of this Subpart;
- 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 219.413(a)(2) of this Subpart;

3) Notify the Agency in writing of any violation of Section 219.413 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.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)