POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENT

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

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

3) Section Number: 219.187 — Proposed Action: Amend

4) Statutory authority: Implementing Sections 21, 22, 22.01 and 22.9, and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/21, 22, 22.01, 22.9, 27].

5) A complete description of the subjects and issues involved: In a recent filing with the Board, the Illinois Environmental Protection Agency (Agency) stated that language recently adopted in R10-8 contained a technical error. The Agency indicated that this error made it impossible for sources subject to the adopted regulations to comply with applicable limitations. The Agency noted that, although the Board had opened a subdocket in order to address a separate issue, no rulemaking proposal addressing that issue had been timely filed. The Agency proposed to proceed in subdocket as the most efficient way to adopt a correction.

For a more detailed description of this rulemaking, see the Board's August 19, 2010, first-notice opinion and order: Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group II Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219. (R10-08(A))

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The Agency, which initiated the proceeding in this subdocket, did not indicate that it had used a published study or report in developing the proposed correction.

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

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

9) Does this rulemaking contain incorporations by reference? No

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

Section Numbers: Proposed Action: Illinois Register Citation:

POLLUTION CONTROL BOARD

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219.105	Amend	34 Ill. Reg. 4475; April 2, 2010
219.106	Amend	34 Ill. Reg. 4475; April 2, 2010
219.112	Amend	34 Ill. Reg. 4475; April 2, 2010
219.204	Amend	34 Ill. Reg. 4475; April 2, 2010
219.205	Amend	34 Ill. Reg. 4475; April 2, 2010
219.207	Amend	34 Ill. Reg. 4475; April 2, 2010
219.208	Amend	34 Ill. Reg. 4475; April 2, 2010
219.210	Amend	34 Ill. Reg. 4475; April 2, 2010
219.211	Amend	34 Ill. Reg. 4475; April 2, 2010
219.212	Amend	34 Ill. Reg. 4475; April 2, 2010
219.219	New	34 Ill. Reg. 4475; April 2, 2010
219.890	New	34 Ill. Reg. 4475; April 2, 2010
219.891	New	34 Ill. Reg. 4475; April 2, 2010
219.892	New	34 Ill. Reg. 4475; April 2, 2010
219.894	New	34 Ill. Reg. 4475; April 2, 2010
219.900	New	34 Ill. Reg. 4475; April 2, 2010
219.901	New	34 Ill. Reg. 4475; April 2, 2010
219.902	New	34 Ill. Reg. 4475; April 2, 2010
219.903	New	34 Ill. Reg. 4475; April 2, 2010
219.904	New	34 Ill. Reg. 4475; April 2, 2010

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

12) Time, place and manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R10-08(A) and be addressed to:

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

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

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENT

Interested persons may request copies of the Board's opinion and order by calling the Clerk's office at 312-814-3620, or download them from the Board's Web site at www.ipcb.state.il.us.

13) Initial regulatory flexibility analysis:

A) Types of small businesses, small municipalities, and not-for-profit corporations affected: This rulemaking will impact any small business, small municipality, and not-for-profit corporation that engages in industrial solvent cleaning operations subject to the requirements of Section 218.187 and meeting the applicability thresholds specified in the proposed rulemaking.

B) Reporting, bookkeeping or other procedures required for compliance: The Agency indicates that the proposed rulemaking correct a technical error, and the proposal does not itself require the owner or operator of a subject source to make reports or conduct bookkeeping or other procedures for compliance.

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

14) Regulatory Agenda on which this rulemaking was summarized: January 2009

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

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

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

SUBPART A: GENERAL PROVISIONS

Section

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section

SUBPART E: SOLVENT CLEANING

Section

SUBPART F: COATING OPERATIONS

SUBPART G: USE OF ORGANIC MATERIAL

SUBPART H: PRINTING AND PUBLISHING

SUBPART Q: SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING PLANT

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

SUBPART T: PHARMACEUTICAL MANUFACTURING

SUBPART HH: MOTOR VEHICLE REFINISHING

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

SUBPART TT: OTHER EMISSION UNITS

219.988 Testing

SUBPART UU: RECORDKEEPING AND REPORTING

Section
219.990 Exempt Emission Units
219.991 Subject Emission Units

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

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

SOURCE: Adopted in R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days~~,~~; amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. 4242, effective March 3, 1994; amended in R94-12 at 18 Ill. Reg. 14987, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16415, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16980, effective November 15, 1994; emergency amendment in R95-10 at 19 Ill. Reg. 3059, effective February 28, 1995, for a maximum of 150 days; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6958, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7385, effective May 22, 1995; amended in R96-2 at 20 Ill. Reg. 3848, effective February 15, 1996; amended in R96-13 at 20 Ill. Reg. 14462, effective October 28, 1996; amended in R97-24 at 21 Ill. Reg. 7721, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3517, effective February 2, 1998; amended in R04-12/20 at 30 Ill. Reg. 9799, effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. 7110, effective April 30, 2007; amended in R10-10 at 34 Ill. Reg. 5392, effective March 23, 2010; amended in R10-~~08~~8 at 34 Ill. Reg. 9253, effective June 25, 2010; amended in R10-~~08~~8(A) at 34 Ill. Reg. _____, effective _____.

SUBPART E: SOLVENT CLEANING

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 that use organic materials at sources that emit a total of 6.8 kg/day (15 lbs/day) or more of VOM from cleaning operations at the source, in the absence of air pollution control equipment. For purposes of this Section, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance or servicing, including but not

limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

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

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

i) Cleaning operations subject to the limitations in Sections 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;

xv) Cleaning of numismatic dies; and

xvi) Cleaning operations associated with digital printing.

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

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

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

kg/l lb/~~gal i~~gali) Electrical apparatus components and electronic components 0.10 0.83
ii) Medical device and pharmaceutical manufacturing 0.80 6.7
B) Repair and maintenance cleaning:

kg/l lb/~~gali~~gali) Electrical apparatus components and electronic ~~components~~ 0.10 0.83ii) Medical device and pharmaceutical manufacturing: tools, equipment, and machinery 0.80 6.7
iii) Medical device and pharmaceutical manufacturing: general work surfaces 0.60 5.0
C) Cleaning of ink application equipment:

kg/l lb/~~gali~~gali) Rotogravure printing that does not print flexible packaging 0.10 0.83ii) Screen printing 0.50 4.2iii) Ultraviolet ink and electron beam ink application equipment, except screen printing 0.65 5.4iv) Flexographic printing that does not print flexible packaging 0.10 0.83

~~D~~kg/l lb/galD) 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~~o C~~oC (68~~o F~~oF); 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 that demonstrate that combined emissions of VOM from cleaning operations at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment;

B) Notify the Agency of any record that shows that the combined emissions of VOM from cleaning operations at the source ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs.

2) All sources subject to the requirements of this Section shall:

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

i) A declaration that all subject cleaning operations are in compliance with the requirements of this Section;

ii) Identification of each subject cleaning operation and each VOM-containing cleaning solution used as of the date of certification in such operation;

iii) If complying with the emissions control system requirement, what type of emissions control system will be used;

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

v) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;

vi) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 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 units on which the exempt cleaning operation is performed;

B) At least 30 calendar days before changing the method of compliance between subsections (b)(1) or (b)(2)~~,~~ and subsection (b)(3) of this Section, notify the Agency in writing of such change. The notification shall include a demonstration of compliance with the newly applicable subsection;

3) All sources complying with this Section pursuant to the requirements of subsection (b)(1) of this Section shall collect and record the following information for each cleaning solution used:

A) For each cleaning solution ~~which~~that is prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) The VOM content of each cleaning solvent in the cleaning solution;

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

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

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

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

B) For each batch of cleaning solution that is not prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

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

iii) The VOM content of each cleaning solvent in the cleaning solution;

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

v) The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 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~~subsection (b) or (d) by providing a description of the violation and copies of records documenting ~~such~~the violation to the Agency within 30 days following the occurrence of the violation;

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

f) Monitoring Requirements

1) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.187(b)(3) of this Subpart shall:

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

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

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's 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, or as otherwise specified in this Section. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during the testing;

2) Testing to demonstrate compliance with the VOM content limitations in Section 219.187(b)(1) of this Subpart, and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted~~,~~ as follows:

A) The applicable test methods and procedures specified in Section 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~~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~~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~~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's 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: Amended at 34 Ill. Reg. _____, effective _____)

~~ILLINOIS REGISTER~~

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENT~~

Document comparison done by DeltaView on Thursday, September 02, 2010 1:13:00 PM

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PART 219
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MANUFACTURING PROCESSES

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219.APPENDIX H	Baseline VOM Content Limitations for Subpart F, Section 219.212 Cross-Line Averaging

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

SOURCE: Adopted in R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days; amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. 4242, effective March 3, 1994; amended in R94-12 at 18 Ill. Reg. 14987, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16415, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16980, effective November 15, 1994; emergency amendment in R95-10 at 19 Ill. Reg. 3059, effective February 28, 1995, for a maximum of 150 days; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6958, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7385, effective May 22, 1995; amended in R96-2 at 20 Ill. Reg. 3848, effective February 15, 1996; amended in R96-13 at 20 Ill. Reg. 14462, effective October 28, 1996; amended in R97-24 at 21 Ill. Reg. 7721, effective June 9, 1997; amended in R97-31 at 22 Ill. Reg. 3517, effective February 2, 1998; amended in R04-12/20 at 30 Ill. Reg. 9799, effective May 15, 2006; amended in R06-21 at 31 Ill. Reg. 7110, effective April 30, 2007; amended in R10-10 at 34 Ill. Reg. 5392, effective March 23, 2010; amended in R10-8 at 34 Ill. Reg. 9253, effective June 25, 2010; amended in R10-8(A) at 34 Ill. Reg. _____, effective _____.

SUBPART E: SOLVENT CLEANING

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 that use organic materials at sources that emit a total of 6.8 kg/day (15 lbs/day) or more of VOM from cleaning operations at the source, in the absence of air pollution control equipment. For purposes of this Section, "cleaning

operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

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

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

i) Cleaning operations subject to the limitations in Sections 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;

xv) Cleaning of numismatic dies; and

xvi) Cleaning operations associated with digital printing.

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

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

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

		kg/l	lb/gal
i)	Electrical apparatus components and electronic components	0.10	0.83

ii)	Medical device and pharmaceutical manufacturing	0.80	6.7

B) Repair and maintenance cleaning:

		kg/l	lb/gal
i)	Electrical apparatus components and electronic	0.10	0.83
ii)	Medical device and pharmaceutical manufacturing: tools, equipment, and machinery	0.80	6.7
iii)	Medical device and pharmaceutical manufacturing: general work surfaces	0.60	5.0

C) Cleaning of ink application equipment:

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

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

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

3) An afterburner or carbon adsorber is installed and operated that reduces VOM emissions from the subject cleaning operation by at least 85 percent overall. The owner or operator may use an emissions control system other

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

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

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

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

2) Minimize air circulation around the cleaning operation;

3) Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;

4) Utilize equipment practices that minimize emissions.

e) Recordkeeping and Reporting Requirements

1) The owner or operator of a source exempt from the limitations of this Section because of the criteria in Section 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 that demonstrate that combined emissions of VOM from cleaning operations at the source never equal or

exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment;

B) Notify the Agency of any record that shows that the combined emissions of VOM from cleaning operations at the source ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs.

2) All sources subject to the requirements of this Section shall:

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

i) A declaration that all subject cleaning operations are in compliance with the requirements of this Section;

ii) Identification of each subject cleaning operation and each VOM-containing cleaning solution used as of the date of certification in such operation;

iii) If complying with the emissions control system requirement, what type of emissions control system will be used;

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

v) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;

vi) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 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 units on which the exempt cleaning operation is performed;

B) At least 30 calendar days before changing the method of compliance between subsections (b)(1) or (b)(2) and subsection (b)(3) of this Section, notify the Agency in writing of such change. The notification shall include a demonstration of compliance with the newly applicable subsection;

3) All sources complying with this Section pursuant to the requirements of subsection (b)(1) of this Section shall collect and record the following information for each cleaning solution used:

A) For each cleaning solution that is prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) The VOM content of each cleaning solvent in the cleaning solution;

iii) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of 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 that is not prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

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

iii) The VOM content of each cleaning solvent in the cleaning solution;

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

v) The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 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 associated cleaning equipment;

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

D) Maintain records documenting the use of good operating practices consistent with the equipment manufacturer's specifications for the cleaning equipment being used and the emissions control system equipment. At a minimum, these records shall include:

i) Records for periodic inspection of the cleaning equipment and emissions control system equipment with date of

inspection, individual performing the inspection, and nature of inspection;

ii) Records for repair of malfunctions and breakdowns with identification and description of incident, date identified, date repaired, nature of repair, and the amount of VOM released into the atmosphere as a result of the incident;

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

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

f) Monitoring Requirements

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 devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and

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

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's 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, or as otherwise specified in this Section. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during the testing;

2) Testing to demonstrate compliance with the VOM content limitations in Section 219.187(b)(1) of this Subpart, and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted as follows:

A) The applicable test methods and procedures specified in Section 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~~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~~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~~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's or operator's plan approved by the Agency and

867 USEPA as federally enforceable permit conditions pursuant to Section
868 219.187(b)(3) of this Subpart.
869
870 (Source: Amended at 34 Ill. Reg. _____, effective _____)