ILLINOIS POLLUTION CONTROL BOARD March 1, 2007

IN THE MATTER OF:)	
)	
ORGANIC MATERIAL EMISSION)	R06-21
STANDARDS AND LIMITATIONS FOR)	(Rulemaking – Air)
THE CHICAGO AND METRO-EAST)	
AREAS: PROPOSED AMENDMENTS TO)	
35 ILL. CODE 218 AND 219)	

Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by T.E. Johnson):

Today the Board adopts the proposed rule for second notice pursuant to the Illinois Administrative Procedure Act (5 ILCS 100/1-1 *et seq.* (2004)). This rulemaking was filed by the Illinois Environmental Protection Agency (Agency) on December 22, 2005. The Agency proposes amendments to Parts 218 and 219 of the volatile organic material (VOM) rules (415 ILCS 5/218, 219 (2004)) to allow for the use of add-on controls as a compliance option for operations using cold cleaning solvent degreasing. The proposed amendments affect cold cleaning degreasing operations located in the Chicago and Metro-East ozone nonattainment areas.

The Board adopted first notice rules on September 21, 2006. The proposed amendments were published in the *Illinois Register* on October 6, 2006. 30 Ill. Reg. 40, at 15867, 15892 (Oct. 6, 2006). The Board received no public comments during the 45-day first-notice public comment period, which ended November 26, 2006, and the proposal adopted here is substantively unchanged from that adopted in the Board's first-notice opinion and order. In this opinion, the Board provides the procedural history of this rulemaking, an overview of the proposed standards and limitations, and a discussion of the second-notice proposal.

Today the Board adopts this proposal for second-notice review by the Joint Committee on Administrative Rules (JCAR).

BACKGROUND

The Agency filed the proposal on December 22, 2005. If adopted, the proposed amendments will amend two subsections of the requirements found in Parts 218.182 and 219.182 of the Environmental Protection Act (Act). 415 ILCS 5/218.182, 219.182 (2004). The amendments will also amend Appendix H of both Parts.

Solvent cleaning, or degreasing as it is commonly called, is a process using aqueous liquids or non-aqueous organic solvents to clean and remove soils from surfaces. Proposal (Prop.) at 2. Solvent cleaning is divided into three major types: cold cleaning; open-top vapor degreasing; and conveyorized degreasing. *Id.* Evaporation of the solvent used during degreasing

results in VOM emissions that react with other pollutants such as nitrogen oxides and carbon monoxide to form ozone. *Id.*

In 1997, as a part of the 9% Rate of Progress (ROP) plan, the Board adopted control measures proposed by the Agency to reduce VOM emissions for cold cleaning degreaser operations in the Chicago and Metro-East ozone nonattainment areas. Prop. at 3. These measures, which are codified at 35 Ill. Adm. Code 218.182 and 219.182, lowered the allowed solvent vapor pressure for operations in the Chicago and Metro-East areas to 2.0 millimeters of mercury (mmHg) by 1999 and 1.0 mmHg by 2001. *Id.* The Agency estimated that the implementation of the lower vapor pressure would result in a VOM emission reduction of 11.35 tons per day by 1999 and an additional 11.68 tons per day by 2001. The 1997 ROP regulations do not allow the use of add-on controls for cold cleaning degreasers as an alternative to complying with the solvent vapor limit.

Diversapack, a printing company that recycles its solvents in a totally enclosed parts washer and uses add-on controls for the abatement of process emissions, contacted the Agency in May 2003, regarding a possible variance from the vapor pressure limits at 35 Ill. Adm. Code 218.182(c). Prop. at 2. Diversapack uses solvents compatible with its printing operations, but which do not meet the current vapor pressure requirements. *Id*. The Agency identified three additional point sources in the Chicago area that use add-on controls plus solvents that do not meet the lower vapor pressure limits. *Id*.

In lieu of the site-specific rulemakings for each of the identified facilities, the Agency is proposing revisions to 35 Ill. Adm. Code 218 and 219. Prop. at 2. Specifically, the Agency proposes revising Sections 218.182 and 219.182 to allow for add-on controls or equivalent alternative control plans as compliance options, as well as additional revisions concerning solvent sale, solvent use, add-on control testing, and recordkeeping requirements. *Id.* at 3.

The Agency notes that currently an 8-hour ozone National Ambient Air Quality Standard (NAAQS) is in effect for the Chicago and the Metro-East areas, designating each as a moderate ozone nonattainment area. Prop. at 3. This 8-hour ozone NAAQS replaced the previous 1-hour standard on June 15, 2005. However, given that the United States Environmental Protection Agency (USEPA) has a policy against regression, the control measures adopted to meet the 1-hour standard must still be maintained. *Id.* at 4. Further, under the federal Clean Air Act and the USEPA State Implementation Plan (SIP), failure to obtain equivalent emissions reductions from the cold cleaning sources would require the Agency to make up the deficiency through the implementation of contingency control measures. *Id.* at 3-4. According to the Agency, USEPA has indicated that the 95% control level proposed here is sufficient for this emissions source category. *Id.* at 4.

Two hearings were held before Board Hearing Officer John Knittle. The first hearing was held on April 19, 2006, in Chicago (Tr.1). The second hearing was held on May 17, 2006, in Edwardsville (Tr.2). During those hearings, the Board heard the testimony of Gary E. Beckstead from the Agency's Bureau of Air. In addition, the Board has received two public comments in this proceeding; the first from the Illinois Environmental Regulatory Group

(IERG), filed in support of the proposal (PC 1) on June 14, 2006; the second from the Agency, also filed in support of the proposal (PC 2) on June 15, 2006.

Beckstead described the proposal generally, and testified that the proposed provisions for add-on controls would result in less VOM emissions than using solvents meeting the currently required vapor pressure limits. Further, Beckstead stated that costs and inefficiencies would occur if the impacted sources were required to convert to the low-vapor pressure solvents.

In its public comment, IERG asserted that this proposed rulemaking rightly restores the option of add-on controls and adds the equivalent alternative control plan option, while remaining consistent with the intent of the 1997 revisions to reduce VOM emissions in the nonattainment areas. PC 1 at 3. IERG also opined that the compliance options provided by this rulemaking are justified historically, environmentally, technically, and economically. *Id.* at 5. The Agency stated in its public comment that, per the Board's request during the first hearing, the Agency conducted an additional outreach effort towards retailers of solvent. The effort resulted in one association requesting to be added to the Agency's mailing list for future related proposed rulemakings. PC 2 at 1.

As required by Section 27(b) of the Act (415 ILCS 5/27(b) (2004)), the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study (EcIS) on this rulemaking. The Board's EcIS request, dated February 22, 2006, was placed in this rulemaking's docket. DCEO did not respond to the Board's request. At the second hearing, the hearing officer noted the Board's EcIS request to DCEO and DCEO's lack of response, affording anyone the opportunity to testify. No one testified about DCEO's lack of response. Tr.2 at 5-6.

During the first-notice public comment period, JCAR submitted no corrections to be included in the Board's second-notice proposal.

SUMMARY OF PROPOSAL FOR SECOND NOTICE

The Agency's proposal is unchanged since first notice. The proposal, as amended by Agency *errata* sheets 1 (ES1) and 2 (ES2), revises the Board's cold cleaning degreaser rules applicable to facilities in the Chicago and Metro-East ozone nonattainment areas. The proposed revisions allow the use of add-on controls as an alternative to using solvents with vapor pressure of 1.0 mmHg or less. Likewise, the proposal also allows the use of an equivalent alternative control plan to comply with the control measure requirements. In addition, the proposal provides the testing procedures and recordkeeping requirements for add-on controls and equivalent alternative controls.

While the proposal discusses only the changes to Section 218.182 below, the proposal makes parallel changes to 35 III. Adm. Code 218.182(c) and (d) and 219.182(c) and (d). Prop. at 5. The Agency's proposal seeks to add a new subsection at Section 218.182(c)(3)(A) that would allow the sale of solvents with vapor pressure greater than 1.0 mmHg in units greater than five gallons, but only if the purchaser provides a copy of a valid state or federal construction or operating permit or a copy of a *Federal Register* notice demonstrating that the source is in

compliance with the add-on control requirements, or is exempt. *Id.* The proposed provision at Section 218.182(c)(3)(B) allows the operation of a cold cleaning degreaser using a solvent with a vapor pressure greater than 1.0 mmHg, but only if the source is in compliance with the add-on control requirements or is exempt.

The proposal sets forth control requirements for add-on controls at Section 218.182(c)(4). Prop. at 5. Subsection (c)(4)(A) requires sources using solvents with vapor pressures greater than 1.0 mmHg but less than 56 mmHg to control their emissions to an overall capture and control efficiency of no less than 95%. *Id.* at 6; ES2. The requirements for equivalent alternative emissions control plans will be set forth at Section 218.182(c)(4)(B). These requirements stipulate that emissions from a solvent with a vapor pressure of 1.0 mmHg must be the basis for assessment of equivalent emissions for any proposed control plan. Further, if used as an equivalent alternative control plan, an add-on control must have at least 95% reduction in VOM emissions. Prop. at 7; ES2.

Provisions will also be added mandating the testing of add-on controls at Section 218.182(c)(4)(C). Prop. at 7. Under the proposal, currently operating add-on controls will have to be tested by March 1, 2007, and newly constructed add-on controls will have to be tested within 90 days after startup. *Id*. The testing procedures, monitoring, and recordkeeping provisions for add-on controls and equivalent alternative control plans will be consistent with the provisions in Section 218.105 and Section 219.105, which require that the control devices be operated and maintained at the manufacturer's specifications and continuously monitored to assure that they are operating at the required compliance levels. Finally, recordkeeping and reporting requirements applicable to the operation of add-on controls will be set forth under Section 218.182(d). All records must be kept for a minimum of three years. *Id*.

The Agency's proposal, including its statement of reasons, is available through the Clerk's Office in Chicago (312-814-3620) and on the Board's Web site (<u>www.ipcb.state.il.us</u>) using the Clerk's Office On-Line or "COOL."

DISCUSSION OF SECOND-NOTICE PROPOSAL

The Board has received no public comments during the first-notice public comment period. At second notice, no changes were received from JCAR and, therefore, discussion in addition to that contained in the first notice opinion and order is not required.

The Board agrees with the Agency's assertion that the technical feasibility of add-on controls for point source cold cleaning can result in waste being minimized through solvent being reused. The Board also agrees with the Agency that the proposal is economically reasonable and offers cost benefits comparable to converting to low vapor pressure solvents for some cold cleaning operations. The Board agrees with the Agency that additional costs and inefficiencies would occur if the existing sources are required to use the low vapor pressure solvents. The Board also maintains its proposed amendments to the "paper coating" note at Appendix H in Parts 218 and 219, which were inadvertently not made in consolidated rulemaking docket R04-12/20. These changes will maintain wording consistency in conjunction with the changes proposed to Parts 218 and 219.

Additionally, the Board has made changes in the effective date of the rule. The rule, as proposed by the Agency, provided that the requirements of Sections 218.182(c)(3) and 219.182(c)(3) would be effective after November 30, 2006. In order to avoid a retroactive application of this rule, the Board has changed that date to May 30, 2007. For consistency, a corresponding change was made to the added provisions mandating the testing of add-on controls at Section 218.182(c)(4)(C) and 219.182(c)(4)(C), and currently operating add-on controls will have to be tested by August 31, 2007, with newly constructed add-on controls will have to be tested within 90 days after startup.

CONCLUSION

The Board finds that the Agency's proposed amendments are technically feasible and economically reasonable. The Board adopts the proposal for second-notice review by JCAR. The 45-day second-notice public comment period will begin on the date written notice is received by JCAR and the Board will accept comments only from JCAR during the second-notice period. *See* 35 Ill. Adm. Code 102.606.

<u>ORDER</u>

The Board directs the Clerk to cause the filing of the following rule with the Joint Committee on Administrative Rules for its second-notice review. Proposed additions to Parts 218 and 219 are underlined; proposed deletions appear stricken.

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

PART 218 ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS FOR THE CHICAGO AREA

SUBPART A: GENERAL PROVISIONS

Section

- 218.100 Introduction
- 218.101 Savings Clause
- 218.102 Abbreviations and Conversion Factors
- 218.103 Applicability
- 218.104 Definitions
- 218.105 Test Methods and Procedures
- 218.106 Compliance Dates
- 218.107 Operation of Afterburners
- 218.108 Exemptions, Variations, and Alternative Means of Control or Compliance

- 218.109 Vapor Pressure of Volatile Organic Liquids
- 218.110 Vapor Pressure of Organic Material or Solvent
- 218.111 Vapor Pressure of Volatile Organic Material
- 218.112 Incorporations by Reference
- 218.113 Monitoring for Negligibly-Reactive Compounds
- 218.114 Compliance with Permit Conditions

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section

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

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section

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

SUBPART E: SOLVENT CLEANING

Section

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

SUBPART F: COATING OPERATIONS

Section

- 218.204 Emission Limitations
- 218.205 Daily-Weighted Average Limitations
- 218.206 Solids Basis Calculation
- 218.207 Alternative Emission Limitations

218.208 Exemptions from Emission Limitations

- 218.209 Exemption from General Rule on Use of Organic Material
- 218.210 Compliance Schedule
- 218.211 Recordkeeping and Reporting
- 218.212 Cross-Line Averaging to Establish Compliance for Coating Lines
- 218.213 Recordkeeping and Reporting for Cross-Line Averaging Participating Coating Lines
- 218.214 Changing Compliance Methods
- 218.215 Wood Furniture Coating Averaging Approach
- 218.216 Wood Furniture Coating Add-On Control Use
- 218.217 Wood Furniture Coating Work Practice Standards

SUBPART G: USE OF ORGANIC MATERIAL

Section

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

SUBPART H: PRINTING AND PUBLISHING

Section

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

SUBPART Q: SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING PLANT

- Section
- 218.421 General Requirements
- 218.422 Inspection Program Plan for Leaks
- 218.423 Inspection Program for Leaks
- 218.424 Repairing Leaks
- 218.425 Recordkeeping for Leaks
- 218.426 Report for Leaks
- 218.427 Alternative Program for Leaks
- 218.428 Open-Ended Valves

- 218.429 Standards for Control Devices
- 218.430 Compliance Date (Repealed)
- 218.431 Applicability
- 218.432 Control Requirements
- 218.433 Performance and Testing Requirements
- 218.434 Monitoring Requirements
- 218.435 Recordkeeping and Reporting Requirements
- 218.436 Compliance Date

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

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

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

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

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section

- 218.480 Applicability
- 218.481 Control of Reactors, Distillation Units, Crystallizers, Centrifuges and Vacuum Dryers
- 218.482 Control of Air Dryers, Production Equipment Exhaust Systems and Filters
- 218.483 Material Storage and Transfer
- 218.484 In-Process Tanks
- 218.485 Leaks
- 218.486 Other Emission Units
- 218.487 Testing

- 218.488 Monitoring for Air Pollution Control Equipment
- 218.489 Recordkeeping for Air Pollution Control Equipment

SUBPART V: BATCH OPERATIONS AND AIR OXIDATION PROCESSES

- Section
- 218.500 Applicability for Batch Operations
- 218.501 Control Requirements for Batch Operations
- 218.502 Determination of Uncontrolled Total Annual Mass Emissions and Average Flow Rate Values for Batch Operations
- 218.503 Performance and Testing Requirements for Batch Operations
- 218.504 Monitoring Requirements for Batch Operations
- 218.505 Reporting and Recordkeeping for Batch Operations
- 218.506 Compliance Date
- 218.520 Emission Limitations for Air Oxidation Processes
- 218.521 Definitions (Repealed)
- 218.522 Savings Clause
- 218.523 Compliance
- 218.524 Determination of Applicability
- 218.525 Emission Limitations for Air Oxidation Processes
- 218.526Testing and Monitoring
- 218.527 Compliance Date (Repealed)

SUBPART W: AGRICULTURE

- Section 218.541
- Pesticide Exception

SUBPART X: CONSTRUCTION

- Section 218.561 Architectural Coatings
- 218.562 Paving Operations
- 218.563 Cutback Asphalt

SUBPART Y: GASOLINE DISTRIBUTION

Section

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

SUBPART Z: DRY CLEANERS

- Section
- 218.601 Perchloroethylene Dry Cleaners (Repealed)
- 218.602 Applicability (Repealed)
- 218.603Leaks (Repealed)

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

SUBPART AA: PAINT AND INK MANUFACTURING

Section 218.620 A

218.620 Applicability218.621 Exemption for Waterbase Material and Heatset Offset Ink

- 218.021 Exemption for waterbase Material and Heatset
- 218.623 Permit Conditions (Repealed)
- 218.624 Open Top Mills, Tanks, Vats or Vessels
- 218.625 Grinding Mills
- 218.626 Storage Tanks
- 218.628 Leaks
- 218.630 Clean Up
- 218.636 Compliance Schedule
- 218.637 Recordkeeping and Reporting

SUBPART BB: POLYSTYRENE PLANTS

- Section
- 218.640 Applicability
- 218.642 Emissions Limitation at Polystyrene Plants
- 218.644 Emissions Testing

SUBPART CC: POLYESTER RESIN PRODUCT MANUFACTURING PROCESS

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

SUBPART DD: AEROSOL CAN FILLING

Section

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

SUBPART FF: BAKERY OVENS (REPEALED)

Section

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

SUBPART GG: MARINE TERMINALS

Section

- 218.760 Applicability
- 218.762 Control Requirements
- 218.764 Compliance Certification
- 218.766 Leaks
- 218.768 Testing and Monitoring
- 218.770 Recordkeeping and Reporting

SUBPART HH: MOTOR VEHICLE REFINISHING

Section

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

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

Section

- 218.920 Applicability
- 218.923Permit Conditions (Repealed)
- 218.926 Control Requirements

- 218.927 Compliance Schedule
- 218.928 Testing
- 218.929 Cementable and Dress or Performance Shoe Leather

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

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

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

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

SUBPART TT: OTHER EMISSION UNITS

Section

Section

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

SUBPART UU: RECORDKEEPING AND REPORTING

218.990Exempt Emission Units218.991Subject Emission Units

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

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

SOURCE: Adopted at R91-7 at 15 III. Reg. 12231, effective August 16, 1991; amended in R91-24 at 16 III. Reg. 13564, effective August 24, 1992; amended in R91-28 and R91-30 at 16 III. Reg. 13864, effective August 24, 1992; amended in R93-9 at 17 III. Reg. 16636, effective September 27, 1993; amended in R93-14 at 18 III. Reg. at 1945, effective January 24, 1994; amended in R94-12 at 18 III. Reg. 14973, effective September 21, 1994; amended in R94-15 at 18 III. Reg. 16392, effective October 25, 1994; amended in R94-16 at 18 III. Reg. 16950, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 III. Reg. 6848, effective May 9, 1995; amended in R94-33 at 19 III. Reg. 7359, effective May 22, 1995; amended in R96-13 at 20 III. Reg. 14428, effective October 17, 1996; amended in R97-24 at 21 III. Reg. 7708, effective June 9, 1997; amended in R97-31 at 22 III. Reg. 3556, effective February 2, 1998; amended in R98-16 at 22 III. Reg. 14282, effective July 16, 1998; amended in R02-20 at 27 III. Reg 7283, effective April 8, 2003; amended in R04-12/20 at 30 III. Reg. 9684, effective May 15, 2006; amended in R06-21 at 31 III. Reg. ______, effective ______.

SUBPART E: SOLVENT CLEANING

Section 218.182 Cold Cleaning

- a) Operating Procedures: No person shall operate a cold cleaning degreaser unless:
 - 1) Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
 - 2) The cover of the degreaser is closed when parts are not being handled; and
 - 3) Parts are drained until dripping ceases.
- b) Equipment Requirements: No person shall operate a cold cleaning degreaser unless:
 - 1) The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:
 - A) The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at $38^{\circ}C$ (100°F);
 - B) The solvent is agitated; or
 - C) The solvent is heated above ambient room temperature.

- 2) The degreaser is equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining unless:
 - A) The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at $38^{\circ}C$ (100°F); or
 - B) An internal drainage device cannot be fitted into the cleaning system, in which case the drainage device may be external.
- 3) The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:
 - A) A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or
 - B) Any other equipment or system of equivalent emission control as approved by the Agency and further processed consistent with Section 218.108 of this Part. Such a system may include a water cover, refrigerated chiller or carbon adsorber.
- 4) A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and
- 5) If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.
- c) Material <u>and Control</u> Requirements:
 - 1) On and after March 15, 1999, no person shall:
 - A) Cause or allow the sale of solvent with a vapor pressure which exceeds 2.0 mmHg (0.038 psi) measured at 20° C (68° F) in units greater than five gallons, for use in cold cleaning degreasing operations located in the area covered by Section 218.103 of this Part.
 - B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 2.0 mmHg (0.038 psi) measured at 20° C (68° F).
 - 2) On and after March 15, 2001, no person shall:
 - A) Cause or allow the sale of solvent with a vapor pressure which

- B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F).
- 3) On and after May 30, 2007, no person shall:

Part.

- A) Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five gallons, for use in cold cleaning degreasing operations located in the area covered by Section 218.103 of this Part, unless the purchaser provides a copy of a valid state or federal construction or operating permit or a copy of the Federal Register demonstrating that the purchaser is in compliance with the control requirements of subsection (c)(4) of this Section or is exempt under subsection (f) or (g) of this Section.
- B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F), unless the person is in compliance with the control requirements of subsection (c)(4) of this Section or is exempt under subsection (f) or (g) of this Section.
- 4) <u>Control Requirements:</u>
 - A) <u>A person may operate a cold cleaning degreaser using solvent with</u> <u>a vapor pressure greater than 1.0 mmHg (0.019 psi) but less than</u> <u>56 mmHg (1.064 psi) measured at 20° C (68° F) provided add-on</u> <u>control devices demonstrating at least 95 percent overall capture</u> <u>and control of emissions are used. The add-on controls may</u> include, but are not limited to, carbon adsorbers or afterburners.
 - <u>An equivalent alternative control plan may be used to meet the control requirements of this Section pursuant to Section 218.108 of this Part. Pursuant to the material requirements of subsection (c)(3)(B) of this Section, a solvent with a vapor pressure of 1.0 mmHg (0.019 psi) measured at 20° C (68° F) shall be the basis for assessment of equivalent emissions from any equivalent alternative control plan. If used as an equivalent alternative control plan, an add-on control must demonstrate at least a 95 percent overall capture and control efficiency. A control plan approved by the Agency shall be effective only when included in a federally
 </u>

enforceable permit or approved by the USEPA as a SIP revision pursuant to Section 218.108 of this Part.

- <u>Add-on controls operating at a source prior to May 30, 2007, must</u> be tested by August 31, 2007. Add-on controls constructed on or after May 30, 2007, must be tested within 90 days of initial startup. Testing procedures and recordkeeping for add-on controls and equivalent alternative controls subject to subsections (c)(4)(A) and (B) of this Section are to be performed pursuant to Section 218.105 (c), (d), (e) and (f) of this Part.
- d) Recordkeeping and Reporting Requirements: On and after March 15, 1999:
 - All persons subject to the requirements of subsections (c)(1)(A), and (c)(2)(A), and (c)(3)(A) of this Section must maintain records which include for each sale:
 - A) The name and address of the solvent purchaser;
 - B) The date of sale;
 - C) The type of solvent;
 - D) The unit volume of solvent;
 - E) The total volume of solvent; and
 - F) The vapor pressure of the solvent measured in mmHg at 20° C (68° F).
 - All persons subject to the requirements of subsections (c)(1)(B), and (c)(2)(B), and (c)(3)(B) of this Section must maintain records which include for each purchase:
 - A) The name and address of the solvent supplier;
 - B) The date of purchase;
 - C) The type of solvent; and
 - D) The vapor pressure of the solvent measured in mmHg at 20° C (68° F)-: and
 - <u>E)</u> For any mixture of solvents, the vapor pressure of the mixture, as used, measured in mmHg at 20° C (68° F).

- 3) <u>All persons subject to the requirements of subsection (c)(4) of this Section</u> must maintain records, which include for each purchase:
 - <u>A)</u> The name and address of the solvent supplier;
 - B) The date of purchase;
 - <u>C)</u> <u>The type of solvent;</u>
 - <u>D)</u> The unit volume of solvent;
 - <u>E)</u> <u>The total volume of solvent;</u>
 - F) The vapor pressure of the solvent measured in mmHg at 20° C (68° F); and
 - $\frac{G}{G} = \frac{For any mixture of solvents, the vapor pressure of the mixture, as}{used, measured in mmHg at <math>20^{\circ}$ C (68° F).
- 4) <u>All persons subject to the requirements of subsection (c)(4) of this Section</u> <u>shall maintain records documenting the use of good operating practices</u> <u>consistent with the equipment manufacturer's specifications for the cold</u> <u>cleaning degreasers and add-on control equipment. At a minimum these</u> <u>records shall include:</u>
 - <u>A)</u> Records for periodic inspection of the cold cleaning degreasers and add-on control equipment with date of inspection, individual performing the inspection, and nature of inspection;
 - B) 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 that escaped into the atmosphere as a result of the incident;
 - <u>C)</u> <u>Control device monitoring and recording data; and</u>
 - D) <u>A daily log of operating time for the control device, monitoring</u> equipment, and all associated degreasers.
- 5) All persons subject to the requirements of subsection (c) of this Section shall notify the Agency at least 30 days before changing the method of compliance between subsection (c)(3) and (c)(4) of this Section. Such notification shall include a demonstration of compliance with the newly applicable subsection.

- 6) All persons subject to the requirements of subsection (b) or (c) of this Section shall notify the Agency of any violation of subsection (b) or (c) of this Section 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.
- e) All records required by subsection (d) of this Section shall be retained for three years and shall be made available to the Agency upon request.
- f) The cleaning of electronic components as defined in 35 Ill. Adm. Code Section 211.1885 is exempt from the requirements of subsection(c) of this Section.
- g) Any cold cleaning taking place in a Detrex cold batch degreaser Model #2D-CC-SPL Size 24-4-10, or substantial equivalent, including automated loading of parts, totally enclosed operation (excluding loading or unloading) and permitted by the Agency, is exempt from the requirements of subsection (c) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 218.APPENDIX H Baseline VOM Content Limitations for Subpart F, Section 218.212 Cross-Line Averaging

This Appendix contains limitations for purposes of determining compliance with the requirements in Section 218.212 of this Part. A source must establish that, at very least, each participating coating line used for purposes of cross-line averaging meets the Federal Implementation Plan level of VOM content, as listed below. The emission limitations for participating coating lines that must not be exceeded are as follows:

a)	Autom	obile or Light-Duty Truck Coating	kg/l	lb/gal
	1)	Prime coat	0.14	(1.2)

2) Primer surface coat 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 218.105(b) and the recordkeeping and reporting requirements specified in Section 218.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 218.205 does not apply to the primer surface limitation.)

kg/l lb/gal

3) Topcoat

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 218.105(b) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 218.205 of this Part does not apply to the topcoat limitation.)

	4)	Final repair coat	kg/l 0.58	lb/gal (4.8)
b)	Can C	Coating	kg/l	lb/gal
	1)	Sheet basecoat and overvarnish	0.34	(2.8)
	2)	Exterior basecoat and overvarnish	0.34	(2.8)
	3)	Interior body spray coat	0.51	(4.2)
	4)	Exterior end coat	0.51	(4.2)
	5)	Side seam spray coat	0.66	(5.5)
	6)	End sealing compound coat	0.44	(3.7)
c)	Paper	Coating	kg/l 0.35	lb/gal (2.9)

(Note: The paper coating limitation shall not apply to any owner or operator of any paper coating line on which <u>flexographic or rotogravure</u> printing is performed if the paper coating line complies with the emissions limitations in Subpart H: Printing and Publishing, Section 218.401 of this Part. <u>In addition, screen printing on paper is not regulated as paper coating, but is regulated under Subpart TT of this Part.</u>)

		kg/l	lb/gal
d)	Coil Coating	0.31	(2.6)
e)	Fabric Coating	0.35	(2.9)

f)	Vinyl Coating	0.45 (3.8)			
g)	Metal Furniture Coating				
	1) Air Dried	0.36 (3.0)			
	2) Baked	0.36 (3.0)			
h)	Large Appliance Coating				
	1) Air Dried	0.34 (2.8)			
	2) Baked	0.34 (2.8)			
	(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 0.951 (1 quart) in any one rolling eight-hour period.)				
i)	Magnet Wire Coating	kg/l lb/gal 0.20 (1.7)			
j)	Miscellaneous Metal Parts and Products Coating				
	1) Clear coating	0.52 (4.3)			
	2) Extreme performance coating				
	2) Extreme performance coating				

3)	Steel pail and drum interior coating	0.52	(4.3)

4) All other coatings

B)

Baked

A) Air Dried 0.42 (3.5)

- B) Baked 0.36 (3.0)
- k) Heavy Off-Highway Vehicle Products Coating kg/l lb/gal
 - 1) Extreme performance prime coat 0.42 (3.5)
 - 2) Extreme performance top- coat (air dried) 0.42 (3.5)

0.42

(3.5)

3) Final repair coat (air dried)	0.42	(3.5)
----------------------------------	------	-------

4) All other coatings are subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j) above.

l) Wood Furn		l Furniture Coating	kg/l	lb/gal
	1)	Clear topcoat	0.67	(5.6)
	2)	Opaque stain	0.56	(4.7)
	3)	Pigmented coat	0.60	(5.0)
	4)	Repair coat	0.67	(5.6)
	5)	Sealer	0.67	(5.6)
	6)	Semi-transparent stain	0.79	(6.6)
	7)	Wash coat	0.73	(6.1)

(Note: 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 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.)

m) Existing Diesel-Electric Locomotive Coating Lines in Cook County kg/l lb/gal 1) Extreme performance prime coat 0.42 (3.5)2) Extreme performance topcoat (air dried) 0.42 (3.5)3) Final repair coat (air dried) 0.42 (3.5)4) High-temperature aluminum coating 0.72 (6.0)5) All other coatings 0.36 (3.0)

n)			Coating Transpo	g: ortation	kg/l	lb/gal
	1)	Inter	iors			
		A)	Bake	d		
			i)	Color Coat	0.49	(4.1)
			ii)	Primer	0.46	(3.8)
		B)	Air I	Dried		
			i) ii)	Color Coat Primer		(3.2) (3.5)
	2)	Exter	riors (fle	exible and non-flexible))	
		A)	Bake	d		
			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 I	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)	Spec	ialty			
		A)	Vacu based	um metallizing basecoa	ats, text 0.66	ure (5.5)
		B)	Blac	k coatings, reflective ar	gent coa	atings,

air bag cover coatings, and soft

			coating	gs			0.71	(5.9)
		C)			cers, vacu d texture		allizing	
			topcoa	ts			0.77	(6.4)
		D)	ink pac	d coa	tings, adł tings, ele id resist	-		
			coating				0.82	(6.8)
		E)	Head l	amp	lens coat	ings	0.89	(7.4)
o)	Plastic	e Parts C	Coating:	Bus	iness Ma	achine	kg/l	lb/gal
	1)	Prime	r				0.14	(1.2)
	2)	Color	coat (no	on-tex	ture coa	t)	0.28	(2.3)
	3)	Color	coat (tex	xture	coat)		0.28	(2.3)
	4)	freque	-	erfere	terferenc nce (EM		0.48	(4.0)
	5)	Specia	alty Coa	tings				
		A)	Soft co	oat			0.52	(4.3)
		B)	Plating	g resi	st		0.71	(5.9)
		C)	Plating	g sens	sitizer		0.85	(7.1)*
(Source: Am	ended a	at 30 Ill.	. Reg		, effectiv	/e)	

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

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

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section

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

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section

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

SUBPART E: SOLVENT CLEANING

- Section 219.181 Solvent Cleaning in General
- 219.182 Cold Cleaning
- 219.183 Open Top Vapor Degreasing
- 219.184 Conveyorized Degreasing

- 219.185 Compliance Schedule (Repealed)
- 219.186Test Methods

SUBPART F: COATING OPERATIONS

Section

- 219.204 Emission Limitations
- 219.205 Daily-Weighted Average Limitations
- 219.206 Solids Basis Calculation
- 219.207 Alternative Emission Limitations
- 219.208 Exemptions From Emission Limitations
- 219.209 Exemption From General Rule on Use of Organic Material
- 219.210 Compliance Schedule
- 219.211 Recordkeeping and Reporting
- 219.212 Cross-Line Averaging to Establish Compliance for Coating Lines
- 219.213 Recordkeeping and Reporting for Cross-Line Averaging Participating Coating Lines
- 219.214 Changing Compliance Methods
- 219.215 Wood Furniture Coating Averaging Approach
- 219.216 Wood Furniture Coating Add-On Control Use
- 219.217 Wood Furniture Coating Work Practice Standards

SUBPART G: USE OF ORGANIC MATERIAL

Section

- 219.301 Use of Organic Material
- 219.302 Alternative Standard
- 219.303 Fuel Combustion Emission Units
- 219.304 Operations with Compliance Program

SUBPART H: PRINTING AND PUBLISHING

- Section
- 219.401 Flexographic and Rotogravure Printing
- 219.402 Applicability
- 219.403 Compliance Schedule
- 219.404 Recordkeeping and Reporting
- 219.405 Lithographic Printing: Applicability
- 219.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior to March 15, 1996
- 219.407 Emission Limitations and Control Requirements for Lithographic Printing Lines On and After March 15, 1996
- 219.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996
- 219.409 Testing for Lithographic Printing On and After March 15, 1996
- 219.410 Monitoring Requirements for Lithographic Printing
- 219.411 Recordkeeping and Reporting for Lithographic Printing

SUBPART Q: SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING PLANT

beetion	
219.421	General Requirements
219.422	Inspection Program Plan for Leaks
219.423	Inspection Program for Leaks
219.424	Repairing Leaks
219.425	Recordkeeping for Leaks
219.426	Report for Leaks
219.427	Alternative Program for Leaks
219.428	Open-Ended Valves
219.429	Standards for Control Devices
219.430	Compliance Date (Repealed)
010 401	A 1º 1 '1'

- 219.431 Applicability
- 219.432 Control Requirements
- 219.433 Performance and Testing Requirements
- 219.434 Monitoring Requirements
- 219.435 Recordkeeping and Reporting Requirements
- 219.436 Compliance Date

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

Section

Section

- 219.441 Petroleum Refinery Waste Gas Disposal
- 219.442 Vacuum Producing Systems
- 219.443 Wastewater (Oil/Water) Separator
- 219.444 Process Unit Turnarounds
- 219.445 Leaks: General Requirements
- 219.446 Monitoring Program Plan for Leaks
- 219.447 Monitoring Program for Leaks
- 219.448 Recordkeeping for Leaks
- 219.449 Reporting for Leaks
- 219.450 Alternative Program for Leaks
- 219.451 Sealing Device Requirements
- 219.452 Compliance Schedule for Leaks
- 219.453 Compliance Dates (Repealed)

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

- Section
- 219.461 Manufacture of Pneumatic Rubber Tires
- 219.462 Green Tire Spraying Operations
- 219.463 Alternative Emission Reduction Systems
- 219.464 Emission Testing
- 219.465 Compliance Dates (Repealed)
- 219.466 Compliance Plan (Repealed)

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section

- 219.480 Applicability
- 219.481 Control of Reactors, Distillation Units, Crystallizers, Centrifuges and Vacuum Dryers
- 219.482 Control of Air Dryers, Production Equipment Exhaust Systems and Filters
- 219.483 Material Storage and Transfer
- 219.484 In-Process Tanks
- 219.485 Leaks
- 219.486 Other Emission Units
- 219.487 Testing
- 219.488 Monitoring for Air Pollution Control Equipment
- 219.489 Recordkeeping for Air Pollution Control Equipment

SUBPART V: BATCH OPERATIONS AND AIR OXIDATION PROCESSES

Section

- 219.500 Applicability for Batch Operations
- 219.501 Control Requirements for Batch Operations
- 219.502 Determination of Uncontrolled Total Annual Mass Emissions and Actual Weighted Average Flow Rate Values for Batch Operations
- 219.503 Performance and Testing Requirements for Batch Operations
- 219.504 Monitoring Requirements for Batch Operations
- 219.505 Reporting and Recordkeeping for Batch Operations
- 219.506 Compliance Date
- 219.520 Emission Limitations for Air Oxidation Processes
- 219.521 Definitions (Repealed)
- 219.522 Savings Clause
- 219.523 Compliance
- 219.524 Determination of Applicability
- 219.525 Emission Limitations for Air Oxidation Processes (Renumbered)
- 219.526 Testing and Monitoring
- 219.527 Compliance Date (Repealed)

SUBPART W: AGRICULTURE

Section

Section

219.541 Pesticide Exception

SUBPART X: CONSTRUCTION

- 219.561 Architectural Coatings
- 219.562 Paving Operations
- 219.563 Cutback Asphalt

SUBPART Y: GASOLINE DISTRIBUTION

- Section
- 219.581Bulk Gasoline Plants
- 219.582Bulk Gasoline Terminals
- 219.583 Gasoline Dispensing Operations Storage Tank Filling Operations

- 219.584Gasoline Delivery Vessels
- 219.585 Gasoline Volatility Standards
- 219.586 Gasoline Dispensing Operations Motor Vehicle Fueling Operations (Repealed)

SUBPART Z: DRY CLEANERS

- 219.601 Perchloroethylene Dry Cleaners (Repealed)
- 219.602 Exemptions (Repealed)
- 219.603 Leaks (Repealed)
- 219.604 Compliance Dates (Repealed)
- 219.605 Compliance Plan (Repealed)
- 219.606 Exception to Compliance Plan (Repealed)
- 219.607 Standards for Petroleum Solvent Dry Cleaners
- 219.608 Operating Practices for Petroleum Solvent Dry Cleaners
- 219.609 Program for Inspection and Repair of Leaks
- 219.610 Testing and Monitoring
- 219.611 Exemption for Petroleum Solvent Dry Cleaners
- 219.612 Compliance Dates (Repealed)
- 219.613 Compliance Plan (Repealed)

SUBPART AA: PAINT AND INK MANUFACTURING

Section

Section

- 219.620 Applicability
- 219.621 Exemption for Waterbase Material and Heatset-Offset Ink
- 219.623 Permit Conditions
- 219.624 Open-Top Mills, Tanks, Vats or Vessels
- 219.625 Grinding Mills
- 219.626 Storage Tanks
- 219.628 Leaks
- 219.630 Clean Up
- 219.636 Compliance Schedule
- 219.637 Recordkeeping and Reporting

SUBPART BB: POLYSTYRENE PLANTS

- Section
- 219.640 Applicability
- 219.642 Emissions Limitation at Polystyrene Plants
- 219.644 Emissions Testing

SUBPART FF: BAKERY OVENS (REPEALED)

- Section
- 219.720 Applicability (Repealed)
- 219.722 Control Requirements (Repealed)
- 219.726 Testing (Repealed)
- 219.727 Monitoring (Repealed)
- 219.728 Recordkeeping and Reporting (Repealed)

- 219.729 Compliance Date (Repealed)
- 219.730 Certification (Repealed)

SUBPART GG: MARINE TERMINALS

Section

- 219.760 Applicability
- 219.762 Control Requirements
- 219.764 Compliance Certification
- 219.766 Leaks
- 219.768 Testing and Monitoring
- 219.770 Recordkeeping and Reporting

SUBPART HH: MOTOR VEHICLE REFINISHING

Section

- 219.780 Emission Limitations
- 219.782 Alternative Control Requirements
- 219.784 Equipment Specifications
- 219.786 Surface Preparation Materials
- 219.787 Work Practices
- 219.788 Testing
- 219.789 Monitoring and Recordkeeping for Control Devices
- 219.790 General Recordkeeping and Reporting (Repealed)
- 219.791 Compliance Date
- 219.792 Registration
- 219.875 Applicability of Subpart BB (Renumbered)
- 219.877 Emissions Limitation at Polystyrene Plants (Renumbered)
- 219.879 Compliance Date (Repealed)
- 219.881 Compliance Plan (Repealed)
- 219.883 Special Requirements for Compliance Plan (Repealed)
- 219.886 Emissions Testing (Renumbered)

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

Section

- 219.920 Applicability
- 219.923 Permit Conditions
- 219.926 Control Requirements
- 219.927 Compliance Schedule
- 219.928 Testing

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

- Section
- 219.940 Applicability
- 219.943 Permit Conditions
- 219.946 Control Requirements

219.947 Compliance Schedule

219.948 Testing

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

Section

219.960 Applicability

- 219.963 Permit Conditions
- 219.966 Control Requirements
- 219.967 Compliance Schedule
- 219.968 Testing

SUBPART TT: OTHER EMISSION UNITS

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

219.988 Testing

Castion

SUBPART UU: RECORDKEEPING AND REPORTING

Section	
219.990	Exempt Emission Units
219.991	Subject Emission Units

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

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

SOURCE: Adopted at 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 III. Reg. 6958, effective May 9, 1995; amended in R94-33 at 19 III. Reg. 7385, effective May 22, 1995; amended in R96-2 at 20 III. Reg. 3848, effective February 15, 1996; amended in R96-13 at 20 III. Reg. 14462, effective October 28, 1996; amended in R97-24 at 21 III. Reg. 7721, effective June 9, 1997; amended in R97-31 at 22 III. Reg. 3517, effective February 2, 1998; amended in R04-12/20 at 30 III. Reg. 9799, effective May 15, 2006; amended in R06-21 at 30 III. Reg. ______, effective ______.

SUBPART E: SOLVENT CLEANING

Section 219.182 Cold Cleaning

- a) Operating Procedures: No person shall operate a cold cleaning degreaser unless:
 - 1) Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
 - 2) The cover of the degreaser is closed when parts are not being handled; and
 - 3) Parts are drained until dripping ceases.
- b) Equipment Requirements: No person shall operate a cold cleaning degreaser unless:
 - 1) The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:
 - A) The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38° C (100° F);
 - B) The solvent is agitated; or
 - C) The solvent is heated above ambient room temperature.
 - 2) The degreaser is equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining unless:
 - A) The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38° C (100° F); or
 - B) An internal drainage device cannot be fitted into the cleaning system, in which case the drainage device may be external.

- 3) The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38° C (100° F) or if the solvent is heated above 50° C (120° F) or its boiling point:
 - A) A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or
 - B) Any other equipment or system of equivalent emission control as approved by the Agency and further processed consistent with Section 219.108 of this Part. Such a system may include a water cover, refrigerated chiller or carbon adsorber.
- 4) A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and
- 5) If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.
- c) Material <u>and Control</u> Requirements:
 - 1) On and after March 15, 1999, no person shall:
 - A) Cause or allow the sale of solvent with a vapor pressure which exceeds 2.0 mmHg (0.038 psi) measured at 20° C (68° F) in units greater than five (5) gallons, for use in cold cleaning degreasing operations located in the area covered by Section 219.103 of this Part.
 - B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 2.0 mmHg (0.038 psi) measured at 20° C (68° F).
 - 2) On and after March 15, 2001, no person shall:
 - A) Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five (5) gallons, for use in cold cleaning degreasing operations located in the area covered by Section 219.103 of this Part.
 - B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F).
 - 3) On and after May 30, 2007, no person may:

- <u>A)</u> Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five gallons, for use in cold cleaning degreasing operations located in the area covered by Section 219.103 of this Part, unless the purchaser provides a copy of a valid state or federal construction or operating permit or a copy of the Federal Register demonstrating that the purchaser is in compliance with the control requirements of subsection (c)(4) of this Section or is exempt under subsection (f) or (g) of this Section.
- <u>B</u>) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F), unless the person is in compliance with the control requirements of subsection (c)(4) of this Section or is exempt under subsection (f) or (g) of this Section.
- 4) <u>Control Requirements:</u>
 - A) <u>A person may operate a cold cleaning degreaser using solvent with</u> <u>a vapor pressure greater than 1.0 mmHg (0.019 psi) but less than</u> <u>56 mmHg (1.064 psi) measured at 20° C (68° F) provided add-on</u> <u>control devices demonstrating at least 95 percent overall capture</u> <u>and control of emissions are used. The add-on controls may</u> <u>include, but are not limited to, carbon adsorbers or afterburners.</u>
 - <u>An equivalent alternative control plan may be used to meet the control requirements of this Section pursuant to Section 219.108 of this Part. Pursuant to the material requirements of subsection (c)(3)(B) of this Section, a solvent with a vapor pressure of 1.0 mmHg (0.019 psi) measured at 20° C (68° F) shall be the basis for assessment of equivalent emissions from any equivalent alternative control plan. If used as an equivalent alternative control plan, an add-on control must demonstrate at least a 95 percent overall capture and control efficiency. A control plan approved by the Agency shall be effective only when included in a federally enforceable permit or approved by the USEPA as a SIP revision pursuant to Section 219.108 of this Part.
 </u>
 - <u>Add-on controls operating at a source prior to May 30, 2007, must</u> be tested by August 31, 2007. Add-on controls constructed on or after May 30, 2007 must be tested within 90 days of initial startup. Testing procedures and recordkeeping for add-on controls and equivalent alternative controls subject to subsections (c)(4)(A) and (B) of this Section are to be performed pursuant to Section 219.105 (c), (d), (e) and (f) of this Part.

- All persons subject to the requirements of subsections (c)(1)(A), and (c)(2)(A), and (c)(3)(A) of this Section must maintain records which include for each sale:
 - A) The name and address of the solvent purchaser;
 - B) The date of sale;
 - C) The type of solvent;
 - D) The unit volume of solvent;
 - E) The total volume of solvent; and
 - F) The vapor pressure of the solvent measured in mmHg at 20° C (68° F).
- All persons subject to the requirements of subsections (c)(1)(B), and (c)(2)(B), and (c)(3)(B) of this Section must maintain records which include for each purchase:
 - A) The name and address of the solvent supplier;
 - B) The date of purchase;
 - C) The type of solvent; and
 - D) The vapor pressure of the solvent measured in mmHg at 20° C (68° F)-; and
 - <u>E)</u> For any mixture of solvents, the vapor pressure of the mixture, as used, measured in mmHg at 20° C (68° F).
- 3) All persons subject to the requirements of subsection (c)(4) of this Section must maintain records, which include for each purchase:
 - A) The name and address of the solvent supplier;
 - B) The date of purchase;
 - <u>C)</u> <u>The type of solvent;</u>
 - D) The unit volume of solvent;

- <u>E)</u> <u>The total volume of solvent;</u>
- F) The vapor pressure of the solvent measured in mmHg at 20° C (68° F); and
- 4) All persons subject to the requirements of subsection (c)(4) of this Section shall maintain records documenting the use of good operating practices consistent with the equipment manufacturer's specifications for the cold cleaning degreasers and add-on control equipment. At a minimum these records shall include:
 - <u>A)</u> Records for periodic inspection of the cold cleaning degreasers and add-on control equipment with date of inspection, individual performing the inspection, and nature of inspection;
 - B) 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 that escaped into the atmosphere as a result of the incident;
 - <u>C)</u> <u>Control device monitoring and recording data; and</u>
 - D) <u>A daily log of operating time for the control device, monitoring equipment, and all associated degreasers.</u>
- 5) All persons subject to the requirements of subsection (c) of this Section shall notify the Agency at least 30 days before changing the method of compliance between subsection (c)(3) and (c)(4) of this Section. Such notification shall include a demonstration of compliance with the newly applicable subsection.
- 6) All persons subject to the requirements of subsection (b) or (c) of this Section shall notify the Agency of any violation of subsection (b) or (c) of this Section 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.
- e) All records required by subsection (d) of this Section shall be retained for three years and shall be made available to the Agency upon request.
- f) The cleaning of electronic components as defined in 35 Ill. Adm. Code Section 211.1885 is exempt from the requirements of subsection (c) of this Section.

g) Any cold cleaning taking place in a Detrex cold batch degreaser Model #2D-CC-SPL Size 24-4-10, or substantial equivalent, including automated loading of parts, totally enclosed operation (excluding loading and unloading) and permitted by the Agency, is exempt from the requirements of subsection (c) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

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

This Appendix contains limitations for purposes of determining compliance with the requirements in Section 219.212 of this Part. A source must establish that, at very least, each participating coating line used for purposes of cross-line averaging meets the Federal Implementation Plan level of VOM content, as listed below. The emission limitations for participating coating lines that must not be exceeded are as follows:

a)		omobile or Light-Duty k Coating	kg/l	lb/gal
	1)	Prime coat	0.14	(1.2)
	2)	Primer surface coat	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)

(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

	4)	Final repair coat	kg/l 0.58	lb/gal (4.8)
b)	Can C	Coating	kg/l	lb/gal
	1)	Sheet basecoat and overvarnish	0.34	(2.8)
	2)	Exterior basecoat and overvarnish	0.34	(2.8)
	3)	Interior body spray coat	0.51	(4.2)
	4)	Exterior end coat	0.51	(4.2)
	5)	Side seam spray coat	0.66	(5.5)
	6)	End sealing compound coat	0.44	(3.7)
c)	Paper	Coating	kg/l 0.35	lb/gal (2.9)

specifying the method of demonstrating compliance with the protocol. Section 219.205 of this Part does not apply to the topcoat limitation.)

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

d)	Coil C	oating	kg/l 0.31	lb/gal (2.6)
e)	Fabric	Coating	0.35	(2.9)
f)	Vinyl	Coating	0.45	(3.8)
g)	Metal	Furniture Coating		
	1)	Air Dried	0.36	(3.0)
	2)	Baked	0.36	(3.0)

h) Large

1)	Air Dried	0.34	(2.8)
2)	Baked	0.34	(2.8)

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

i)	Magne	et Wire	Coating	kg/l 0.20	lb/gal (1.7)
j)		llaneous ets Coat	Metal Parts and ing		
	1)	Clear o	coating	0.52	(4.3)
	2)	Extren coating	ne performance		
		A)	Air Dried	0.42	(3.5)
		B)	Baked	0.42	(3.5)
	3)	-	ail and drum r coating	0.52	(4.3)
	4)	All oth	er coatings		
		A)	Air Dried	0.42	(3.5)
		B)	Baked	0.36	(3.0)
k)	-	Off-Hi cts Coat	ghway Vehicle ing	kg/l	lb/gal
	1)	Extren prime	ne performance coat	0.42	(3.5)
	 Extreme performance top- coat (air dried) 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.

Wood	l Furniture Coating	kg/l	lb/gal
1)	Clear topcoat	0.67	(5.6)
2)	Opaque stain	0.56	(4.7)
3)	Pigmented coat	0.60	(5.0)
4)	Repair coat	0.67	(5.6)
5)	Sealer	0.67	(5.6)
6)	Semi-transparent stain	0.79	(6.6)
7)	Wash coat	0.73	(6.1)

1)

(Note: 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 37.81 (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, 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.)

m) Plastic Parts Coating: Automotive/Transportation

1)

kg/l lb/gal Interiors A) Baked i) Color coat 0.49* $(4.1)^*$ 0.46* ii) $(3.8)^{*}$ Primer B) Air Dried 0.38* i) Color coat $(3.2)^*$ Primer $(3.5)^*$ ii) 0.42*

2) Exteriors (flexible and non-flexible)

Baked

A)

3)

11)	Daked					
	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)*		
Specialty						
A)		m metallizing pats, texture pats	0.66*	(5.5)*		
B)	reflect coating bag co	coatings, ive argent gs, air ver coatings, ft coatings	0.71*	(5.9)*		

- C) Gloss reducers, 0.77* (6.4)* vacuum metallizing topcoats, and texture topcoats
- D) Stencil coatings, 0.82* (6.8)* adhesion primers, ink pad coatings,

			electrostatic pro coatings, and re coatings	-		
		E)	Head lamp lens coatings	8	0.89*	(7.4)*
n) F	Plastic	c Parts Coating: Busing Primer Color coat (non-texture coat) Color coat (texture coat) Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coating		Busine	ess Machine	
1)				kg/l 0.14*	lb/gal (1.2)*
2	,				0.28*	(2.3)*
3	,				0.28*	(2.3)*
4	-				0.48*	(4.0)*
5	5)	Specialty Coatings				
		A)	Soft coat		0.52*	(4.3)*
		B)	Plating resist		0.71*	(5.9)*
		C)	Plating sensitiz	zer	0.85*	(7.1)*
(Source: Amended at 30 Ill. Reg, effective)						

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution control Board, certify that the Board adopted the above opinion and order on March 1, 2007, by a vote of 4-0.

Dretty In. Sunn

Dorothy M. Gunn, Clerk Illinois Pollution Control Board