## C 1

IN THE MATTER OF:	) ) R1	0_ ع
REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) FOR VOLATILE	) (R	0- <b>20</b> ulemaking-Air)
ORGANIC MATERIAL EMISSIONS FROM	)	
GROUP IV CONSUMER & COMMERCIAL PRODUCTS: PROPOSED AMENDMENTS	) .	RECEIVED CLERK'S OFFICE
TO 35 ILL. ADM. CODE 211, 218, and 219	j	MAR 0 8 2010
TABLE OF O	CONTENTS	STATE OF ILLINOIS Pollution Control Board

- 1. Notice of Filing
- 2. Appearance of Dana Vetterhoffer, Assistant Counsel for the Illinois Environmental Protection Agency
- 3. Proposal of Regulations by Director Douglas P. Scott
- 4. Certification of Required Rule
- 5. Certification of Origination
- 6. Agency Analysis of Economic and Budgetary Effects
- 7. Motion for Waiver of Copy Requirements
- 8. Fast Track Rulemaking Cover Sheet
- 9. Statement of Reasons
- 10. Proposed Amendments to 35 Ill. Adm. Code Parts 211, 218, and 219
- 11. Technical Support Document for Control of Volatile Organic Material Emissions in Non-Attainment Areas from Miscellaneous Metal and Plastic Parts Coatings; Automobile and Light-Duty Truck Assembly Coatings; Miscellaneous Industrial Adhesives; and Fiberglass Boat Manufacturing Materials, AQPSTR 10-01, Illinois Environmental Protection Agency, January 2010
- 12. Documents Relied Upon:

Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Control Techniques Guidelines for Miscellaneous Industrial Adhesives, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives, 73 FR 58481-58491 (October 7, 2008).

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 72 FR 20227-20237 (April 24, 2007).

Illinois Environmental Protection Act (415 ILCS 5/et seq.)

Clean Air Act (42 U.S.C. 7401 et seq.)

Incorporations by reference:

"Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations," September 2008, United States Environmental Protection Agency, Washington, D.C., EPA-453/R-08-002.

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

46 CFR, Subchapter Q (2007).

46 CFR, Subchapter T (2008).

A.S.T.M. D-523-80.

A.S.T.M. D-523-89.

Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. Section 136 (2009).

American Architectural Manufacturers Association Specification 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) (2005).

American Architectural Manufacturers Association Specification 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels) (2005).

- 13. Certificate of Service
- 14. First Notice Forms
- 15. Disk in Microsoft WORD containing Agency's Proposed Amendments to Parts 211, 218, and 219, and First Notice Forms

IN THE MATTER OF:	)	R10-20
REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) FOR VOLATILE	) )	(Rulemaking-Air)
ORGANIC MATERIAL EMISSIONS FROM GROUP IV CONSUMER & COMMERCIAL PRODUCTS: PROPOSED AMENDMENTS	) ) )	RECEIVED CLERK'S OFFICE
TO 35 ILL. ADM. CODE 211, 218, and 219	)	MAR 0 8 2010
<u>NO.</u>	<u> </u>	STATE OF ILLINOIS Pollution Control Board

To: John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601-3218 Matthew Dunn, Chief
Division of Environmental Enforcement
Office of the Attorney General
69 W. Washington, Suite 1800
Chicago, IL 60602

Virginia Yang
Deputy Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the REGULATORY PROPOSAL entitled "REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) FOR VOLATILE ORGANIC MATERIAL EMISSIONS FROM GROUP IV CONSUMER & COMMERCIAL PRODUCTS: PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE 211, 218, and 219," MOTION FOR WAIVER OF COPY REQUIREMENTS, and APPEARANCE of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dana Vetterhoffer

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

IN THE MATTER OF:	)	
	)	R10-
REASONABLY AVAILABLE CONTROL	)	(Rulemaking-Air)
TECHNOLOGY (RACT) FOR VOLATILE	)	
ORGANIC MATERIAL EMISSIONS FROM	)	
GROUP IV CONSUMER & COMMERCIAL	)	•
PRODUCTS: PROPOSED AMENDMENTS	)	
TO 35 ILL. ADM. CODE 211, 218, and 219	)	

#### **APPEARANCE**

The undersigned hereby enters her appearance as an attorney on behalf of the Illinois Environmental Protection Agency.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: Dana Vetterhoffer

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

IN THE MATTER OF:	)	R10- 20
REASONABLY AVAILABLE CONTROL	)	(Rulemaking-Air)
TECHNOLOGY (RACT) FOR VOLATILE	j	CLERK'S OFFICE
ORGANIC MATERIAL EMISSIONS FROM	)	CLERK'S OFFICE
GROUP IV CONSUMER & COMMERCIAL	)	MAR U 8 2010
PRODUCTS: PROPOSED AMENDMENTS	)	
TO 35 ILL. ADM. CODE 211, 218, and 219	)	STATE OF ILLINOIS Pollution Control Board

### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PROPOSAL OF REGULATIONS

The Illinois Environmental Protection Agency moves that the Illinois Pollution Control Board adopt the attached regulations.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Douglas P. Scott

Director

DATED: January 12, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

IN THE MATTER OF:	)	R10- 20
REASONABLY AVAILABLE CONTROL	)	R10- <b>20</b> (Rulemaking-Air)
TECHNOLOGY (RACT) FOR VOLATILE ORGANIC MATERIAL EMISSIONS FROM GROUP IV CONSUMER & COMMERCIAL PRODUCTS: PROPOSED AMENDMENTS	)	CLERK'S OFFICE MAR 0 8 2010
TO 35 ILL. ADM. CODE 211, 218, and 219		STATE OF ILLINOIS Pollution Control Soard

#### CERTIFICATION OF REQUIRED RULE

The Illinois Environmental Protection Agency certifies in accordance with 35 Ill. Adm. Code 102.202(h) and 102.500, and 415 ILCS 5/28.2(b), that it believes that this proposal for amendments to 35 Ill. Adm. Code 211, 218, and 219 is a federally required rule under Sections 172(c)(1) and 182(b)(2) of the Clean Air Act ("CAA"). 42 U.S.C. §§ 7502(c)(1) and 7511a(b)(2).

The proposal for amendments is needed to satisfy Illinois' obligation to submit a State Implementation Plan ("SIP") for sources of volatile organic materials ("VOM") emissions in areas designated as nonattainment with respect to the ozone National Ambient Air Quality Standard. Section 172(c)(1) of the CAA provides that states must include in their SIPs for nonattainment areas "reasonably available control measures," including "reasonably available control technology" ("RACT"), for sources of emissions. 42 U.S.C. § 7502(c)(1). Section 182(b)(2) of the CAA provides that, for ozone nonattainment areas, the State must revise its SIP to include RACT for sources of VOM emissions covered by a control techniques guideline ("CTG") issued between November 15, 1990, and the date of attainment. 42 U.S.C. § 7511a(b)(2).

The proposed amendments are intended to establish RACT requirements for Group IV

Consumer and Commercial Product categories in response to CTGs issued by the United States

Environmental Protection Agency on October 7, 2008, and thereby satisfy the CAA requirements

described above.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dana Vetterhoffer

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217)'782-5544 \*

IN THE MATTER OF:	)	•	
	)	R10- 20 (Rulemaking-Air)	CLERK'S OFFICE
REASONABLY AVAILABLE CONTROL	)	(Rulemaking-Air)	CLERK'S OFFICE
TECHNOLOGY (RACT) FOR VOLATILE	)		MAR 0 8 2010
ORGANIC MATERIAL EMISSIONS FROM	)		
GROUP IV CONSUMER & COMMERCIAL	)		STATE OF ILLINOIS Pollution Control Board
PRODUCTS: PROPOSED AMENDMENTS	)		Pollution Control Board
TO 35 ILL. ADM. CODE 211, 218, and 219	)	•	_

#### **CERTIFICATION OF ORIGINATION**

The Illinois Environmental Protection Agency certifies in accordance with 35 Ill. Adm. Code 102.202(i) that this proposal for amendments to 35 Ill. Adm. Code 211, 218, and 219 amends the most recent version of the rules as published on the Illinois Pollution Control Board's website.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dana Vetterhoffer

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

## Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking

Agency:		Illinois Pollution Control Board
Part/Title:		Definitions and General Provisions (35 Ill. Adm. Code Part 211)
Illinois	Register	r Citation:
Please explan		to provide as dollar-specific responses as possible and feel free to add any relevant
1. Antici		ated effect on State expenditures and revenues.
	(a)	Current cost to the agency for this program/activity.  \$ 0 per year (approximately)
	(b)	If this rulemaking will result in an increase or decrease in cost, specify the fiscal year in which this change will first occur and the dollar amount of the effect.  N/A
	(c)	Indicate the funding source, including Fund and appropriation lines, for this program/activity. $\underline{N/A}$
	(d)	If an increase or decrease in the costs of another State agency is anticipated, specify the fiscal year in which this change will first occur and the estimated dollar amount of the effect. $N/A$
	(e)	Will this rulemaking have any effect on State revenues or expenditures not already indicated above? No
2.	Econon	nic effect on persons affected by the rulemaking:
	(a)	Indicate the economic effect and specify the persons affected:
		Positive Negative No effect X
		Persons affected: Owners and operators of affected automobile and light duty truck assembly coating lines, miscellaneous metal parts and products coating lines, plastic parts and products coating lines, sources using miscellaneous industrial adhesives, and sources using fiberglass boat manufacturing materials.
	·	Dollar amount per person:0_
		Total statewide cost:0
	(b)	If an economic effect is predicted, please briefly describe how the effect will occur. N/A

(c) Will the rulemaking have an indirect effect that may result in increased administrative costs? No Will there be any change in requirements such as filing, documentation, reporting or completion of forms? No

The proposed changes to Part 211 should have no indirect effect that may result in increased administrative costs.

## Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking

Agency:		Illinois Pollution Control Board
Part/Ti III. Adi		Organic Material Emission Standards and Limitations for the Chicago Area (35 Part 218)
Ninois	Registe	r Citation:
Please explan	-	to provide as dollar-specific responses as possible and feel free to add any relevant
1.	Anticip	pated effect on State expenditures and revenues.
	(a)	Current cost to the agency for this program/activity. ~\$50,300 per year
	(p)	If this rulemaking will result in an increase or decrease in cost, specify the fiscal year in which this change will first occur and the dollar amount of the effect.  N/A
	(c)	Indicate the funding source, including Fund and appropriation lines, for this program/activity. N/A
	(d)	If an increase or decrease in the costs of another State agency is anticipated, specify the fiscal year in which this change will first occur and the estimated dollar amount of the effect. $N/A$
	(e)	Will this rulemaking have any effect on State revenues or expenditures not already indicated above? <u>No</u>
2.	Econon	nic effect on persons affected by the rulemaking:
ů.	(a)	Indicate the economic effect and specify the persons affected:
		Positive Negative X No effect
		Persons affected: See list of potentially affected sources in TSD.
		Dollar amount per person: Affected miscellaneous metal and plastic parts coating operations: \$0-1760/ton Affected automobile and light-duty truck assembly coating operations: \$0 Affected miscellaneous industrial adhesive sources: \$0-270/ton Affected fiberglass boat manufacturing facilities: \$0  Total statewide cost: Affected miscellaneous metal and plastic parts coating operations: \$2820/day
		Affected automobile and light-duty truck assembly coating operations: \$0 Affected miscellaneous industrial adhesive sources: \$97/day

Affected fiberglass boat manufacturing facilities: \$0 (no affected sources)

- (b) If an economic effect is predicted, please briefly describe how the effect will occur. Costs due to control measures and switching to low-VOM materials at affected sources, as described in TSD.
- (c) Will the rulemaking have an indirect effect that may result in increased administrative costs? Will there be any change in requirements such as filing, documentation, reporting or completion of forms?

The rulemaking will require a small amount of additional reporting but should have no more than a negligible indirect effect that may result in increased administrative costs.

## Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking

Ageno	<b>y</b> :	Illinois Pollution Control Board
Part/T (35 III		Organic Material Emission Standards and Limitations for the Metro East Area Code Part 219)
Illinoi	s Registe	er Citation:
Please explan	_	to provide as dollar-specific responses as possible and feel free to add any relevant
1.	Antici	pated effect on State expenditures and revenues.
	(a)	Current cost to the agency for this program/activity. ~\$5,500 per year
	(b)	If this rulemaking will result in an increase or decrease in cost, specify the fiscal year in which this change will first occur and the dollar amount of the effect.  N/A
	(c)	Indicate the funding source, including Fund and appropriation lines, for this program/activity. $\underline{N/A}$
	(d)	If an increase or decrease in the costs of another State agency is anticipated, specify the fiscal year in which this change will first occur and the estimated dollar amount of the effect. $N/A$
	(e)	Will this rulemaking have any effect on State revenues or expenditures not already indicated above? No
2.	Econo	mic effect on persons affected by the rulemaking:
	(a)	Indicate the economic effect and specify the persons affected:
		Positive Negative X No effect
		Persons affected: See list of potentially affected sources in TSD.
		Dollar amount per person: Affected miscellaneous metal and plastic parts coating operations: \$0-1760/ton Affected automobile and light-duty truck assembly coating operations: \$0 Affected miscellaneous industrial adhesive sources: \$0-270/ton Affected fiberglass boat manufacturing facilities: \$0
		Total statewide cost: Affected miscellaneous metal and plastic parts coating operations: \$374/day Affected automobile and light-duty truck assembly coating operations: \$0 (no affected sources)

Affected miscellaneous industrial adhesive sources: \$10/day
Affected fiberglass boat manufacturing facilities: \$0 (no affected sources)

- (b) If an economic effect is predicted, please briefly describe how the effect will occur. Costs due to control measures or switching to low-VOM materials at sources, as described in TSD.
- (c) Will the rulemaking have an indirect effect that may result in increased administrative costs? Will there be any change in requirements such as filing, documentation, reporting or completion of forms?

The rulemaking will require a small amount of additional reporting but should have no more than a negligible indirect effect that may result in increased administrative costs.

IN THE MATTER OF:	)	R10- <b>20</b>
REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) FOR VOLATILE	)	(Rulemaking-Air)
ORGANIC MATERIAL EMISSIONS FROM GROUP IV CONSUMER & COMMERCIAL	)	RECEIVED CLERK'S OFFICE
PRODUCTS: PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE 211, 218, and 219	)	MAR 0 8 2010
MOTION FOR WAIVER OF	COPY	STATE OF ILLINOIS REQUIREMENT Sllution Control Board

The Proponent, the Illinois Environmental Protection Agency ("Illinois EPA"), by its attorney, and pursuant to 35 Ill. Adm. Code 101.500, 102.110, 102.200, and 102.402, respectfully moves that the Illinois Pollution Control Board ("Board") waive the requirement that the Illinois EPA submit the original and nine copies of the regulatory proposal including all documents relied upon, and waive the requirement that the Illinois EPA provide copies of certain documents relied upon. In support of its Motion, Illinois EPA states as follows:

- 1. Section 102.200 of the Board's procedural rules requires that the original and nine copies of each regulatory proposal be filed with the Clerk. 35 Ill. Adm. Code Section 102.200. Section 27(a) of the Environmental Protection Act also requires that the Illinois EPA provide information supporting a regulatory proposal. 415 ILCS 5/27(a).
- 2. The Illinois EPA directly relied upon several documents when drafting the regulatory proposal, and incorporated by reference certain documents as well. The documents relied upon/incorporated by reference are as follows:
  - a. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.

- b. Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.
- c. Control Techniques Guidelines for Miscellaneous Industrial Adhesives, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.
- d. Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September 2008.
- e. Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives, 73 Fed. Reg. 58481-58491 (October 7, 2008).
- f. National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 72 Fed. Reg. 20227-20237 (April 24, 2007).
- g. Illinois Environmental Protection Act (415 ILCS 5/et seq.).
- h. Clean Air Act (42 U.S.C. 7401 et seq.).
- i. Incorporations by reference:
  - "Protocol for Determining the Daily Volatile Organic Compound Emission Rate
    of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations",
    September 2008, United States Environmental Protection Agency, Washington,
    D.C., EPA-453/R-08-002.
  - 2. 40 CFR 63, Subpart PPPP, Appendix A (2008).
  - 3. 46 CFR, Subchapter Q (2007).
  - 4. 46 CFR, Subchapter T (2008).
  - A.S.T.M. D-523-80.
  - 6. A.S.T.M. D-523-89.
  - 7. Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. Section 136 (2009).

- 8. American Architectural Manufacturers Association Specification 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) (2005).
- American Architectural Manufacturers Association Specification 2605-05
   (Voluntary Specification, Performance Requirements and Test Procedures for
   Superior Performing Organic Coatings on Aluminum Extrusions and Panels)
   (2005).
- 3. Several of the documents described above—the Illinois Environmental Protection Act, Clean Air Act, several portions of the Code of Federal Regulations, and the Federal Insecticide, Fungicide, and Rodenticide Act—are readily accessible to or are within the possession of the Board. Given the ease of accessibility of these documents, listed as items (g), (h), (i)(2), (i)(3), (i)(4), and (i)(7) above, the Illinois EPA moves that the Board waive the requirement that the Illinois EPA provide copies of such documents.
- 4. Section 5-75(a) of the Illinois Administrative Procedure Act ("IAPA") provides that an agency may incorporate by reference the regulations, standards, and guidelines of an agency of the United States or a nationally recognized organization or association without publishing the incorporated material in full. 5 ILCS 100/5-75(a). Section 5-75(c) of the IAPA provides, however, that such agency shall maintain a copy of the referenced material in at least one of its principal offices and shall make it available to the public upon request. 5 ILCS 100/5-75(c).
- 5. In developing this proposed rulemaking, the Illinois EPA incorporated by reference two documents published by the American Society for Testing and Materials ("ASTM") and two voluntary specifications published by the American Architectural Manufacturers Association ("AAMA"), listed above as items (i)(5), (i)(6), (i)(8), and (i)(9). The documents are copyright protected and must be downloaded at a cost to the Illinois EPA. The Illinois EPA is also subject to additional fees for each copy provided to the Board. In order to keep costs incurred by the

Illinois EPA at a minimum, Illinois EPA requests that the Board waive the normal copy requirements and allow the Illinois EPA to file only the originals of such documents. Attached with the ASTMs is a copy of the License Agreement utilized by the owner of the copyright, and attached with the AAMA specifications is a copy of the copyright notice. The Illinois EPA directs the Board's attention to such documents so that the Board may conform its handling of the standards consistent with those agreements.

6. The remaining documents in the regulatory proposal consist of over 700 pages. Given the length of the proposal and the resources required to provide nine copies, Illinois EPA requests that the Board waive the normal copy requirements and allow Illinois EPA to file the original and four complete copies of such documents.

WHEREFORE, the Illinois EPA moves that the Board waive the requirement that the Illinois EPA provide copies of the documents listed as items (g), (h), (i)(2), (i)(3), (i)(4), and (i)(7); waive the requirement that the Illinois EPA provide an original and nine copies of the copyrighted materials listed as items (i)(5), (i)(6), (i)(8), and (i)(9), allowing the Illinois EPA to provide only the originals of such documents; and waive the requirement that the Illinois EPA provide an original and nine copies of the remaining documents in its proposal, allowing the Illinois EPA to provide the original and four copies.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dana Vetterhoffer

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

# THIS IS A FAST TRACK RULEMAKING

FILED IN ACCORDANCE WITH SECTION 28.5 OF THE ENVIRONMENTAL PROTECTION ACT (415 ILCS 5/28.5)

I. INTRODUC		MAK U 8 2010  STATE OF ILLINOIS  Rollition Control Board
STATEMENT OF	REASO	ONS bears of a note
10 33 ILL. ADM. CODE 211, 218, and 219	)	RECEIVED CLERK'S OFFICE
TO 35 ILL. ADM. CODE 211, 218, and 219	Ś	
PRODUCTS: PROPOSED AMENDMENTS	)	
GROUP IV CONSUMER & COMMERCIAL	)	
ORGANIC MATERIAL EMISSIONS FROM	)	
TECHNOLOGY (RACT) FOR VOLATILE	)	
REASONABLY AVAILABLE CONTROL	)	(Rulemaking-Air)
TO LOOK LOOK ALLE ALLE ACTION OF	)	R10- 20
IN THE MATTER OF:	)	710 0
ኬኒ ማቸው አፈል ምምርት ለው.	\ \	

The Illinois Environmental Protection Agency ("Illinois EPA") submits this

Statement of Reasons to the Illinois Pollution Control Board ("Board") pursuant to

Sections 10, 27, 28, and 28.5 of the Environmental Protection Act ("Act") (415 ILCS

5/10, 27, 28, and 28.5) and 35 Ill. Adm. Code 102.202 in support of the attached proposal of regulations. These regulations are proposed to control emissions of Volatile Organic Material ("VOM"), which is effectively the same as volatile organic compounds

("VOC"), from the following Group IV Consumer and Commercial Product Categories: Miscellaneous Metal and Plastic Parts Coatings, Auto and Light-Duty Truck Coatings, Miscellaneous Industrial Adhesives, and Fiberglass Boat Manufacturing Materials.

This proposed rulemaking is intended to meet certain obligations of the State of Illinois under the federal Clean Air Act ("CAA"), 42 U.S.C. § 7401 et seq. Specifically, the rulemaking is intended to satisfy Illinois' obligation to submit a State Implementation Plan ("SIP") to address requirements under Sections 172 and 182 of the CAA for sources of VOM emissions in areas designated as nonattainment with respect to the ozone National Ambient Air Quality Standard ("NAAQS"). See 42 U.S.C. §§ 7502 and 7511a.

Section 172(c)(1) of the CAA provides that states must include in their SIPs for nonattainment areas ("NAAs") "reasonably available control measures" ("RACM"), including "reasonably available control technology" ("RACT"), for sources of emissions.

42 U.S.C. § 7502(c)(1). Section 182(b)(2) of the CAA provides that, for ozone NAAs, the State must revise its SIP to include RACT for sources of VOM emissions covered by a control techniques guideline ("CTG") issued between November 15, 1990, and the date of attainment. 42 U.S.C. § 7511a(b)(2).

Illinois is proposing reasonable and cost effective VOM controls for Group IV Consumer and Commercial Product Categories in response to CTGs issued for such categories. Included in this proposal are amendments to 35 Ill. Adm. Code Part 218, Organic Material Emission Standards and Limitations for the Chicago Area; 35 Ill. Adm. Code Part 219, Organic Material Emission Standards and Limitations for the Metro East Area; and 35 Ill. Adm. Code Part 211, Definitions and General Provisions.

#### II. STATEMENT OF FACTS

The CAA establishes a comprehensive program for controlling and improving the nation's air quality via state and federal regulations. The United States Environmental Protection Agency ("USEPA") is charged with identifying air pollutants that endanger the public health and welfare and with formulating the NAAQS that specify the maximum permissible concentrations of those pollutants in the ambient air pursuant to Sections 108 and 109 of the CAA. 42 U.S.C. §§ 7408-7409.

#### A. 8-Hour Ozone NAAQS

Ozone occurs both in the Earth's upper atmosphere and at ground level. VOM is a primary precursor to the formation of ground-level ozone, which is formed when oxides of nitrogen and VOM react in the atmosphere in the presence of sunlight. Ground-level ozone is a major component of smog. 73 Fed. Reg. 58482 (Oct. 7, 2008). Exposure to sufficient concentrations of ground-level ozone is associated with agricultural crop loss, damage to forests and ecosystems, and a variety of human health conditions, including acute respiratory symptoms, increased susceptibility to respiratory infection, and pulmonary inflammation. 73 Fed. Reg. 58482.

On July 18, 1997, USEPA revised the NAAQS for ozone by replacing the 1-hour standard with an 8-hour standard. 62 Fed. Reg. 38856 (July 18, 1997). In Illinois, there are two areas designated as nonattainment (moderate) for the 8-hour ozone standard: 1) the Chicago-Gary-Lake County, IL-IN designated area, which includes Cook, DuPage, Grundy (partial-Goose Lake and Aux Sable Townships), Kane, Kendall (partial-Oswego Township), Lake, McHenry, and Will Counties; and 2) the St. Louis, MO-IL designated area, which includes Jersey, Madison, Monroe, and St. Clair Counties. 40 CFR § 81.314.

#### B. CAA Requirements

#### 1. Consumer and Commercial Products, Group IV

Section 183(e) of the CAA required that USEPA conduct a study of the emissions of VOM into the ambient air from consumer and commercial products in order to determine their potential to contribute to ozone levels which violate the ozone NAAQS and to establish criteria for regulating emissions of VOM from such products. 73 Fed.

Reg. 58482. Section 183(e) provides, "[T]he Administrator shall list those categories of consumer or commercial products that the Administrator determines, based on the study,

account for at least 80 percent of the VOC emissions . . . from consumer or commercial products in areas that violate the NAAQS for ozone" and shall divide the categories into groups. 42 U.S.C. § 7511b(e)(3)(A).

The CAA requires that USEPA then either regulate VOM emissions from such categories or issue a CTG in lieu of a national regulation if the Administrator determines that such guidance will be substantially as effective as regulations in reducing emissions of VOM which contribute to ozone levels in ozone NAAs. 42 U.S.C. § 7511b(e)(3)(C). CTGs provide states with recommendations regarding what types of controls could constitute RACT for VOM for the applicable source categories. 73 Fed. Reg. 58483. States must either adopt regulations to implement the recommendations in the CTG or adopt alternative approaches that constitute RACT, either of which must be submitted to the USEPA for review and approval as part of the SIP process. 73 Fed. Reg. 58483.

On October 7, 2008, the USEPA issued final CTGs for Group IV Consumer and Commercial Product Categories. The USEPA required that states submit SIP revisions in response to the CTGs within one year. 73 Fed. Reg. 58484.

#### 2. RACT Requirements

USEPA designated the Chicago and Metro East areas in Illinois as nonattainment (moderate) for the 8-hour ozone NAAQS, which triggered requirements under the CAA for adopting regulations that reduce emissions sufficiently to demonstrate attainment of the standard. Section 172(c)(1) of the CAA provides, in pertinent part:

#### (c) Nonattainment plan provisions

The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

#### (1) In general

Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

42 U.S.C. § 7502(c)(1). A subset of RACM is RACT, which is defined as the lowest emission limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility. See 44 Fed. Reg. 53762 (September 17, 1979).

Additionally, Section 182(b) of the CAA provides, in pertinent part:

#### (b) Moderate Areas

Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area, make the submissions described under subsection (a) of this section (relating to Marginal Areas), and shall also submit the revisions to the applicable implementation plan described under this subsection.

(2) Reasonably available control technology

The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of reasonably available control technology under section 7502(c)(1) of this title with respect to each of the following:

(A) Each category of VOC sources in the area covered by a CTG document issued by the Administrator between November 15, 1990, and the date of attainment.

42 U.S.C. § 7511a(b)(2).

Sections 172 and 182 of the CAA establish the requirement for Illinois to submit VOM regulations constituting RACT for Group IV Consumer and Commercial Product

Categories in ozone NAAs classified as moderate and above. Illinois is required to submit its SIP revisions by October 7, 2009.

#### C. Fast Track

This regulatory proposal is properly submitted to the Board under Section 28.5 of the Act as a fast-track rulemaking. Section 28.5 provides, "When the [CAA] requires rules other than identical in substance rules to be adopted, upon request by the Agency, the Board must adopt rules under fast-track rulemaking requirements." A rule is "required to be adopted" when the USEPA "is empowered to impose sanctions against the State for failure to adopt such rules." 415 ILCS 5/28.5.

This rulemaking proposal satisfies such criteria. First, the proposed rule is not identical in substance to any federal regulation. The CTGs at issue here are merely guidance documents a state may utilize when making VOM RACT determinations for Group IV product categories. Second, the proposed rule is required to be adopted. As previously discussed, Sections 172 and 182 of the CAA require that Illinois submit as a SIP revision VOM RACT regulations for Group IV categories in ozone NAAs. Pursuant to Section 179 of the CAA, two sanctions are available to USEPA if Illinois fails to do so: 1) the loss of highway funds; and 2) an increase in the emissions offset ratio for New Source Review. 42 U.S.C. § 7509. Further, if Illinois fails to make an adequate SIP submission, USEPA has the authority to impose a Federal Implementation Plan pursuant to Section 110(c)(1) of the CAA. 42 U.S.C. § 7410(c)(1). Illinois EPA's submittal of its proposal as a fast-track rulemaking is therefore appropriate.

#### III. PURPOSE AND EFFECT OF THE PROPOSAL

As described in detail above, this rulemaking proposal has been prepared to satisfy Illinois' obligation to submit a SIP revision to address the requirements under Sections 172 and 182 of the CAA for sources of VOM emissions in areas designated as nonattainment with respect to the ozone NAAOS. See 42 U.S.C. §§ 7502 and 7511a.

Additionally, Illinois is required to submit these SIP revisions before the USEPA can redesignate the Chicago and Metro East NAAs to attainment of the 1997 ozone NAAQS, regardless of whether the VOM reductions obtained by the SIP revisions are actually necessary to achieve attainment of the NAAQS. Section 107(d)(3)(E) of the CAA provides that the Administrator may not redesignate a NAA to attainment unless the State has a fully-approved SIP for the area seeking redesignation and the State has met all applicable requirements of Section 110 and Part D (which includes the requirement that states adopt VOM RACT rules for categories covered by a CTG). 42 U.S.C. § 7407(d)(3)(E). In a September 17, 1993, guidance document from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation ("Shapiro Memorandum"), the USEPA confirmed, "[B]efore EPA can act favorably upon any State redesignation request, the statutorily-mandated control programs of section 110 and part D (that were due prior to the time of the redesignation request) must have been adopted by the State and approved by EPA into the SIP." (Shapiro Memorandum, p. 2).

On July 2, 2007, the Illinois EPA submitted to the USEPA an attainment demonstration for the Metro East NAA for the 1997 8-hour ozone NAAQS. On March

See also Wall v. USEPA. In Wall, the United States Court of Appeals for the Sixth Circuit vacated the USEPA's redesignation of a state to attainment, in part because the state failed to promulgate VOC RACT rules in response to CTGs. The USEPA argued that fully adopted VOC RACT rules were unnecessary because the state did not need the reductions from such rules to achieve attainment. The court rejected USEPA's argument, holding that the CAA unambiguously requires that a SIP submitted with respect to a redesignation request contain fully adopted RACT rules required by Part D. Redesignation absent such rules was therefore improper. Wall v. USEPA, 265 F.2d 426, 433, 440-42 (6th Cir. 2001).

19, 2009, the Illinois EPA submitted an attainment demonstration for the Chicago NAA as well. Monitoring data indicates that these areas have, in fact, attained the 1997 8-hour ozone NAAQS, which qualifies them for redesignation to attainment. These areas cannot be redesignated to attainment, however, unless and until the Illinois EPA submits SIP revisions in response to the Group IV CTGs and the USEPA approves such revisions.

#### IV. GEOGRAPHIC REGIONS AND SOURCES AFFECTED

The geographic regions subject to the proposed regulations are the two areas designated as nonattainment for the 8-hour ozone standard: 1) the Chicago-Gary-Lake County, IL-IN designated area, which includes Cook, DuPage, Grundy (partial-Goose Lake and Aux Sable Townships), Kane, Kendall (partial-Oswego Township), Lake, McHenry, and Will Counties; and 2) the St. Louis, MO-IL designated area, which includes Jersey, Madison, Monroe, and St. Clair Counties. 40 CFR § 81.314.

The proposed regulations are generally expected to affect both new and existing sources that are covered by a Group IV CTG, are located in the Chicago or Metro East NAAs, and meet the applicability criteria specified in the proposed regulations. Table 2.3, Section 3.6, and Table 4.2 in the *Technical Support Document* lists the sources potentially affected by the proposed regulations.

#### V. TECHNICAL FEASIBILITY AND ECONOMIC REASONABLENESS

The technology for controlling VOM emissions from Group IV product categories is both technically feasible and economically reasonable. Affected sources can meet the requirements in the proposed amendments through a number of readily available control techniques.

Control approaches for reducing VOM emissions from automobile and light-duty truck assembly coatings and miscellaneous metal and plastic parts coatings include work practices, product substitution or reformulation (namely, the use of low-VOM or no-VOM coatings or cleaning materials), utilization of higher efficiency coating application equipment, and capture and control systems. Control devices available to automobile and light-duty truck assembly coatings include oxidizers and hybrid systems. Those available to miscellaneous metal and plastic parts coatings include oxidizers, absorbers, and adsorbers.

Similarly, VOM emissions from miscellaneous industrial adhesives can be controlled by product reformulation or substitution via low-VOM adhesives, work practice procedures, utilization of more efficient application equipment, such as electrostatic or high volume low pressure spray equipment, and capture systems and control devices, including oxidizers, adsorbers, and absorbers.

Finally, VOM control techniques for fiberglass boat manufacturing operations include use of one or more of the following: low monomer VOM resins and gel coats, vapor suppressed resins and gel coats, non-atomizing resin application methods, and closed molding processes, such as vacuum bagging.

In the Technical Support Document, the Illinois EPA explains in more detail that the above control approaches are both technically feasible and economically reasonable.

See also, CTGs.

#### VI. COMMUNICATION WITH INTERESTED PARTIES

The Illinois EPA engaged in outreach on this proposal. On November 5, the Illinois EPA posted a draft of the proposed rule and copies of the pertinent CTGs on its

website for public comment. The Illinois EPA also contacted potentially affected sources via email, soliciting feedback on the proposed rule.

The Illinois EPA received several comments regarding the proposed rule.

Generally, the comments can be categorized into the following areas: revisions to proposed definitions, requests that certain terms be defined, requests for clarification of specific provisions in the proposal, appropriate VOM content limitations, appropriate applicability language and exclusions, and the location of future hearings regarding the proposed rulemaking. This proposal incorporates many of the concerns and suggestions set forth in those comments, and discussions continue between the Illinois EPA and interested parties regarding certain other issues raised in comments.

These regulations are being proposed after the interested parties have had an opportunity to review the proposal and discuss any issues with the Illinois EPA.

#### VII. SYNOPSIS OF TESTIMONY

The Illinois EPA plans to call Rory Davis, Environmental Protection Engineer,
Air Quality Planning Section, Bureau of Air, Illinois EPA, as a witness at hearing. Mr.
Davis will testify and answer questions regarding the proposed amendments. The Illinois
EPA may also call Rob Kaleel, Manager of the Air Quality Planning Section, Bureau of
Air, Illinois EPA, to testify and answer questions regarding the proposed amendments as
well. Written testimony will be submitted prior to hearing in accordance with the
Board's procedural rules and with Board orders.

#### VIII. THE ILLINOIS EPA'S PROPOSAL

Generally, Illinois EPA's regulatory proposal aims to implement the recommendations contained in the CTGs to the extent that such recommendations are

consistent with existing regulations. The following is a Section-by-Section summary of the Illinois EPA's proposal.

#### 35 Ill. Adm. Code 211

#### Subpart A: General Provisions

#### Section 211.101 Incorporations by Reference

The Illinois EPA proposes adding incorporations by reference for five documents referenced in the proposed amendments to Subpart B of Part 211.

#### Section 211.102 Abbreviations and Conversion Factors

The Illinois EPA proposes adding abbreviations for five terms referenced in the proposed amendments to Subpart B of Part 211.

#### Subpart B: Definitions

The Illinois EPA proposes amending current definitions in, and adding new definitions to, Part 211.

#### Section 211.200 Acrylonitrile-Butadiene-Styrene (ABS) Welding

The Illinois EPA proposes adding a definition for acrylonitrile-butadiene-styrene (ABS) welding. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.233 Adhesion Primer

The Illinois EPA proposes adding a definition for adhesion primer. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.235 Adhesive Primer

The Illinois EPA proposes adding a definition for adhesive primer. This definition is necessary for proposed Subpart II of Parts 218 and 219.

#### Section 211.260 Aerosol Adhesive and Adhesive Primer

The Illinois EPA proposes adding a definition for aerosol adhesive and adhesive primer. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.492 Antifoulant Coating

The Illinois EPA proposes adding a definition for antifoulant coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.540 Architectural Structure

The Illinois EPA proposes adding a definition for architectural structure. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.715 Bedliner

The Illinois EPA proposes adding a definition for bedliner. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.735 Black Coating

The Illinois EPA proposes adding a definition for black coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.829 Business Machine Plastic Parts

The Illinois EPA proposes amending the definition of business machine plastic parts to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.825 Camouflage Coating

The Illinois EPA proposes adding a definition for camouflage coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.954 Cavity Wax

The Illinois EPA proposes adding a definition for cavity wax. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.965 Ceramic Tile Installation Adhesive

The Illinois EPA proposes adding a definition for ceramic tile installation adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.1128 Closed Molding

The Illinois EPA proposes adding a definition for closed molding. This definition is necessary for proposed Subpart II of Parts 218 and 219.

#### Section 211.1455 Contact Adhesive

The Illinois EPA proposes adding a definition for contact adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.1560 Cove Base

The Illinois EPA proposes adding a definition for cove base. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.1565 Cove Base Installation Adhesive

The Illinois EPA proposes adding a definition for cove base installation adhesive.

This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.1655 Cyanoacrylate Adhesive

The Illinois EPA proposes adding a definition for cyanoacrylate adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.1700 Deadener

The Illinois EPA proposes adding a definition for deadener. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.1876 Electric Dissipating Coating

The Illinois EPA proposes adding a definition for electric dissipating coating.

This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.1877 Electric-Insulating Varnish

The Illinois EPA proposes adding a definition for electric-insulating varnish. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.1878 Electrodeposition Primer

The Illinois EPA proposes adding a definition for electrodeposition primer. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2040 Etching Filler

The Illinois EPA proposes adding a definition for etching filler. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.2055 Ethylene Propulenediene Monomer (EPDM) Roof Membrane

The Illinois EPA proposes adding a definition for ethylene propylenediene monomer (EPDM) roof membrane. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.2200 Extreme High-Gloss Coating

The Illinois EPA proposes adding a definition for extreme high-gloss coating.

This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2210 Extreme Performance Coating

The Illinois EPA proposes amending the definition for extreme performance coating to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.2310 Final Repair Coat

The Illinois EPA proposes amending the definition for final repair coat to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2320 Finish Primer/Surfacer

The Illinois EPA proposes adding a definition for finish primer/surfacer. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.2367 Flexible Vinyl

The Illinois EPA proposes adding a definition for flexible vinyl. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.2415 Fog Coat

The Illinois EPA proposes adding a definition for fog coat. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2525 Gasket/Gasket Sealing Material

The Illinois EPA proposes adding a definition for gasket/gasket sealing material.

This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2625 Glass Bonding Primer

The Illinois EPA proposes adding a definition for glass bonding primer. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2825 Heat-Resistant Coating

The Illinois EPA proposes adding a definition for heat-resistant coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.2955 High Bake Coating

The Illinois EPA proposes adding a definition for high bake coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.2956 High Build Primer/Surfacer

The Illinois EPA proposes adding a definition for high build primer/surfacer.

This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.2958 High Gloss Coating

The Illinois EPA proposes adding a definition for high gloss coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.2960 High-Performance Architectural Coating

The Illinois EPA proposes adding a definition for high-performance architectural coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211,2980 High Temperature Coating

The Illinois EPA proposes adding a definition for high temperature coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.3100 Indoor Floor Covering Installation Adhesive

The Illinois EPA proposes adding a definition for indoor floor covering installation adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.3120 In-Line Repair

The Illinois EPA proposes adding a definition for in-line repair. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.3240 Laminate

The Illinois EPA proposes adding a definition for laminate. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.3505 Lubricating Wax/Compound

The Illinois EPA proposes adding a definition for lubricating wax/compound.

This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.3640 Marine Coating

The Illinois EPA proposes adding a definition for marine coating. This definition is necessary for Subpart F of Parts 218 and 219.

### Section 211.3665 Mask Coating

The Illinois EPA proposes adding a definition for mask coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.3760 Metallic Coating

The Illinois EPA proposes adding a definition for metallic coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.3775 Metal to Urethane/Rubber Molding or Casting Adhesive

The Illinois EPA proposes adding a definition for metal to urethane/rubber molding or casting adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.3785 Military Specification Coating

The Illinois EPA proposes adding a definition for military specification coating.

This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.3820 Miscellaneous Industrial Adhesive Application Operation

The Illinois EPA proposes adding a definition for miscellaneous industrial adhesive application operation. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

### Section 211.3925 Mold Seal Coating

The Illinois EPA proposes adding a definition for mold seal coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.3961 Motor Vehicle Adhesive

The Illinois EPA proposes adding a definition for motor vehicle adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

### Section 211.3967 Motor Vehicle Weatherstrip Adhesive

The Illinois EPA proposes adding a definition for motor vehicle weatherstrip adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.3968 Multi-Colored Coating

The Illinois EPA proposes adding a definition for multi-colored coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.3969 Multi-Component Coating

The Illinois EPA proposes adding a definition for multi-component coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.3975 Multipurpose Construction Adhesive

The Illinois EPA proposes adding a definition for multipurpose construction adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.4052 Non-Convertible Coating

The Illinois EPA proposes adding a definition for non-convertible coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.4080 One-Component Coating

The Illinois EPA proposes adding a definition for one-component coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.4220 Optical Coating

The Illinois EPA proposes adding a definition for optical coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.4280 Outdoor Floor Covering Installation Adhesive

The Illinois EPA proposes adding a definition for outdoor floor covering installation adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.4455 Pan Backing Coating

The Illinois EPA proposes adding a definition for pan backing coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.4540 Perimeter Bonded Sheet Flooring

The Illinois EPA proposes adding a definition for perimeter bonded sheet flooring. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.4735 Plastic

The Illinois EPA proposes adding a definition for plastic. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.4760 Plastic Solvent Welding Adhesive

The Illinois EPA proposes adding a definition for plastic solvent welding adhesive. This definition is necessary for proposed Subpart II of Parts 218 and 219.

# Section 211.4765 Plastic Solvent Welding Adhesive Primer

The Illinois EPA proposes adding a definition for plastic solvent welding adhesive primer. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.4768 Pleasure Craft

The Illinois EPA proposes adding a definition for pleasure craft. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.4769 Pleasure Craft Surface Coating

The Illinois EPA proposes adding a definition for pleasure craft surface coating.

This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.4895 Polyvinyl Chloride Plastic (PVC Plastic)

The Illinois EPA proposes adding a definition for polyvinyl chloride plastic (PVC plastic). This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.4900 Porous Material

The Illinois EPA proposes adding a definition for porous material. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.5012 Prefabricated Architectural Coating

The Illinois EPA proposes adding a definition for prefabricated architectural coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.5061 Pretreatment Coating

The Illinois EPA proposes adding a definition for pretreatment coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.5061 Pretreatment Wash Primer

The Illinois EPA proposes amending the definition for pretreatment wash primer to implement the definition recommended in the CTG. The Illinois EPA also proposes changing the Section number of this definition to Section 211.5062 to make room for the proposed definition for pretreatment coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.5090 Primer Surfacer Coat

The Illinois EPA proposes amending the definition for primer surfacer coat to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.5400 Red Coating

The Illinois EPA proposes adding a definition for red coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.5520 Reinforced Plastic Composite

The Illinois EPA proposes adding a definition for reinforced plastic composite.

This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.5550 Repair Coat

The Illinois EPA proposes amending the definition for repair coat to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.5800 Rubber

The Illinois EPA proposes adding a definition for rubber. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.5890 Sealer

The Illinois EPA proposes amending the definition for sealer to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.5985 Sheet Rubber Lining Installation

The Illinois EPA proposes adding a definition for sheet rubber lining installation.

This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.5987 Shock-Free Coating

The Illinois EPA proposes adding a definition for shock-free coating. This definition is necessary for Subpart F of Parts-218 and 219.

# Section 211.6012 Silicone-Release Coating

The Illinois EPA proposes adding a definition for silicone-release coating. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.6015 Single-Ply Roof Membrane

The Illinois EPA proposes adding a definition for single-ply roof membrane. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.6017 Single-Ply Roof Membrane Adhesive Primer

The Illinois EPA proposes adding a definition for single-ply roof membrane adhesive primer. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.6020 Single-Ply Roof Membrane Installation and Repair Adhesive

The Illinois EPA proposes adding a definition for single-ply roof membrane installation and repair adhesive. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.6063 Solar-Absorbent Coating

The Illinois EPA proposes adding a definition for solar-absorbent coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.6065 Solids Turnover Ratio (R<sub>T</sub>)

The Illinois EPA proposes adding a definition for solids turnover ratio (R<sub>T</sub>). This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.6400 Stencil Coat

The Illinois EPA proposes amending the definition for stencil coat to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.6425 Structural Glazing

The Illinois EPA proposes adding a definition for structural glazing. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

# Section 211.6460 Subfloor

The Illinois EPA proposes adding a definition for subfloor. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.6585 Thin Metal Laminating Adhesive

The Illinois EPA proposes adding a definition for thin metal laminating adhesive.

This definition is necessary for proposed Subpart IJ of Parts 218 and 219.

# Section 211.6640 Tire Repair

The Illinois EPA proposes adding a definition for tire repair. This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.6670 Topcoat

The Illinois EPA proposes amending the definition for topcoat to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.6690 Topcoat Operation

The Illinois EPA proposes amending the definition for topcoat operation to implement part of the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.6720 Touch-Up Coating

The Illinois EPA proposes amending the definition for touch-up coating to implement the definition recommended in the CTG. This definition is necessary for Subpart F of Parts 218 and 219.

#### Section 211.6740 Translucent Coating

The Illinois EPA proposes adding a definition for translucent coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.6780 Trunk Interior Coating

The Illinois EPA proposes adding a definition for trunk interior coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.6825 Underbody Coating

The Illinois EPA proposes adding a definition for underbody coating. This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.6885 Vacuum Metalizing Coating

The Illinois EPA proposes adding a definition for vacuum metalizing coating.

This definition is necessary for Subpart F of Parts 218 and 219.

# Section 211.7220 Waterproof Resorcinol Glue

The Illinois EPA proposes adding a definition for waterproof resorcinol glue.

This definition is necessary for proposed Subpart JJ of Parts 218 and 219.

#### Section 211.7240 Weatherstrip Adhesive

The Illinois EPA proposes adding a definition for weatherstrip adhesive. This definition is necessary for Subpart F of Parts 218 and 219.

# 35 Ill. Adm. Code 218/219

# Subpart A: General Provisions

# Section 218/219.105 Test Methods and Procedures

The Illinois EPA proposes amending subsection (b) by updating the testing protocol for automobile and light-duty truck primer-surfacer and topcoat operations.

#### Section 218/219.106 Compliance Dates

The Illinois EPA proposes adding subsection (e) to Section 218.106 and subsection (c) to Section 219.106, which establish May 1, 2011, as the compliance date for sources subject to the rulemaking proposal. The Illinois EPA also proposes amending subsection (a) of Section 219.106 to reference proposed subsection (c).

# Section 218/219.112 Incorporations by Reference

The Illinois EPA proposes adding subsections (cc), (dd), (ee), and (ff) to Section 218.112, and subsections (aa), (bb), (cc), and (dd) to Section 219.112, which incorporate

by reference several documents mentioned in the Illinois EPA's proposed amendments to Parts 218 and 219.

# Subpart F: Coating Operations

# Section 218/219.204 Emission Limitations

The Illinois EPA proposes amending the introductory paragraph to reference revised and new subsections of Section 218/219.204.

The Illinois EPA proposes amending subsection (a) to restrict the VOM content of automobile and light-duty truck coatings to the limitations set forth in the CTG, and to separate the limits that are applicable to such coatings prior to the new compliance date from those applicable on and after the new compliance date. The Illinois EPA also proposes amending subsection (a) to include a definition for electrodeposition; to specify how compliance with the amended VOM content limitations for primer-surfacer, topcoat, and combined primer-surfacer and topcoat operations shall be demonstrated; to specify what testing is required for such operations; and to provide an equation for determining occurrence weighted average for final repair coat operations. Finally, the Illinois EPA's proposed amendments provide that the amended VOM content limitations shall not apply to materials supplied in containers with a net volume of 16 ounces or less, or a net weight of one pound or less.

The Illinois EPA proposes amending subsection (j) to specify that the limitations in (j) are only applicable to miscellaneous metal parts and products coatings prior to May 1, 2011, and that on and after such date, the limitations in subsection (q) shall apply.

The Illinois EPA proposes amending subsection (n) to specify that the limitations in (n) are only applicable to plastic parts coatings (automotive/transportation) prior to May 1, 2011, and that on and after such date, the limitations in subsection (q) shall apply.

The Illinois EPA proposes amending subsection (o) to specify that the limitations in (o) are only applicable to plastic parts coatings (business machines) prior to May 1, 2011, and that on and after such date, the limitations in subsection (q) shall apply.

The Illinois EPA proposes adding subsection (q), which sets forth VOM content limitations, definitions, and exclusions for metal parts and products coatings; plastic parts and products-miscellaneous coatings; plastic parts and products-automotive/transportation coatings; plastic parts and products-business machine coatings; pleasure craft surface coatings; and motor vehicle materials coatings.

# Section 218/219.205 Daily-Weighted Average Limitations

The Illinois EPA proposes amending the introductory paragraph to reference proposed subsection (j) in Section 218.205, and proposed subsection (i) in Section 219.205.

The Illinois EPA proposes amending subsection (a) to provide that such subsection applies to Section 218/219.204(a)(1)(A), (a)(1)(D), (a)(2)(A), (a)(2)(E), and (a)(2)(F), among other listed subsections.

The Illinois EPA proposes amending subsection (b) to specify that the limitations in such subsection only apply to miscellaneous parts and products coatings prior to May 1, 2011.

The Illinois EPA proposes amending subsection (g) to specify that the limitations in such subsection only apply to plastic parts coatings prior to May 1, 2011.

The Illinois EPA proposes adding subsection (j) to Section 218.205 and subsection (i) to Section 219.205, which set forth the requirements for miscellaneous metal parts and products coating lines, plastic parts and products coating lines, pleasure craft surface coating lines, and motor vehicle materials coating lines utilizing the daily weighted averaging alternative on and after May 1, 2011.

# Section 218/219.207 Alternative Emission Limitations

The Illinois EPA proposes amending subsection (a) to reference proposed subsection (l) in Section 218.207, and proposed subsection (k) in Section 219.207, and to exclude coating lines subject to Section 218/219.204(q)(6) from the alternative emission limitations option.

The Illinois EPA proposes amending subsection (b) to provide for sources complying with a proposed emission limitation in Section 218/219.204 that is already in terms of weight of VOM per volume of solids.

The Illinois EPA proposes amending subsection (c) to include references to certain amended VOM content limitations.

The Illinois EPA proposes adding subsection (1) to Section 218.207 and subsection (k) to Section 219.207, which set forth the requirements for miscellaneous metal parts and products coating lines, plastic parts and products coatings lines, and pleasure craft surface coating lines utilizing the alternative emissions limitation on and after May 1, 2011.

#### Section 218/219.208 Exemptions from Emission Limitations

The Illinois EPA proposes amending subsection (a) to provide that on and after May 1, 2011, for applicability purposes VOM emissions from heavy off-highway vehicle

products coatings lines shall be combined with VOM emissions from miscellaneous metal parts and products coating lines and plastic parts and products coating lines.

The Illinois EPA proposes amending subsection (c) and adding subsection (d) to provide that the exclusions contained in such subsections shall only apply to miscellaneous metal parts and products, plastic parts coatings for automotive/ transportation, and plastic parts coatings for business machines until May 1, 2011.

The Illinois EPA proposes relettering the existing subsection (d) to subsection (e) and correcting internal cross-references.

#### Section 218/219.210 Compliance Schedule

The Illinois EPA proposes amending the introductory paragraph to reference the proposed subsection (g).

The Illinois EPA proposes adding subsection (g), which provides that, on and after a date consistent with Section 218/219.106, sources subject to the proposed limitations in Section 218/219.204(a) or (q), or subject to the limitations in Section 218/219.219, shall comply with such limitations, as well as with all other applicable provisions in Subpart F.

#### Section 218/219,211 Recordkeeping and Reporting

The Illinois EPA proposes amending subsection (c) to include references to the amended VOM content limitations for automobile and light-duty truck coatings, and to provide that, for certain automobile and light-duty truck coating lines, VOM content information shall be maintained and/or reported in terms of weight of VOM per volume of solids or coatings, as applicable, as applied each day on each coating line. The Illinois EPA also proposes amending subsection (c) to provide that coating lines subject to

Section 218/219.204(a)(2)(A) shall maintain and/or report the solids turnover ratio of each electrodeposition primer operation. Subject printing lines shall also maintain certified product data sheets for each coating applied on each line.

The Illinois EPA proposes amending subsection (d) to provide that, for coating lines that are subject to Section 218/219.204(a)(2)(A) or (q) and that are utilizing the daily weighted averaging alternative, VOM content information shall be maintained and/or reported in terms of weight of VOM per volume of solids or coatings, as applicable, as applied each day on each coating line.

The Illinois EPA proposes amending subsection (e) to provide that coating lines complying pursuant to Section 218.207(l) or 219.207(k) shall comply with the recordkeeping and reporting requirements set forth in subsection (e). The Illinois EPA also proposes amending internal cross references.

The Illinois EPA proposes adding subsection (g), which establishes recordkeeping and reporting requirements for coating lines subject to the work practices set forth in Section 218/219.219.

# Section 218/219.212 Cross-Line Averaging to Establish Compliance for Coating Lines

The Illinois EPA proposes amending this Section to provide that the cross-line averaging alternative is not available to coating lines subject to the revised VOM content limitations.

# Section 218/219.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly Coatings and Miscellaneous Metal and Plastic Parts Coatings

The Illinois EPA proposes adding Section 218/219.219, which sets forth work practice requirements for VOM-containing coatings, thinner, coating-related waste

materials, cleaning materials, and cleaning-related activities associated with automobile and light-duty truck assembly coating lines or miscellaneous metal or plastic parts coatings lines. This Section also establishes application method requirements for certain coating lines described in Section 218/219.204(q).

# Subpart II: Fiberglass Boat Manufacturing Materials

The Illinois EPA proposes adding Subpart II to Parts 218 and 219 regarding fiberglass boat manufacturing materials.

# Section 218/219.890 Applicability

Subsection (a) provides that, on and after May 1, 2011, the requirements of Subpart II shall apply to the owners and operators of sources that manufacture hulls or decks of boats from fiberglass, or that build molds to make hulls or decks of boats from fiberglass, and that emit 15 lbs/day or more of VOM from specified operations. If a source meets such criteria, the limitations in Subpart II apply to the manufacture of all fiberglass boat parts at the source.

Subsection (b) establishes exemptions for certain coatings and operations.

Subsection (c) provides that if a source is or becomes subject to this Subpart, the source is always subject to the Subpart.

Subsection (d) provides that sources exempt pursuant to this Section are still subject to recordkeeping and reporting requirements.

# Section 218/219.891 Emission Limitations and Control Requirements

Subsection (a) provides that resins and gel coats at subject sources shall comply with the limitations set forth in subsection (b)(1) or (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of this Section. This subsection also provides

that if a source complies pursuant to subsection (b) or (c), and the non-monomer VOM content of a resin or gel coat exceeds five percent, by weight, the excess non-monomer VOM shall be added to the monomer VOM content of such resin or gel coat in accordance with a specified equation.

Subsection (b) establishes VOM content limitations for subject resins and gel coats, and a 12-month rolling weighted averaging alternative to such limitations.

Subsection (c) establishes an emission averaging alternative in which resin and gel coat operations utilizing the alternative comply with a source-specific monomer VOM mass emission limit on a 12-month rolling average basis. Subsection (c) sets forth several equations that sources shall utilize if complying by means of this alternative. Sources shall utilize Equation 2 to determine the source-specific monomer VOM mass emission limit; Equation 3 to calculate monomer VOM emissions from the resin and gel coat operations included in the emissions average; and Equation 4 to calculate the weighted-average monomer VOM emission rate for the previous 12 months for each resin and gel coat operation. Subsection (c) also sets forth monomer VOM emission rate formulas for use in Equation 4 and subsection (e)(3) of this Section.

Subsection (d) establishes an emissions control alternative for subject resin and gel coat operations. Subsection (d) provides that an afterburner, carbon adsorber, or other approved control device shall be installed and operated such that the VOM emissions at the outlet of the control device meet an emission limitation determined using a slightly altered version of Equation 2, as set forth in subsection (c)(1).

Subsection (e) sets forth Equation 5 and provides that, for all filled production and tooling resins, the owner or operator of a subject source shall use such equation to adjust

the monomer VOM emission rates determined pursuant to subsection (b). Subsection (e) also sets forth limitations to the emission rate determined using Equation 5 for sources complying pursuant to subsection (b).

Subsection (f) provides that certain types of materials are exempt from the limitations set forth in subsections (a) through (e). Such materials shall instead comply with the requirements set forth in subsection (f).

Subsection (g) provides that no owner or operator of a source subject to this

Subpart shall use VOM-containing cleaning solutions to remove cured resin and gel coats

from fiberglass boat manufacturing application equipment. Additionally, no owner or

operator shall use VOM-containing cleaning solutions for routine cleaning of application

equipment unless specified VOM content or composite vapor pressure requirements are

met.

Subsection (h) provides that no owner or operator of a source subject to this Subpart shall use resin or gel coat mixing containers with a capacity equal to or greater than 55 gallons unless such containers have covers with no visible gaps in place at all times, except when material is being manually added to or removed from a container or when mixing or pumping equipment is being placed in or removed from a container.

# Section 218/219.892 Testing and Monitoring Requirements

Subsection (a) provides that testing to demonstrate compliance with Section 218/219.891 shall be conducted within 90 days after a request by the Illinois EPA, or as otherwise specified in Subpart II. The Illinois EPA shall be notified in writing 30 days in advance of such testing.

Subsection (b) provides that testing to demonstrate compliance with the monomer VOM content limitations set forth in Section 218/219.891(b) shall be conducted in accordance with a specified test method.

Subsection (c) provides that the owner or operator of a source complying pursuant to the emissions control device requirements in Section 218/219.891(d) shall conduct an initial performance test of the control device that demonstrates compliance with the emission limitation determined pursuant to such Section. The owner or operator shall then conduct at least one performance test per calendar year. Subsection (c) also requires that performance tests used to demonstrate compliance be conducted at least six months apart, unless the test is being conducted pursuant to subsection (b)(1)(C) of this Section or per an Agency request. The owner or operator shall monitor and record relevant operating parameters during each performance test used to demonstrate compliance and shall continue to operate the fiberglass boat manufacturing process within such parameters until another performance test is conducted that demonstrates compliance. If the fiberglass boat manufacturing process exceeds any parameter by more than ten percent, the owner or operator shall conduct an additional performance test. Finally, subsection (c) sets forth the methods and procedures the owner or operator shall follow when testing, as well as monitoring requirements for emissions control systems.

Subsection (d) provides that testing to demonstrate compliance with the VOM content limitations for cleaning solutions set forth in Section 218/219.891(g), and with the non-monomer VOM content limitations set forth in Section 218/219.891(a), shall be conducted in accordance with specified test methods and procedures. For cleaning

solvents, testing may instead be conducted in accordance with the manufacturer's specifications if certain conditions are met.

Subsection (e) sets forth monitoring requirements for owners or operators relying on the VOM content of cleaning solutions to comply with Section 218/219.891(g)(1).

Subsection (f) provides that testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents shall be conducted in accordance with the methods and procedures set forth in Section 218/219.110.

# Section 218/219.894 Recordkeeping and Reporting Requirements

Subsection (a) provides that the owners and operators of sources exempt from the limitations of Subpart II because of the criteria in Section 218/219.890(a) shall submit a certification to the Illinois EPA that includes a declaration that the source is exempt and calculations that demonstrate that the source is exempt. The owner or operator shall also notify the Illinois EPA if the combined emissions of VOM from subject fiberglass boat manufacturing operations at the source ever equal or exceed 15 lbs/day, within 30 days after the event occurs.

Subsection (b) sets forth recordkeeping and reporting requirements for all sources subject to the requirements of Subpart II. Such sources shall submit a certification to the Illinois EPA that includes specified information, notify the Illinois EPA at least 30 calendar days before changing the method of compliance between Sections 218/219.891(b), (c), and (d), notify the Illinois EPA of any violation of the requirements of Subpart II within 30 days following the violation, retain all records required by this Section for at least three years, and make such records available to the Illinois EPA upon request.

Subsection (c) provides that the owner or operator of a subject fiberglass boat manufacturing operation that is complying by means of Section 218/219.891(b) shall submit a certification to the Illinois EPA that includes the name, identification number, and VOM content of each subject resin and gel coat as applied each day. The owner or operator shall collect and record such information, as well as the daily weighted average VOM content of all subject resins and gel coats complying pursuant to Section 218/219.891(b)(2).

Subsection (d) provides that the owner or operator of a subject fiberglass boat manufacturing operation that is complying by means of Section 218/219.891(c) shall collect and record each month the amount and VOM content of each subject resin and gel coat used in each subject manufacturing operation. At the end of the 12-month averaging period, and at the end of each subsequent month, the owner or operator shall also collect and record the monomer VOM mass emission limit for the subject manufacturing operations for the applicable 12-month averaging period, and the total actual emissions of VOM from such operations.

Subsection (e) provides that the owner or operator of a subject fiberglass boat manufacturing operation that is complying by means of Section 218/219.891(d) shall submit a certification to the Illinois EPA that includes information regarding the type of control device used to demonstrate compliance, the results of all tests and calculations necessary to demonstrate compliance, and a declaration that the owner or operator is in compliance with monitoring requirements. The owner or operator shall also submit to the Illinois EPA a copy of all test results within 90 days after conducting testing, and a certification providing specified details regarding such testing. Finally, the owner or

operator shall collect and record daily control device monitoring data, a log of operating time for the control device and monitoring equipment, a maintenance log for the control device and monitoring equipment, and information substantiating that the fiberglass boat manufacturing operation is operating in compliance with the parameters determined pursuant to Section 218/219.892.

Subsection (f) provides that the owner or operator of a source subject to Section 218/219.891(f) shall collect and record specified information regarding materials exempt pursuant to such Section.

Subsection (g) provides that the owner or operator of a subject source shall collect and record specified information for each cleaning solution used in each fiberglass boat manufacturing operation.

# Subpart JJ: Miscellaneous Industrial Adhesives

# Section 218/219.900 Applicability

Subsection (a) provides that, on and after May 1, 2011, the requirements in Subpart JJ apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from such operations, including related cleaning activities, equal or exceed 15 lbs/day, in the absence of air pollution control equipment.

Subsection (b) establishes exemptions for certain coatings, adhesives, and operations.

Subsection (c) provides that if a source is or becomes subject to this Subpart, the source is always subject to the Subpart.

Subsection (d) provides that sources exempt pursuant to this Section are still subject to recordkeeping and reporting requirements.

# Section 218/219.901 Emission Limitations and Control Requirements

Subsection (a) provides that the owner or operator of a source subject to the requirements of Subpart JJ shall comply with subsection (b), (c), or (d) of this Section, as well as with the limitations in subsections (e) and (f) of this Section. Sources subject to Section 218.900(b)(2), however, shall only comply with the limitations in subsection (f).

Subsection (b) establishes VOM content limitations for subject adhesives.

Subsection (c) establishes a daily-weighted averaging alternative to the VOM content limitations in subsection (b).

Subsection (d) establishes an emissions control alternative for subject adhesives. Subsection (d) provides that an afterburner, carbon adsorber, or other approved control device shall be utilized that provides at least 85% reduction in the overall emissions of VOM from the adhesive application operation. Alternatively, the owner or operator may comply with the applicable limitation set forth in Section 218.901(b) by utilizing a combination of low-VOM adhesives and an afterburner, carbon adsorber, or other approved control device.

Subsection (e) provides that the owner or operator of a subject source shall comply with specified application method requirements.

Subsection (f) provides that the owner or operator of a subject source shall comply with specified work practices for each subject adhesive application operation.

# Section 218/219.902 Testing Requirements

Subsection (a) provides that testing to demonstrate compliance with Subpart JJ shall be conducted within 90 days after a request by the Illinois EPA, or as otherwise

specified. The Illinois EPA shall be notified in writing 30 days in advance of such testing.

Subsection (b) provides that testing to demonstrate compliance with the VOM content limitations set forth in Section 218/219.901(b) shall be conducted in accordance with specified test methods, or, under certain circumstances, in accordance with the manufacturer's specifications.

Subsection (c) provides that the owner or operator of a source complying with Section 218/219.901(d) by utilizing an afterburner or carbon adsorber shall perform testing pursuant to specified test methods and procedures.

Subsection (d) provides that the owner or operator of a source complying with Section 218/219.901(d) by utilizing an emissions control system other than afterburner or carbon adsorber shall conduct testing as set forth in the owner or operator's plan approved by the Illinois EPA and USEPA.

#### Section 218/219.903 Monitoring Requirements

Subsection (a) sets forth monitoring requirements for owners or operators utilizing an afterburner or carbon adsorber to demonstrate compliance with Section 218/219.901(d).

Subsection (b) sets forth monitoring requirements for owners or operators utilizing an emissions control system other than an afterburner or carbon adsorber to demonstrate compliance with Section 218/219.901(d).

# Section 218/219.904 Recordkeeping and Reporting Requirements

Subsection (a) provides that the owners and operators of sources exempt from the limitations of Subpart JJ because of the criteria in Section 218/219.900(a) shall submit a

certification to the Illinois EPA that includes a declaration that the source is exempt and calculations that demonstrate that the source is exempt. The owner or operator shall also notify the Illinois EPA if the combined emissions of VOM from subject miscellaneous industrial adhesive application operations at the source ever equal or exceed 15 lbs/day, within 30 days after the event occurs.

Subsection (b) sets forth recordkeeping and reporting requirements for all sources subject to the requirements of Subpart JJ. Such sources shall submit a certification to the Illinois EPA that includes specified information, notify the Illinois EPA at least 30 calendar days before changing the method of compliance between Sections 218/219.901(b), (c), and (d), notify the Illinois EPA of any violation of the requirements of Subpart JJ within 30 days following the violation, retain all records required by this Section for at least three years, and make such records available to the Illinois EPA upon request.

Subsection (c) provides that the owner or operator of a subject adhesive application operation that is complying by means of Section 218/219.901(b) shall submit a certification to the Illinois EPA that includes the name, identification number, and VOM content of each subject adhesive as applied each day. The owner or operator shall also collect and record such information.

Subsection (d) provides that the owner or operator of a subject adhesive application operation that is complying by means of Section 218/219.901(c) shall submit a certification to the Illinois EPA that includes the name, identification number, and VOM content of each subject adhesive as applied each day. The owner or operator shall

also collect and record such information, along with the daily weighted average VOM

content of all subject adhesives as applied.

Subsection (e) provides that the owner or operator of a subject adhesive

application operation that is complying by means of Section 218/219.901(d) shall submit

a certification to the Illinois EPA that includes information regarding the type of control

device used to demonstrate compliance, the results of all tests and calculations necessary

to demonstrate compliance, and a declaration that the owner or operator is in compliance

with monitoring requirements. The owner or operator shall also submit to the Illinois

EPA a copy of all test results within 90 days after conducting testing, and a certification

providing specified details regarding such testing. Finally, the owner or operator shall

collect and record daily control device monitoring data, a log of operating time for the

control device, monitoring equipment, and the associated adhesive application unit, and a

maintenance log for the control device and monitoring equipment.

ILLINOIS ENVIRONMENTAL

PROTECTION AGENCY

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East

P.O. Box 19276

Springfield, IL 62794-9276

(217) 782-5544

41

#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	R10- <b>20</b>
REASONABLY AVAILABLE CONTROL	Ś	(Rulemaking-Air)
TECHNOLOGY (RACT) FOR VOLATILE	)	RECEIVED CLERK'S OFFICE
ORGANIC MATERIAL EMISSIONS FROM	)	OLEHK'S OFFICE
GROUP IV CONSUMER & COMMERCIAL	)	MAR 0 8 2010
PRODUCTS: PROPOSED AMENDMENTS	)	
TO 35 ILL. ADM. CODE 211, 218, and 219	)	STATE OF ILLINOIS Pollution Control Board

# CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state that I have served the attached REGULATORY PROPOSAL entitled "REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) FOR VOLATILE ORGANIC MATERIAL EMISSIONS FROM GROUP IV CONSUMER & COMMERCIAL PRODUCTS: PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE 211, 218, and 219," MOTION FOR WAIVER OF COPY REQUIREMENTS, and APPEARANCE of the Illinois Environmental Protection Agency upon the person to whom it is directed, by mailing it by first-class mail from Springfield, Illinois, with sufficient postage affixed, to the following persons:

John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601-3218 Matthew Dunn, Chief
Division of Environmental Enforcement
Office of the Attorney General
69 W. Washington, Suite 1800
Chicago, IL 60602

Virginia Yang
Deputy Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dana Vetterhoffer /

Assistant Counsel

Division of Legal Counsel

DATED: March 3, 2010

1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

# TECHNICAL SUPPORT DOCUMENT

for

# CONTROL OF VOLATILE ORGANIC MATERIAL EMISSIONS IN NON-ATTAINMENT AREAS

# from

MISCELLANEOUS METAL AND PLASTIC PARTS COATINGS; AUTOMOBILE AND LIGHT-DUTY TRUCK ASSEMBLY COATINGS; MISCELLANEOUS INDUSTRIAL ADHESIVES; AND FIBERGLASS BOAT MANUFACTURING MATERIALS

**AQPSTR 10-01** 

January 2010

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 NORTH GRAND AVENUE EAST P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276

# Table of Contents

List o	f Acron	yms	2
Table	S.,		3
Execu	itive Sur	mmary	4
1.0	Intro	duction	6
2.0	Misce	ellaneous Metal and Plastic Parts Coatings	8
0	2.1	Description of Sources and Emissions	8
	2.2	Emissions in Illinois from Miscellaneous Metal and Plastic	Ū
	2.2	Parts Coatings	9
	2.3	Technical Feasibility of Controls	9
		2.3.1 Option 1: Use of Low VOM Coatings	10
		2.3.2 Option 2: Use of Low VOM Coatings and Add-on	
		Controls.	14
		2.3.3 Option 3: 90% Capture and Control Efficiency	17
	2.4	Economic Reasonableness and Cost Effectiveness of Controls	17
	2.5	Additional Recommendations: Work Practices	19
-	2.6	Potentially Affected Sources in Illinois	20
	2.7	Existing Regulations	23
3.0	Δυξοι	mobile and Light-Duty Truck Assembly Coatings	24
J.0	3.1	Description of Sources and Emissions	24
	3.2	Emissions in Illinois from Auto and Light-Duty Truck	2-1
•	٥.٣	Coatings	24
	3.3	Technical Feasibility of Controls	25
	3.4	Economic Reasonableness and Cost Effectiveness of Controls	27
	3.5	Additional Recommendations: Work Practices	28
	3.6	Potentially Affected Sources in Illinois	29
	3.7	Existing Regulations.	29
4.0	Misco	ellaneous Industrial Adhesives.	30
7.0	4.1	Description of Sources and Emissions.	30
	4.2	Emissions in Illinois from Miscellaneous Industrial Adhesives	31
	4.3	Technical Feasibility of Controls.	31
	4.4	Economic Reasonableness and Cost Effectiveness of Controls	34
	4.5	Additional Recommendations: Work Practices	34
	4.6	Potentially Affected Sources in Illinois	35
5.0	Eiber	glass Boat Manufacturing Materials	37
5.0	5.1	Description of Sources and Emissions	37
	5.2	Recommended Control Techniques for Fiberglass Boat	5,
;	٠	Manufacturing Materials	37
		5.2.1 Option 1: Use of Low Monomer VOM Manufacturing	٠,
		Materials	38
		5.2.2 Option 2: Emissions Averaging Option	39
		5.2.3 Option 3: Add-on Controls	42
	5.3	Technical Feasibility of Controls	43
	5.4	Economic Reasonableness of Controls	43
	5.5	Additional Recommendations: Work Practices	43
Refer	anace		45

# List of Acronyms

CAA Clean Air Act
CO Carbon Monoxide

CTG Control Techniques Guidelines

EDP Electrodeposition Primer

Illinois EPA Illinois Environmental Protection Agency

MMA Methyl Methacrylate NAA Non-attainment Area

NAICS North American Industry Classification System

NESHAP National Emissions Standards for Hazardous Air Pollutants

NO<sub>x</sub> Nitrogen Oxides

OTC Ozone Transport Commission

ppm Parts per million

RACT Reasonably Available Control Technology

SIP State Implementation Plan

USEPA United States Environmental Protection Agency

VOM Volatile Organic Material

# Tables

Table 2.1	VOM Limits for Metal and Plastic Parts Coatings in Terms of Mass per Volume of Coating	12
Table 2.2	VOM Limits for Metal and Plastic Parts Coatings in Terms of Mass per Volume of Solids	15
Table 2.3	Potentially Affected Sources in Illinois.	20
Table 3.1	Recommended VOM Emission Limits for Automobile and Light-Duty Truck Assembly Coatings	26
Table 3.2	Recommended VOM Emission Limits for Miscellaneous Materials Used at Automobile and Light-Duty Truck Assembly Coating Facilities (grams of VOM per liter of coating excluding water and exempt compounds as applied).	27
Table 4.1	VOM Emission Limits for General and Specialty Adhesive Application Processes	33
Table 4.2	Potentially Affected Sources in Illinois	36
Table 5.1	Compliant Materials Monomer VOM Content Recommendations for Open Molding Resin and Gel Coat	39
Table 5.2	Monomer VOM Emission Rate Formulas for Open Molding Operations	42

#### **Executive Summary**

On September 30, 2008, the United States Environmental Protection Agency ("USEPA") issued final Control Techniques Guidelines ("CTGs") in lieu of national rules to regulate five categories of consumer and commercial products that have been designated as Group IV Consumer and Commercial Products. The intent of these CTGs was to reduce emissions of volatile organic material ("VOM") from miscellaneous metal and plastic parts coatings, auto and light-duty truck coatings, miscellaneous industrial adhesives, and fiberglass boat manufacturing materials.

The purpose of this document is to provide technical support for a rulemaking to incorporate the recommended control techniques for the Group IV categories into Illinois regulations, limiting emissions of VOM in ozone non-attainment areas ("NAAs"). This technical support document addresses: the technical feasibility of the proposed control techniques; their economic reasonableness and cost effectiveness; the sources in Illinois that will be impacted by the proposed regulation; the reasoning behind adopting these rules in Illinois; and the process by which the control techniques have been developed by the USEPA in order to meet a reasonably available control technology ("RACT") standard.

The Illinois Environmental Protection Agency ("Illinois EPA") has determined that the proposed regulations to implement the recommendations of the USEPA CTGs addressing the Group IV categories are both technically feasible and economically reasonable. The Illinois EPA has relied primarily upon the analysis conducted by the USEPA in developing the CTGs for these categories. Illinois is required by the Clean Air Act ("CAA") to revise its State Implementation Plan ("SIP") to include RACT control for sources addressed by a CTG. CAA Section 182(b)(2) requires that states submit SIP revisions in response to any CTG issued between November 15, 1990, and the attainment date for any NAA. The Illinois EPA is proposing regulations consistent with the recommendations contained in the CTGs to control VOM emission from Consumer and Commercial Products, Group IV.

Three of the Group IV categories, miscellaneous metal coatings, plastic parts coatings, and auto and light-duty truck assembly coatings, are currently addressed by Illinois regulations for the

Chicago and Metro-East St. Louis NAAs in 35 Ill. Adm. Code Parts 218 and 219, respectively. The RACT recommendations of the current CTGs provide more stringent limits for sources as well as more specific subcategories for coatings and applications. Parts 218 and 219 have been amended to reflect the CTGs' RACT recommendations.

The other two Group IV categories addressed by CTGs are currently not specifically addressed by Illinois regulations. These categories are miscellaneous industrial adhesives and fiberglass boat manufacturing materials. The Illinois EPA is proposing two new Subparts, Subparts II and JJ, for Parts 218 and 219 that will address these categories.

#### 1.0 Introduction

Pursuant to Section 109 of the CAA, as amended in 1990, and to protect the public health, the USEPA revised the National Ambient Air Quality Standard ("NAAQS") for ozone effective July 17, 1997. The USEPA lowered the NAAQS for ozone to 0.08 parts per million ("ppm") from the previous 0.120 parts per million. In addition, the time period used for measuring compliance was increased from the previous 1 hour to 8 hours. In Illinois, Chicago and the Metro-East St. Louis area have been designated as moderate ozone NAAs for the 1997 NAAQS. Included in the Chicago NAA are Cook, DuPage, Kane, Lake, McHenry, and Will counties, as well as the Aux Sable Township and Goose Lake Township in Grundy County, and Oswego Township in Kendall County. The Metro-East St. Louis NAA is comprised of Jersey, Madison, Monroe, and St. Clair counties. CAA Section 172 requires that SIPs for these NAAs include requirements for RACT as it applies to emissions sources.

To comply with the requirements for RACT, the Illinois EPA is proposing to reduce VOM emissions from miscellaneous metal and plastic parts coatings, automobile and light-duty truck assembly coatings, miscellaneous industrial adhesives, and fiberglass boat manufacturing materials. These five VOM emission sources have been designated as "Consumer and Commercial Products, Group IV" categories by the USEPA. Pursuant to CAA Section 183(e)(3)(C), USEPA determined that CTGs "will be substantially as effective as national regulations in reducing emissions of volatile organic compounds in ozone national ambient air quality standard nonattainment areas<sup>5</sup>." Based on that determination, USEPA issued final CTGs in lieu of national regulations for the affected categories on September 30, 2008. Illinois EPA has addressed the CTG recommendations in the proposed rule for this group of source categories<sup>1-4</sup>.

Miscellaneous metal parts coatings, plastic parts coatings, and auto and light-duty truck assembly coatings are currently regulated by the Illinois EPA in Subpart F of 35 Ill. Adm. Code Parts 218.204 and 219.204 for the Chicago and Metro-East St. Louis NAAs respectively. However, the Illinois EPA's proposed amendments are more stringent, and prescribe VOM content limits for more specific product subcategories, than current Illinois regulations.

Fiberglass boat manufacturing materials are currently regulated by a 2001 National Emission Standard for Hazardous Air Pollutants ("NESHAP") (40 CFR Part 63 Subpart VVVV). The current Illinois regulation for polyester resin product manufacturing in Subpart CC of 35 Ill. Adm. Code Part 218, requiring high efficiency spray techniques and VOM content limits in resin and gel coat materials, was determined by the USEPA to be less stringent than the 2001 NESHAP<sup>4</sup>. The recommendations in the CTG are based on the emission levels from sources complying with the aforementioned NESHAP.

There are currently no federal or state regulations specifically addressing miscellaneous industrial adhesives<sup>3</sup>.

Further reductions of VOM emissions from the aforementioned categories will be beneficial to the environment and are considered to be both economically reasonable and technologically feasible. For these reasons the Illinois EPA has proposed this rule for controlling VOM emissions from Group IV consumer and commercial products.

In evaluating the potential reductions of VOM emissions from Group IV consumer and commercial products and their cost effectiveness, the Illinois EPA has relied upon the four USEPA CTG documents<sup>1-4</sup>. This technical support document is based on a review of those CTGs and is in support of the amendments proposed to implement RACT control techniques in Illinois. Further regulation of these source categories will be integrated into Illinois' state implementation plan ("SIP") for achieving and maintaining attainment of the NAAQS in Illinois NAAs.

### 2.0 Miscellaneous Metal and Plastic Parts Coatings

# 2.1 Description of Sources and Emissions

Miscellaneous metal and plastic parts coatings are coatings applied to a wide range of metal and plastic parts for decorative, protective, and functional purposes. The coatings are applied to components of products that include, but are not limited to: fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and numerous other industrial and household products. For the purposes of this technical support document, and for consistency with the corresponding CTG, these varied subcategories of parts will be referred to collectively as "miscellaneous metal and plastic parts coatings."

Emissions of VOM from this source category occur when the solvent carrying the coating material evaporates and leaves the coating material on the surface during application and drying, and to a lesser extent during the mixing and thinning of the coating, and during cleaning operations<sup>1</sup>.

The coatings affected by the proposed amendments are coatings that are applied by the manufacturers to the parts they produce, and not for coatings that are applied to test panels or coupons for research and development, quality control, or performance testing. Additionally, miscellaneous metal and plastic parts coatings do not include any coatings that are otherwise defined in CAA Section 183(e) which have been previously addressed by other CTGs. These previously addressed coatings include: shipbuilding and repair coatings; aerospace coatings; wood furniture coatings; metal furniture coatings; large appliance coatings; automobile and light-duty truck assembly coatings; flatwood paneling coatings; miscellaneous industrial adhesives; fiberglass boat manufacturing materials; and paper, film, and foil coatings.

The USEPA CTG addressing miscellaneous metal and plastic parts coatings provides a more detailed description of the affected categories and the processes in which they are used and emit VOM<sup>1</sup>.

# 2.2 Emissions in Illinois from Miscellaneous Metal and Plastic Parts Coatings

The Illinois EPA has determined that there are approximately 111 sources in Illinois NAAs that fall into the miscellaneous metal and plastic parts coating category, and that meet or exceed the 15 pound per day criteria for VOM emissions for sources in the proposed regulation. Because existing emission sources in Illinois are not required to report what portion of their VOM emissions are due to metal and plastic parts coatings, it is difficult to determine the total VOM emissions directly related to the category. The Illinois EPA used data provided by USEPA to determine which Illinois sources would potentially be affected. Based on this information the Illinois EPA estimates that potentially affected sources in Illinois emitted a total of 1730 tons of VOM in 2007. The USEPA's CTG on miscellaneous metal and plastic parts coatings does not detail the level of control anticipated from proposed regulations meeting the CTG's recommendations, so the Illinois EPA has not estimated the VOM reductions that may result from implementation of this proposal.

While the data regarding total emissions of VOM and emission reductions from the proposed regulation of miscellaneous metal plastic parts coatings is uncertain, CAA Section 182(b)(2)(A) requires that SIPs be revised to include RACT for VOM sources covered by a CTG issued by USEPA after November 15, 1990, and before the area's date of attainment<sup>1</sup>. The USEPA CTG regarding this category was intended to provide recommendations for RACT control of the various affected coatings. The Illinois EPA concurs with the recommendations of the CTG and has included them, with few exceptions, in the proposed regulation for Group IV of consumer and commercial products.

#### 2.3 Technical Feasibility of Controls

The CTG issued by USEPA for the control of emissions from miscellaneous metal and plastic parts coatings proposes three options for the control of emissions from affected sources, as well as additional recommendations for work practices related to coating activities and cleaning

activities. The three options for control detailed in the CTG are intended to provide a measure of flexibility in compliance. The Illinois EPA has included all three options in the proposed regulation.

Reduction of VOM emissions from this category can typically be achieved by: pollution prevention methods such as product substitution or reformulation to use lower VOM materials; use of higher efficiency coating application equipment such as electrostatic sprayers or high volume low pressure ("HVLP") sprayers; the use of capture and control equipment to capture emissions and combust them, or to recover them using adsorption or absorption processes; and the use of recommended work practices. The CTG for miscellaneous metal and plastic parts coatings provides a more complete description of these control methods<sup>1</sup>.

The Illinois EPA has relied upon the CTG to determine the technical feasibility of the proposed VOM limits. The USEPA based the limits and practices in the CTG on regulations achieving the same level of emission reduction in California, and specifically in the South Coast Air Quality Management District. Based upon compliance with these limits in other regions of the U.S., along with the flexibility in compliance measures in the proposed regulation, the limits in the proposed regulation are technically feasible.

# 2.3.1 Use of Low VOM Coatings

To reduce VOM emissions from miscellaneous metal and plastic parts coatings, an affected source may use low-VOM coatings. Option 1 from the CTG involves recommended application methods and specific limits on VOM content in coatings in terms of mass of VOM per volume of coating. These VOM limits do not include water and exempt compounds in the calculation of mass per volume VOM content. Table 2.1 lists the VOM limits in terms of mass of VOM per volume of coating for each coating category included in the proposed regulation. Table 2.2 specifies the equivalent VOM limits in terms of mass of VOM per volume of solids. Included in the CTG there are a number of exceptions for specified coatings or uses of those coatings that exempt them from either the VOM limits, the application methods, or both. This is due to these coatings requiring a higher VOM content in order to meet performance specifications. These

Table 2.1 VOM Limits for Metal and Plastic Parts Coatings in Terms of Mass per Volume of Coating

Metal Parts a	nd Products			
	Air Dried		<u>Baked</u>	
Coating Category	kg VOM/L Coating	lb VOM/gal Coating	kg VOM/L Coating	lb VOM/gal Coating
General One Component	0.34	2.8	0.28	2.3
General Multi Component	0.34	2.8	0.28	2.3
Camouflage	0.42	3.5	0.42	3.5
Electric-Insulating Varnish	. 0.42	3.5	0.42	3.5
Etching Filler	0.42	3.5	0.42	3.5
Extreme High-Gloss	0.42	3.5	0.36	3.0
Extreme Performance	0.42	3.5	0.36	3.0
Heat-Resistant	0.42	3.5	0.36	3.0
High Performance Architectural	0.74	6.2	0.74	6.2
High Temperature	0.42	3.5	0.42	3.5
Metallic	0.42	3.5	0.42	3.5
Military Specification	0.34	2.8	0.28	2.3
Mold-Seal	0.42	3.5	0.42	3.5
Pan Backing	0.42	3.5	0.42	3.5
Prefabricated Architectural Multi-Component	0.42	3.5	0.28	2.3
Prefabricated Architectural One-Component	0.42	3.5	0.28	2.3
Pretreatment Coatings	0.42	3.5	0.42	3.5
Repair and Touch Up	0.42	3.5	0.36	3.0
Silicone Release	0.42	3.5	0.42	3.5
Solar-Absorbent	0.42	2.5	0.36	3.0
Vacuum-Metalizing	0.42	3.5	0.42	3.5
Drum Coating, New, Exterior	0.34	2.8	0.34	2.8
Drum Coating, New, Interior	0.42	3.5	0.42	3.5
Drum Coating, Reconditioned, Exterior	0.42	3.5	0.42	3.5
Drum Coating, Reconditioned, Interior	0.50	4.2	0.50	4.2
Plastic Parts a	and Products			
	kg VOM/L Coating	lb VOM/gal Coating		
General One Component	0.28	2.3		
General Multi Component	0.42	3.5		
Electric Dissipating Coatings and Shock-Free Coatings	0.80	6.7		
Extreme Performance (2-pack coatings)	0.42	3.5		

Metallic	0.42	3.5	· ·
Military Specification (1 pack)	0.34	2.8	
Military Specification (2 pack)	0.42	3.5	
Mold-Seal	0.76	6.3	
Multi-colored Coatings	0.68	5.7	
Optical Coatings	0.80	6.7	
Vacuum-Metalizing	0.80	6.7	
=			

# Automotive/Transportation Coatings

,	kg VOM/L Coating	lb VOM/gal Coating
High Bake Coatings - Interior and Exterior Parts		
Flexible Primer	0.54	4.5
Non-flexible Primer	0.42	3.5
Base Coats	0.52	4.3
Clear Coat	0.48	4.0
Non-basecoat/clear coat	0.52	4.3
Low Bake/Air Dried Coatings – Exterior Parts		
Primers	0.58	4.8
Basecoat	0.60	5.0
Clearcoats	0.54	4.5
Non-basecoat/Clearcoat	0.60	5.0
Low Bake/Air Dried Coatings – Interior Parts	0.60	5.0
Touchup and Repair Coatings	0.62	5.2

# **Business Machine Coatings**

	kg VOM/L Coating	lb VOM/gal Coating
Primers	0.35	2.9
Topcoat	0.35	2.9
Texture Coat	0.35	2.9
Fog Coat	0.26	2.2
Touchup and repair	0.35	2.9

<sup>\*</sup> For red, yellow, and black automotive coatings, except touch up and repair coatings, the recommended limit is determined by multiplying the appropriate limit in this table by 1.15.

Pleasure Craft Su	raft Surface Coatings		
	kg VOM/L Coating	lb VOM/gal Coating	
Extreme High Gloss Topcoat	0.49	4.1	
High Gloss Topcoat	0.42	3.5	
Pretreatment Wash Primers	0.78	6.5	
Finish Primer/Surfacer	0.42	3.5	
High Build Primer Surfacer	0.34	2.8	
Aluminum Substrate Antifoulant Coating	0.56	4.7	
Other Substrate Antifoulant Coating	0.33	2.8	
All other pleasure craft surface coatings for metal or plastic	0.42	3.5	

### **Motor Vehicle Materials**

	kg VOM/L Coating	lb VOM/gal Coating
Vehicle Cavity Wax	0.65	5.4
Vehicle Sealer	0.65	5.4
Vehicle Deadener	0.65	5.4
Vehicle Gasket/Gasket Sealing Material	0.20	1.7
Vehicle Underbody Coating	0.65	5.4
Vehicle Trunk Interior Coating	0.65	5.4
Vehicle Bedliner	0.20	1.7
Vehicle Lubricating Wax/Compound	0.70	5.8

# 2.3.2 Use of Low VOM Coatings and Add-on Controls

An affected source may also choose to combine the use of low-VOM coatings with add-on controls. This compliance option from the CTG involves achieving equivalent VOM emissions from affected coatings by limiting VOM emission rates in terms of mass of VOM emitted per volume of coating solids applied. Table 2.2 lists the VOM limits for each coating category included in the proposed regulation. This option is intended for use by facilities employing a combination of low-VOM coatings, specific application methods, and add-on controls to achieve the mass of VOM emitted relative to applied coating solids. These limits have been converted from those set forth in section 2.3.1, assuming a VOM density of 883g/L.

Table 2.2 VOM Limits Metal and Plastic Parts Coatings in Terms of Mass per Volume of Solids

Metal Pa	rts and Produ	ıcts		
	Air Dried			aked
Coating Category	kg VOM/L Solids	lb VOM/gal Solids	kg VOM/L Solids	lb VOM/gal Solids
General One Component	0.54	4.52	0.40	3.35
General Multi Component	0.54	4.52	0.40	3.35
Camouflage .	0.80	6.67	0.80	6.67
Electric-Insulating Varnish	0.80	6.67	0.80	6.67
Etching Filler	0.80	6.67	0.80	6.67
Extreme High-Gloss	0.80	6.67	0.61	5.06
Extreme Performance	0.80	6.67	0.80	6.67
Heat-Resistant	0.80	6.67	0.61	5.06
High Performance Architectural	4.56	38.00	4.56	38.00
High Temperature	0.80	6.67	0.80	6.67
Metallic	0.80	6.67	0.80	6.67
Military Specification	0.54	4.52	0.40	3.35
Mold-Seal	0.80	6.67	0.80	6.67
Pan Backing	0.80	6.67	0.80	6.67
Prefabricated Architectural Multi-Component	0.80	6.67	0.40	3.35
Prefabricated Architectural One-Component	0.80	6.67	0.40	3.35
Pretreatment Coatings	0.80	6.67	0.80	6.67
Silicone Release	0.80	6.67	0.80	6.67
Solar-Absorbent	0.80	6.67	0.61	5.06
Vacuum-Metalizing	0.80	6.67	0.80	6.67
Drum Coating, New, Exterior	0.54	4.52	0.54	4.52
Drum Coating, New, Interior	0.80	6.67	0.80	6.67
Drum Coating, Reconditioned, Exterior	0.80	6.67	0.80	6.67
Drum Coating, Reconditioned, Interior	. 1.17	9.78	1.17	9.78
Plastic Pa	arts and Prod	<u>ucts</u>		,
Coating Category	kg VOM/L Solids	lb VOM/gal Solids		
General One Component	0.40	3.35		
General Multi Component	0.80	6.67		
Electric Dissipating Coatings and Shock-Free Coatings	8.96	74.70		
Extreme Performance (2-pack coatings)	0.80	6.67		

Metallic	0.80	6.67	
Military Specification (1 pack)	0.54	4.52	
Military Specification (2 pack)	0.80	6.67	
Mold-Seal	5.24	43.70	
Multi-colored Coatings	3.04	25.30	
Optical Coatings	8.96	74.70	
Vacuum-Metalizing	8.96	74.70	

# Automotive/Transportation Coatings\*

Coating Category	kg VOM/L Solids	lb VOM/gal Solids
Automotive/Transportation Coatings		-
High Bake Coatings – Interior and Exterior Parts		
Flexible Primer Non-flexible Primer Base Coats Clear Coat Non-basecoat/clear coat	1.39 0.80 1.24 1.05 1.24	11.58 6.67 10.34 8.76 10.34
Low Bake/Air Dried Coatings – Exterior Parts Primers Basecoat Clearcoats Non-basecoat/Clearcoat	1.60 1.87 1.39 1.87	13.80 15.59 11.58 15.59
Low Bake/Air Dried Coatings – Interior Parts Touchup and Repair Coatings	1.87 2.13	15.59 17.72
Business Machine Coatings Primers Topcoat Texture Coat Fog Coat Touchup and repair	0.57 0.57 0.57 0.38 0.57	4.80 4.80 4.80 3.14 4.80

<sup>\*</sup> For red, yellow, and black automotive coatings, except touch up and repair coatings, the recommended limit is determined by multiplying the appropriate limit in this table by 1.15.

Pleasure Craft Surface Coatings		
Coating Category	kg VOM/L Solids	lb VOM/gal Solids
Extreme High Gloss Topcoat	1.10	9.20
High Gloss Topcoat	0.80	6.67
Pretreatment Wash Primers	6.67	55.60
Finish Primer/Surfacer	0.80	6.67
High Build Primer Surfacer	0.34	2.80
Aluminum Substrate Antifoulant Coating	0.56	4.70
Other Substrate Antifoulant Coating	0.33	2.80
All other pleasure craft surface coatings for metal or plastic	0.42	3.50

For the limits set forth in Sections 2.3.1 and 2.3.2 of this document, the USEPA recommends one or more of the following application methods: electrostatic application, HVLP spray, flow coat, roller coat, dip coat (including electrodeposition), airless spray, air-assisted airless spray, or other coating application methods capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

# 2.3.3 90% Capture and Control Efficiency

In lieu of using low VOM coatings as described in Sections 2.3.1 and 2.3.2, a source may opt to install and operate an add-on capture and control system that provides an overall control efficiency of at least 90%. Sources complying with this compliance option would not be required to meet the aforementioned VOM limits, or to employ recommended application methods. This compliance option is expected to achieve emission reductions of VOM that are equal to or greater than the limits in Sections 2.3.1 and 2.3.2.

#### 2.4 Economic Reasonableness and Cost Effectiveness of Controls

The Illinois EPA has relied upon the cost analysis conducted by the USEPA for the CTGs for miscellaneous metal and plastic parts coatings to determine that the proposed regulations are cost effective.

The USEPA used the National Emissions Inventory database to estimate the number of miscellaneous metal and plastic parts coatings operations in non-attainment areas in the United States that meet the 15 lb per day threshold. They estimated that there are 1296 such sources in the United States emitting an estimated 22,108 tons of VOM per year. The USEPA also estimated the average cost of compliance with the CTGs for this emission category to be \$10,500 per source, and a cost effectiveness of \$1,758 per ton of VOM reduced<sup>1</sup>. Using these estimates, an affected source, on average, could be expected to achieve a reduction in VOM emissions of 5.97 tons annually. This would amount to an estimated reduction of 662 tons of VOM in Illinois NAAs. However, it should be noted that these estimated reductions would include reductions that have already occurred at sources since the current regulations were implemented, and not necessarily reductions from current emission levels.

The USEPA supplied the data that was used to determine that there were 1269 potentially affected sources nationwide. Of these 1269 sources, 155 were found to be in Illinois NAAs and potentially subject to the CTGs. One hundred eleven of these 155 Illinois sources remained in operation in 2007. Because the source emission data is generally not specific enough to determine whether a source is emitting 15 pounds of VOM per day specifically from miscellaneous metal and plastic parts coatings, a conservative approach for cost estimates was used. For the purposes of cost estimation, the Illinois EPA selected all sources in NAAs that were selected by the aforementioned process. Because there were 111 potentially affected sources, the Illinois EPA estimated, assuming a \$10,500 per source average cost of compliance, a maximum total compliance cost for Illinois state-wide to be approximately \$1,165,500. While this figure is almost certainly an over-estimate of potential costs, the Illinois EPA considers the USEPA's estimate for cost effectiveness of \$1758 per ton to be reasonable for control of VOM.

A more detailed description of the USEPA's cost analyses can be found in the CTG for miscellaneous metal and plastic parts coatings<sup>1</sup>.

#### 2.5 Additional Recommendations: Work Practices

In addition to the limits recommended in the CTG and included in the proposed regulation, the CTG also recommends work practices for miscellaneous metal and plastic parts coating operations. The work practices address coating activities and cleaning activities, and are intended to further reduce VOM emissions from the source category. The CTG states that the emission reductions are unquantifiable, but states that the work practices will result in a net cost savings to sources in this category.

The CTG recommends that work practices for coating related activities include the following:
(1) store all VOM-containing coatings, thinners, and coating-related waste materials in closed containers; (2) ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing these materials; (3) minimize spills of VOM-containing coatings, thinners, and coating-related waste materials; and (4) convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.

The CTG further recommends that work practices for cleaning materials include the following: (1) store all VOM-containing cleaning materials and used shop towels in closed containers; (2) ensure that storage containers used for VOM-containing cleaning materials are kept closed at all times except when depositing or removing these materials; (3) minimize spills of VOM containing cleaning materials; (4) convey VOM-containing cleaning materials from one location to another in closed containers or pipes; and (5) minimize VOM emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

The proposed regulation includes the recommended work practices from the CTG in their entirety.

# 2.6 Potentially Affected Sources in Illinois

In determining the number of sources potentially affected by the proposed regulation regarding miscellaneous metal and plastic parts coatings, the Illinois EPA relied upon information provided by the USEPA. This source specific information was the data that the USEPA relied upon to estimate the number of sources that would be impacted nationwide. The CTG for miscellaneous metal and plastic parts coatings states that 1269 sources nationwide in non-attainment areas would be affected by rules to implement the CTG. Of the 1269 sources in the U.S., 155 sources were found to be in Illinois non-attainment areas, and 111 of these sources remained in operation in 2007. Table 2.3 lists these impacted sources and their location.

Table 2.3 Potentially Affected Sources in Illinois

Illinois Source ID	Name	City	County
031045AAE	UGN INC	: Chicago Heights	Cook County
089807AAD	ILLINOIS TOOL WORKS - SHAKEPROOF DIV	Elgin	Kane County
089483ACD	MACHINERY COMPONENTS INC	West Chicago	Kane County
031600FXO	UNION PACIFIC RAILROAD CO	Chicago	Cook County
043440AHH	COATING TECHNOLOGIES INC	Elk Grove Village	DuPage County
031003AAE	ARDCO INC	Alsip	Cook County
031096ABM	CLAD REX INC	Franklin Park	Cook County
031600EIM	GENERAL ELECTRIC INTERNATIONAL INC	Chicago	Cook County
: 031600FSE	ACTION RACK & MANUFACTURING CO	Chicago	Cook County
031600FME	INGLOT ELECTRONICS CORP	Chicago	Cook County
031273ACK	NORTHROP GRUMMAN SYSTEMS CORP	Rolling Meadows	Cook County
031600FTR	DEHLER MANUFACTURING CO	Chicago	Cook County
031282ACH	EAGLE ELECTRONICS INC	Schaumburg	Cook County
043090ADE	ADVANCED ELECTRONICS INC	West Chicago	DuPage County
031015AAC	BORG WARNER TRANSMISSION SYSTEMS	Bellwood	Cook County
031186AGO	PEERLESS INDUSTRIES	Melrose Park	Cook County
031258AAZ	CALUMET ARMATURE & ELECTRIC CO	Riverdale	Cook County
119055AAK	HIGHLAND MACHINE AND SCREW PRODUCT CO	, Highland	Madison County
031440AHD	CHEM-PLATE INDUSTRIES INC	Elk Grove Village	Cook County
111075AAD	JOHN STERLING CORP	Richmond	McHenry County
089438ADU	KINNEY ELECTRICAL MFG CO	: Elgin	Kane County
031438AAW	ELGIN SWEEPER CO	. Elgin	Cook County

; 043407AAH	FLUID AIR INC	Aurora	DuPage : County
031600CUP	KREL LABORATORIES INC	Chicago	Cook County
163060AAC	WIEGMANN AND CO INC	Freeburg	St. Clair
103000AAC	WIEGINAIN AND CO INC	: Freeburg	County
043055AAC	LOCKFORMER CO	Lisle	DuPage ' County
-			Madison
119115ABC	MILLENNIUM RAIL INC	Wood River	County
031024ABC	G & W ELECTRIC CO	Blue Island	Cook County
031114AAW	BEE-JAY INDUSTRIES INC	Harwood Heights	Cook County
0.400006.40	LA ONETRO I NITERNATIONAL	Downers	DuPage
043030AAG	: MAGNETROL INTERNATIONAL	Grove	County
031440AKI	COMMERCIAL FINISHES CO LTD	Elk Grove	Cook County
031805AAG	DURACO PRODUCTS INC	Village Streamwood	Cook County ,
031600FSL	S & B FINISHING CO	Chicago	Cook County
031600FPE	RS OWENS AND CO	: Chicago	Cook County
031600EYE	SORINI RING MANUFACTURING CO INC	Chicago	Cook County
097200AAZ	ACTION ATHLETIC EQUIPMENT INC	Zion	Lake County
031096ANA	: QC FINISHERS	Franklin Park	Cook County
197075AAA	CLEVELAND STEEL CONTAINER CORP	Peotone	Will County
097418AAQ	VAPOR BUS INTERNATIONAL	Buffalo Grove	Lake County
111065AAQ	NISSAN FORKLIFT CORPORATION NA	Marengo	McHenry County
043090ACH	NATIONAL CONTROLS CORP	: West Chicago	DuPage · County
031414APT	VAPOR POWER	Bensenville	: Cook County
031600CSZ	READY METAL MANUFACTURING CO	Chicago	Cook County
097115ABX	EO SCHWEITZER MFG CO INC	Mundelein	Lake County
031045ABP	ALCO SPRING INDUSTRIES	Chicago Heights	Cook County
031096ABK	, BRUNNER AND LAY INC	Franklin Park	Cook County
119040ATC	MIDWEST METAL COATINGS LLC	Granite City	Madison County
031174AAA	GENERAL MOTORS - ELECTRO-MOTIVE DIV	McCook	Cook County
163010AAH	EMPIRE COMFORT SYSTEMS	Belleville	St. Clair County
031600EZF	YALE POLISHING & PLATING	Chicago	Cook County
031600CFW	WELDED TUBE CO OF AMERICA	Chicago	Cook County
043030AAU	REXNORD CORP - REX BEARING DIV	Downers Grove	DuPage County
043060ABT	E/M CORP	Lombard	DuPage County
197072AAC	FEDERAL SIGNAL CORP SIGNAL DIVISION	University Park	Will County
097190ADF	CHERRY ELECTRICAL PRODUCTS	Waukegan	Lake County
031027AAG	SIGNODE CORP	Bridgeview	Cook County

043020ABE	AMERICAN FLANGE & MANUFACTURING CO INC	Carol Stream	DuPage ; County
031015ABZ	HA FRAMBURG AND CO	Bellwood	Cook County
031440AKK	ICON IDENTITY SOLUTIONS	Elk Grove Village	Cook County
197025AAF	HENDRICKSON STAMPING	Crest Hill	Will County
031600FGY	ACE PLATING CO	Chicago	Cook County
031030ACP	BL DOWNEY CO INC	Broadview	Cook County
031030ACM	REPLOGLE GLOBES INC	Broadview	Cook County
031403AAC	BRITT INDUSTRIES	Arlington Heights	Cook County
031297AAN	SHELCO STEEL WORKS INC	South Holland	Cook County
031030AAI	ELKAY MANUFACTURING	Broadview	Cook County
111813AAE	TC INDUSTRIES INC	Crystal Lake	McHenry County
: 089802AAE	RAYVAC PLASTIC DECORATORS INC	Big Rock	Kane County
043040AAA	CHICAGO BLOWER CORP	Glendale	DuPage
	RUSSELL T BUNDY ASSOCIATES INC D/B/A PAN-	Heights	County
197085AAS	GLO	Rockdale	Will County
031600CGP	S & C ELECTRIC CO	Chicago	Cook County
031165ABH	NYLOK FASTENER CORP	Lincolnwood	Cook County
. 031186ABK	INTERNATIONAL TRUCK AND ENGINE CORP	Melrose Park Elk Grove	Cook County
031440AHP	API INDUSTRIES	Village	Cook County
031600FWW	USPS - CENTRAL VMF	Chicago	Cook County
031234AAM	WEBER-STEPHEN INC	Palatine	Cook County
: 119055AAB	BASLER ELECTRIC CO	Highland	Madison County
197040AAN	NORWOOD MARKING SYSTEMS INC	Frankfort	Will County
031186AFK	WAGNER ZIP CHANGE	Melrose Park	Cook County
089005AHM	EQUIPTO ELECTRONICS CORP	Aurora	Kane County
097803AAC	CROWN GYM MAT INC	Barrington	Lake County
031600GGA	MORSE AUTOMOTIVE CORP	Chicago	Cook County ,
031195ABT	ITT BELL AND GOSSETT	Morton Grove	Cook County
031324ACC	ACCO INTERNATIONAL INC	Wheeling	Cook County
031600GAF	R & B POWDER COATING	Chicago	Cook County
031234AAP	ARLINGTON PLATING CO	Palatine	Cook County
031003ABA	GREIF BROS CORP	Alsip	Cook County
031600CEK	ABBEY FINISHING CORP	Chicago	Cook County
031600FXN	NINA ENTERPRISES INC	Chicago	Cook County
031045AMS	GOODER HENRICHSEN CO INC	Chicago Heights	Cook County
043450AAA	ITW BUILDEX	Itasca	DuPage County
163005AAE	METRO EAST INDUSTRIES INC	Alorton	St. Clair County
031600FLE	, EAGLEBROOK PLASTICS INC	Chicago	Cook County

031600FAY	MEYER STEEL DRUM INC	Chicago	Cook County
119040AAC	ASF-KEYSTONE INC	Granite City	Madison : County
031600FDI	WHEATLAND TUBE CO	Chicago	Cook County .
197809AAC	CATERPILLAR INC	Joliet	Will County
031440AFY	ACME FINISHING CO	Elk Grove Village	Cook County
089438AGC	PLASTIC DECORATOR	: Elgin	Kane County .
031075AAB	ILLINOIS CENTRAL RAILROAD	Homewood	Cook County .
119020AAG	OLIN CORP	East Alton	Madison County
· 031288AHN	: AMERICAN LOUVER CO	Skokie	Cook County
031600APY	MEYER STEEL DRUM INC	Chicago	Cook County
, 031600BRJ	LAKEWOOD ENGINEERING & MFG CO	Chicago	Cook County
097809AAG	JESSUP MANUFACTURING CO	Lake Bluff	Lake County
031600AXT	PALEX CONTAINTER SYSTEMS	Chicago	Cook County
1.97090AAZ	AMERICAN STAIR CORP	. Romeoville	Will County
031414AAM	ASTROBLAST INC	Bensenville	Cook County
119055ABE	COOPER B-LINE INC	Highland	Madison County
093807AAB	CATERPILLAR TRACTOR	Aurora	Kendall County
031045ABS	CHICAGO HEIGHTS STEEL	Chicago Heights	Cook County

# 2.7 Existing Regulations

The current Illinois regulations regarding miscellaneous metal and plastic parts coatings can be found in 35 Ill. Adm. Code Parts 218 and 219. A summary of the Illinois rules for metal parts coatings and for plastic parts coatings can be found in Appendices C and D, respectively, of the CTG for these categories<sup>1</sup>.

# 3.0 Auto and Light-Duty Truck Assembly Coatings

# 3.1 Description of Sources and Emissions

Auto and light-duty truck assembly coatings are coatings applied to new automobile or light-duty truck bodies or body parts for those vehicles. These coatings are categorized under Section 183(e) of the CAA, and are most often formulated and marketed for this purpose. These coatings are applied to vehicles to enhance durability and appearance. This coating category includes coatings applied on a contractual basis outside vehicle manufacturing facilities, but does not include coatings used at plastic or composites molding facilities described in the Auto and Light-Duty Trucks NESHAP (40 CFR Part 63, Subpart III)<sup>6</sup>. Likewise, aerosol coatings are not included in this coating category, as they are addressed by the national VOM rule for aerosol coatings and are a separate category under CAA Section 183.

Emissions of VOM from auto and light-duty truck coatings occur when the solvent carrying the coating material evaporates and leaves the coating material on the surface during application and drying, and to a lesser extent during the mixing and thinning of the coating. The majority of emissions from this category occur during coating application, flash off, and the drying and curing of the coatings. Emissions from this product category can be reduced through the use of lower VOM coatings, specific application methods and work practices, and by add-on control equipment for the capture and control of emissions.

The coating process for automobiles and light-duty trucks generally consists of surface preparation, priming operations, topcoat operations, and final repair operations. The proposed regulation includes control measures for each of these phases of the coating process to meet the recommendations of the CTG regarding this category. The CTG provides a more detailed description of these processes<sup>2</sup>.

# 3.2 Emissions in Illinois from Auto and Light-Duty Truck Coatings

The Illinois EPA has identified only one source in an Illinois non-attainment area that will be affected by the proposed regulation regarding auto and light-duty truck coatings. Ford Motor Co., located in Cook County, is currently the only source in the Illinois EPA inventory that is classified by the North American Industry Classification System ("NAICS") codes specified by

USEPA's notice of final determination and availability of control technique guidelines<sup>5</sup> to be affected by the auto and light-duty truck coatings category. This single source reported emissions of approximately 466 tons of VOM from the affected coating lines in 2007. These coating operations consist of topcoat operations, prime coat operations, sealer application, dip coating application, and a final repair coating line. All of these operations exceed the 15 pounds VOM per day criteria taken from the CTG<sup>2</sup> and included in the proposed regulation.

# 3.3 Technical Feasibility of Controls

The Illinois EPA has relied upon the CTG regarding auto and light-duty truck coatings to determine the appropriate level of control and the feasibility of those measures. The CTG regarding this category was intended to provide recommendations for RACT control of the affected coating operations for automobiles and light-duty trucks. The Illinois EPA's proposed regulations for Group IV consumer and commercial products are consistent with the CTG's recommendations.

Reduction of VOM emissions from this category can typically be achieved by: pollution prevention methods, such as product substitution or reformulation to use lower VOM coatings and cleaning materials; use of higher efficiency coating application equipment such as electrostatic sprayers or high volume low pressure ("HVLP") sprayers; the use of capture and control equipment to capture emissions and combust them, or use of a hybrid system employing a concentrator and an oxidizer; and the use of recommended work practices. For a more complete description of these control methods the reader is directed to the CTG for auto and light-duty truck assembly coatings<sup>2</sup>.

The CTG issued by the USEPA for control of emissions from auto and light-duty truck coatings recommends VOM emission limits for coating operations; work practices for storage and handling of coatings, thinners, and waste materials; and work practices for handling and use of cleaning materials. The limits and work practices included in the CTG reflect current practices that the USEPA considers to be RACT, and were supplied to the USEPA by member and non-member companies of the Alliance of Automobile Manufacturers in 2008. For a more detailed

account of local, state, and federal actions leading to the USEPA determination of these limits please refer to USEPA's CTG for auto and light-duty truck coatings<sup>2</sup>.

The recommended VOM limits for auto and light-duty truck coatings listed in Table 3.1 are specified by assembly coating process, and in the case of electrodeposition primer ("EDP") operations, the VOM content is dependent on the solids turnover ratio,  $R_T$ . The solid turnover ratio is defined as the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total volume design capacity of the EDP system.

Table 3.1 Recommended VOM Emission Limits for Automobile and Light-Duty Truck
Assembly Coatings

Assembly Coating Process	Recommended VOM Emission Limit		
Electrodeposition primer	When solids	When 0.040≤ <i>R</i> <sub>7</sub> <0.160	When
(EDP) operations (including	turnover ratio		
application area, spray/rinse	(R <sub>T</sub> )≥0.16		R <sub>7</sub> ≤0.040
stations, and curing oven)			
	0.084 kg VOM/liter	$0.84 \times 350^{0.160-R_T}$ kg	No VOM
	(0.7lb/gal coating	VOM/liter coating solids.	emission limit.
	solids applied		
Primer-surfacer operations	1.44 kg of VOM/liter of deposited solids (12.0 lbs VOM/gal		
(including application area,		i daily weighted average bas	1
flash-off area, and oven)	_	ng the procedures in the rev	ised Automobile
	Topcoat Protocol.		
Topcoat operations	1.44 kg VOM/liter of deposited solids (12.0 lb VOM/gal deposited		
(including application area,	solids) on a daily weighted average basis as determined by		
flash-off area, and oven)	following the procedures in the revised Automobile Topcoat		
	Protocol.		
Final repair operations	0.58 kg VOM/liter (4.8 lb VOM/.gallon of coating) less water and		
	less exempt solvents on a daily weighted average basis or as an		
	occurrence weighted average.		
Combined primer-surfacer	1.44 kg VOM/liter of deposited solids (12.0 lb VOM/gal deposited		
and topcoat operations	solids) on a daily weighted average basis as determined by		
	following the procedures in the revised Automobile Topcoat		
	Protocol.		

In addition to the emission limits for assembly coating operations for automobiles and light-duty trucks, the CTG recommends VOM emission limits for a number of miscellaneous materials used in auto and light-duty truck assembly coating. These limits are listed in Table 3.2, and have been included in their entirety in the proposed regulation.

Table 3.2 Recommended VOM Emission Limits for Miscellaneous Materials Used at
Automobile and Light-Duty Truck Assembly Coating Facilities (grams of
VOM per liter of coating excluding water and exempt compounds as applied)

Material	Recommended VOM Emission Limit
Automobile and light-duty truck glass bonding primer	900 g VOM/liter
Automobile and light-duty truck adhesive	250 g VOM/liter
Automobile and light-duty truck cavity wax	650 g VOM/liter
Automobile and light-duty truck sealer	650 g VOM/liter
Automobile and light-duty truck deadener	650 g VOM/liter
Automobile and light-duty truck gasket/gasket sealing material	200 g VOM/liter
Automobile and light-duty truck underbody coating	650 g VOM/liter
Automobile and light-duty truck trunk interior coating	650 g VOM/liter
Automobile and light-duty truck bed liner	200 g VOM/liter
Automobile and light-duty truck weatherstrip adhesive	750 g VOM/liter
Automobile and light-duty truck lubricating wax/compound	700 g VOM/liter

### 3.4 Economic Reasonableness and Cost Effectiveness of Controls

The USEPA estimates that there will be no additional cost for the implementation of the control techniques guidelines for auto and light-duty truck assembly coating. Affected sources have reduced VOM emissions from coating operations in response to the New Source Performance Standards ("NSPS"), the 2004 NESHAP<sup>6</sup> for this category, and various State rules. The recommendations from the CTG for this category were derived from information supplied to the USEPA by the Alliance of Automobile Manufacturers, and reflect measures currently being implemented at affected sources. Further, the USEPA estimates that the additional work practices recommended in the CTG will result in a net cost savings to sources, as implementing these work practices reduces the amount of coating and cleaning materials used.

### 3.5 Additional Recommendations: Work Practices

In addition to the limits recommended in the USEPA CTG and included in the proposed regulation, the CTG also recommends work practices for auto and light-duty truck assembly coating operations. The work practices included in the CTG address coating activities and cleaning activities, and are intended to further reduce VOM emissions from the source category. The CTG states that the emission reductions are unquantifiable, but states that the work practices will result in a net cost savings to sources in this category.

The CTG recommends that work practices for coating related activities and cleaning activities include the following: (1) store all VOM-containing coatings, thinners, and coating-related waste materials in closed containers; (2) ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times, except when depositing or removing these materials; (3) minimize spills of VOM-containing coatings, thinners, and coating-related waste materials; (4) convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes; and (5) minimize VOM emissions from cleaning of storage, mixing, and conveying equipment.

The CTG further recommends that sources in this category develop and implement a work practice plan to ensure that VOM emissions are minimized from the following operations: vehicle body wiping; coating line purging; flushing of coating systems; cleaning of spray booth grates; cleaning of spray booth walls; cleaning of spray booth equipment; cleaning external spray booth areas; and other housekeeping measures (e.g., keeping solvent-laden rags in closed containers). If an affected source already has a work practices plan in place from the aforementioned 2004 NESHAP<sup>6</sup>, the proposed regulation does not require a new plan.

The proposed regulation includes the recommended work practices from the USEPA CTG in their entirety.

# 3.6 Potentially Affected Sources in Illinois

As previously stated, Illinois EPA has only identified one source from its emissions inventory that will be affected by the regulation regarding auto and light-duty truck assembly coatings. This source is Ford Motor Co. in Cook County (source ID 031600AAR).

# 3.7 Existing Regulations

The current Illinois regulations regarding automobile and light duty truck assembly coatings in NAAs can be found in 35 Ill. Adm. Code Parts 218 and 219. These rules currently are based upon the 2004 NESHAP<sup>6</sup> as stated above, and a summary of these regulations can be found in the CTG for this category<sup>2</sup>.

#### 4.0 Miscellaneous Industrial Adhesives

# 4.1 Description of Sources and Emissions

The miscellaneous industrial adhesives category includes adhesives and adhesive primers at manufacturing and repair facilities with adhesive application operations. The category does not include adhesives that have been addressed by earlier CTGs. Miscellaneous industrial adhesives are used for joining surfaces in assembly and construction of a large variety of products. Adhesives allow for faster assembly speeds, less labor input, and more ability for joining dissimilar materials than other fastening methods. Although there are a wide variety of adhesives formulated from a multitude of synthetic and natural raw materials, all adhesives can be generally classified as solution/waterborne, solvent-borne, solventless or solid (e.g., hot melt adhesives), pressure sensitive, hot-melt, or reactive (e.g., epoxy adhesives and ultraviolet-curable adhesives). Adhesives can also be generally classified according to whether they are structural or nonstructural. Structural adhesives are commonly used in industrial assembly processes and are designed to maintain a product's structural integrity<sup>3</sup>.

The VOM emissions from miscellaneous industrial adhesives are generally due to evaporation of solvents during application of the adhesive, drying and curing of the adhesive, and in cleaning operations. The majority of emissions occur during the application and drying/curing of the adhesives. Industrial adhesives are applied in a number of ways that include: air atomized spray, electrostatic spray, high volume/low pressure (HVLP) spray, dip coating, flow coating, brush or roll coating, electrocoating, and hand application. For a more detailed description of operations involved in the use of miscellaneous industrial adhesives please refer to the USEPA CTG<sup>3</sup> for the category.

There are currently no Federal or Illinois regulations specifically addressing miscellaneous industrial adhesives. The intent of the CTG regarding the category is to recommend control measures that are considered RACT. The USEPA determination of RACT and the issuing of CTGs were based upon a number of current regulations for industrial adhesives in place in a number of California air quality management districts. For a more detailed description of the regulatory history that was evaluated by the USEPA, the reader is directed to the CTG<sup>3</sup> for miscellaneous industrial adhesives.

#### 4.2 Emissions in Illinois from Miscellaneous Industrial Adhesives

The Illinois EPA has determined that there are approximately 12 sources in Illinois non-attainment areas that could be potentially affected by the proposed regulation for miscellaneous industrial adhesives. The Illinois EPA identified these sources from data provided by the USEPA while that agency was researching the CTG addressing this category. This group of sources was screened to determine whether a source was in an Illinois NAA, and finally to determine whether the source could potentially exceed the 15 pound per day VOM emission criteria from the CTG. Because the Illinois emission inventory data is not adequately specific to determine what portion of a source's emissions are due to industrial adhesives, it is difficult to determine the total VOM emissions directly related to the category at any given source. The potentially affected sources in Illinois NAAs emitted an estimated total of 120 tons of VOM in 2007.

While the data regarding total emissions of VOM and emission reductions from the proposed regulation of miscellaneous industrial adhesives is uncertain, CAA Section 182(b)(2)(A) requires that SIPs be revised to include RACT for VOM sources covered by a CTG issued by USEPA after November 15, 1990<sup>3</sup>. The USEPA CTG regarding this category was intended to provide recommendations for RACT control of the various affected coatings. The Illinois EPA's proposed regulations for Group IV consumer and commercial products are consistent with the CTG's recommendations.

### 4.3 Technical Feasibility of Controls

The Illinois EPA has relied upon the USEPA CTG regarding miscellaneous industrial adhesives to determine the appropriate level of control and the feasibility of those measures. The two most common emission control techniques for reducing VOM emissions from miscellaneous industrial adhesives are pollution prevention and add-on control equipment. The pollution prevention measures involve the use of lower VOM adhesives, higher solids content adhesives, higher efficiency application methods, and work practices to reduce waste and minimize emissions during cleaning operations. Add-on controls for capture and control of VOM emissions are systems similar to those used for a variety of processes that generate VOM emissions, and

involve capture and oxidation or recovery. The recommendations for control of VOM from this category in the CTG were based upon rules currently in effect in California and the Ozone Transport Commission ("OTC"). The USEPA believes these measures to be RACT, and the Illinois EPA concurs. The CTG for miscellaneous industrial adhesives<sup>3</sup> contains a complete description of USEPA's determination of RACT for this category.

In order to provide sources some flexibility in compliance measures, the USEPA has recommended three control options for reduction of VOM emissions from this category. The first option for control involves the use of low VOM adhesives and adhesive primers. The second control option is the use of a combination of low VOM adhesives and primers and add-on controls to achieve emissions equivalent to the VOM content limits of the first option. In the third compliance option a source may employ add-on controls to achieve a control efficiency of 85% as an alternative to the prescribed emission limits of the first control option. This 85% control efficiency criteria is expected to achieve emission reductions of VOM that are equal to or greater than the prescribed emission limits for the industrial adhesives. The Illinois EPA has included all three options in the proposed regulation.

The emission limits for various adhesives and primers recommended in the CTG and included in the proposed regulation are given in grams of VOM per liter of adhesive. These limits are listed in Table 4.1.

Table 4.1 VOM Emission Limits for General and Specialty Adhesive Application Processes

General Adhesive Application Processes	Recommended VOM Emission Limit	
	(g/l)	(lb/gal)
Reinforced Plastic Composite	200	1.7
Flexible Vinyl	250	2.1
Metal	30	0.3
Porous Material (Except Wood)	120	1.0
Rubber	250	2.1
Wood	30	0.3
Other Substrates	250	2.1
Specialty Adhesive Application Processes		
Ceramic Tile Installation	130	1.1
Contact Adhesive	250	2.1
Cove Base Installation	150	1.3
Floor Covering Installation (Indoor)	150	1.3
Floor Covering Installation (Outdoor)	250	2.1
Floor Covering Installation (Perimeter Bonded Sheet Vinyl)	660	5.5
Metal to Urethane/Rubber Molding or Casting	850	7.1
Motor Vehicle Adhesive	250	2.1
Motor Vehicle Weatherstrip Adhesive	750	6.3
Multipurpose Construction	200	1.7
Plastic Solvent Welding (ABS)	400	3.3
Plastic Solvent Welding (Except ABS)	500	4.2
Sheet Rubber Lining Installation	850	7.1
Single-Ply Roof Membrane Installation/Repair (Except EPDM)	250	2.1
Structural Glazing	100	0.8
Thin Metal Laminating	780	100
Tire Repair	100	8.0
Waterproof Resorcinol Glue	170	1.4
Adhesive Primer Application Processes		
Motor Vehicle Glass Bonding Primer	900	7.5
Plastic Solvent Welding Adhesive Primer	650	5.4
Single-Ply Roof Membrane Adhesive Primer	250	2.1
Other Adhesive Primer	250	2.1

#### 4.4 Economic Reasonableness and Cost Effectiveness of Controls

The Illinois EPA has relied upon the cost analysis conducted by the USEPA for the CTGs for miscellaneous industrial adhesives and determined that the proposed regulations are cost effective.

The USEPA used the National Emissions Inventory database to estimate the number of sources operating miscellaneous industrial adhesives application processes in non-attainment areas in the United States that meet the 15 lb per day VOM emission criteria contained in the CTGs. The USEPA estimated that there are 180 such sources in the United States, emitting an estimated 4,881 tons of VOM per year. The USEPA relied upon cost estimates from California's Ventura County Air Pollution Control District's 1993 study. This study estimated that the annualized cost for a source to convert to using low VOM adhesives was approximately \$2300 per source. The USEPA then scaled that cost estimate to 1997 dollars and estimated the cost of control to be \$3,356 per source. This estimate was based upon the assumption that sources would use the VOM limits in the proposed regulation rather than the alternative add-on control option. This assumption was made because sources in currently regulated areas have already implemented the use of these low VOM adhesives, and the reformulated products should be readily available today. Using these assumptions the USEPA estimated the cost effectiveness on a per ton basis of \$265 per ton of VOM reduced. The Illinois EPA estimates that, with 12 of the 180 affected sources nationwide, the total cost statewide for the proposed regulation will be approximately \$40,272 annually. The Illinois EPA considers these figures for cost effectiveness and total statewide cost to be reasonable for control of VOM.

A more detailed description of the USEPA's cost analyses can be found in the CTG for miscellaneous industrial adhesives<sup>3</sup>.

#### 4.5 Additional Recommendations: Work Practices

In addition to the limits recommended in the USEPA CTG and included in the proposed regulation, the CTG also recommends work practices for miscellaneous industrial adhesives. The work practices included in the CTG address adhesive related activities and cleaning activities, and are intended to further reduce VOM emissions from the source category. The

CTG states that the emission reductions are unquantifiable, but states that the work practices will result in a net cost savings to sources in this category.

The CTG recommends that work practices for adhesive related activities include the following: (1) store all VOM-containing adhesives, adhesive primers, and process-related waste materials in closed containers; (2) ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, and process-related waste materials are kept closed at all times, except when depositing or removing these materials; (3) minimize spills of VOM-containing adhesives, adhesive primers, and process-related waste materials; and (4) convey VOM-containing adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes.

The CTG further recommends that work practices for cleaning materials should include the following: (1) store all VOM-containing cleaning materials and used shop towels in closed containers; (2) ensure that storage containers used for VOM-containing cleaning materials are kept closed at all times except when depositing or removing these materials; (3) minimize spills of VOM-containing cleaning materials; (4) convey VOM-containing cleaning materials from one location to another in closed containers or pipes; and (5) minimize VOM emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

The proposed regulation includes the recommended work practices from the USEPA CTG in their entirety.

# 4.6 Potentially Affected Sources in Illinois

In determining the number of sources potentially affected by the proposed regulation regarding miscellaneous industrial adhesives the Illinois EPA relied upon information provided by the USEPA. This source specific information was the data that the USEPA relied upon to estimate the number of sources that would be impacted nationwide. The CTG for miscellaneous industrial adhesives states that 180 sources nationwide in non-attainment areas would be affected

by rules to implement the CTG. Of the 180 sources in the U.S., 17 sources were found to be in Illinois non-attainment areas. Of those 17 sources, 5 sources ceased operation and 12 sources were in operation in 2007. Table 4.2 lists these impacted sources and their location.

Table 4.2 Potentially Affected Sources in Illinois

Source ID	Name	City	County
031471ABS	DELTA-UNIBUS CORPORATION	Northlake	Cook
031015AAC	BORG WARNER TRANSMISSION SYSTEMS	Bellwood	Cook
031081ACU	TAPECOAT CO INC	Evanston	Cook
031324ACZ	TECHNICAL LAMINATIONS & COATINGS INC	Wheeling	Cook
031440AFH	UNIVERSAL CHEMICALS & COATINGS INC	Elk Grove Village	Cook
031440AFY	ACME FINISHING CO	Elk Grove Village	Cook
031096ABM	CLAD REX INC	Franklin Park	Cook
031440AKY	D & K INTERNATIONAL INC	Elk Grove Village	Cook
031600FXL	ARCHITECTURAL SPECIALTY PRODUCTS INC	Chicago	Cook
031600FPE	RS OWENS AND CO	Chicago	Cook
063060ACR	RITCHIE BROS AUCTIONEERS (AMERICA) INC	Morris	Grundy
007005AAB	PACTIV CORPORATION	Trenton	St. Claire

### 5.0 Fiberglass Boat Manufacturing Materials

# 5.1 Description of Sources and Emissions

The CTG addressing fiberglass boat manufacturing materials applies to sources manufacturing fiberglass hulls or decks for boats, or sources that construct molds for the manufacture of fiberglass boat hulls or decks. The CTG does not apply to sources solely manufacturing boat parts, however if a source manufactures fiberglass boat hulls and decks, the manufacture of all fiberglass boat parts at the source is covered by the CTG.

Emissions of VOM from fiberglass boat manufacture occur from the use of gel coats and resins applied to fiberglass in the manufacturing process, and from material used to clean application equipment used in the process. For a more complete description of manufacturing processes for this subcategory the reader is directed to the USEPA CTG addressing fiberglass boat manufacturing materials<sup>4</sup>.

# 5.2 Recommended Control Techniques for Fiberglass Boat Manufacturing Materials

The USEPA in its CTG for fiberglass boat manufacturing materials has made recommendations for what it considers RACT control for the subcategory. In order to provide affected sources with a degree of flexibility in compliance measures the CTG provides three options for control. Much like the proposed regulation for miscellaneous metal and plastic parts coatings, these options include use of compliant low VOM coatings, an emission averaging option, and an overall control efficiency option. The USEPA recommends that States include all three options in their determination of RACT for the subcategory. Illinois EPA has included all three options in the proposed regulation.

It should be noted that for the fiberglass boat manufacturing materials subcategory that the control measures are intended to reduce emissions of monomer VOM. The CTG describes monomer VOM as such:

A monomer is a volatile organic compound that partially combines with itself, or other similar compounds, by a cross-linking reaction to become a part of the cured resin. A fraction of each monomer compound evaporates during resin and gel coat application and curing. Not all of the styrene and MMA evaporate,

because a majority of these compounds are bound in the cross-linking reaction between polymer molecules in the hardened resin or gel coat and become part of the finished product.<sup>4</sup>

Styrene and methyl methacrylate ("MMA") are the primary monomer VOMs used in gel coats and resins for the manufacture of fiberglass boats. Non-monomer VOM is generally less than 5% of a resin or gel coat formulation. The proposed regulation does not limit non-monomer VOM directly, however, if a product is found to contain greater than 5% non-monomer VOM, the percentage exceeding 5% will be added to the monomer VOM content of a product for the purposes of compliance.

There are a number of methods to reduce monomer VOM emissions from fiberglass boat manufacturing material. Many of these methods are similar to the emission reduction measures for the other categories in the proposed regulation such as lower monomer VOM materials, addon capture and control equipment, and recommended work practices. Other control options are specific to this category and include the use of vapor suppressed resins and gel coats, the use of non-atomizing resin application, and various closed molding techniques. These control methods are discussed at length in the USEPA CTG for fiberglass boat manufacturing materials<sup>4</sup>.

# 5.2.1 Use of Low Monomer VOM Manufacturing Materials

The USEPA CTG recommends a compliance option for sources using low monomer VOM resins and gel coats. A source may meet the requirements by using low monomer VOM products that meet the emission limits given for each material used in a given operation, or the VOM content for all materials used in a covered operation can be averaged on a weight-adjusted basis<sup>4</sup>. Table 5.1 lists the monomer VOM content limits based upon the material type and the application method used.

The applicable recommended limits in Table 5.1 above would be considered met if all materials of a certain type meet the applicable monomer VOM content limit for a specific application method on a weighted-average basis. The weighted-average monomer VOM content would be determined based on a 12-month rolling average.

Table 5.1 Compliant Materials Monomer VOM Content Recommendations for Open

Molding Resin and Gel Coat

Material	Application Method	Weighted Average Monomer VOM Content (weight percent)
Production Resin	Atomized (spray)	28
Production Resin	Non-atomized	35
Pigmented Gel Coat	Any method	33
Clear Gel Coat	Any method	48
Tooling Resin	Atomized	30
Tooling Resin	Non-atomized	39
Tooling Gel Coat	Any method	40

A source would use Equation 1 to determine weighted-average monomer VOM content for a particular open molding resin or gel coat material<sup>4</sup>.

# Equation 1:

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

Where:

 $M_i = Mass of open molding resin or gel coat, i, used in the past 12 month in an operation, in megagrams.$ 

 $VOM_i = Monomer\ VOM\ content,\ by\ weight\ percent,\ of\ open\ molding\ resin\ or\ gel\ coat,\ i,$  used in the past 12 months in an operation.

n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

### 5.2.2 Emissions Averaging Option

The second compliance option from the USEPA CTG involves averaging the monomer VOM emissions for all operations that a source chooses to include in an averaging group. Emission limits from other operations at a source could be met by the compliance options detailed in Sections 5.2.1 or 5.2.3. The monomer VOM emission limit for operations for which a source chooses to use the averaging option is a source-specific monomer VOM limit determined by

Equation 2. The numerical coefficients on the right side of Equation 2 are the allowable monomer VOM emission rates for each material in units of kilograms per megagram.

# Equation 2:

Monomer VOM Limit =  $46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$ Where: Monomer VOM Content= Total allowable monomer VOM that can be emitted from the open molding operations included in the average, kilograms per 12month period.  $M_R =$ Mass of production resin used in the past 12 months, excluding any materials that are exempt, megagrams. Mass of pigmented gel coat used in the past 12 months, excluding  $M_{PC} =$ any materials that are exempt, megagrams.  $M_{CG} =$ Mass of clear gel coat used in the past 12 months, excluding any materials that are exempt, megagrams.  $M_{TR} =$ Mass of tooling resin used in the past 12 months, excluding any materials that are exempt, megagrams.  $M_{TG} =$ Mass of tooling gel coat used in the past 12 months, excluding any materials that are exempt, megagrams.

After a monomer VOM limit for a source's averaged operations has been determined using Equation 2, an emission average is determined on a 12 month rolling-average basis and calculated at the end of each month. At the end of the first 12 month period, and at the end of each subsequent month, the monomer VOM emissions from the source's averaged operations are calculated, using Equation 3, to determine whether these emissions exceed the source's limit.

### Equation 3:

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

### Where:

Monomer VOM emissions = Monomer VOM emissions calculated using the monomer VOM emission equations for each operation included in the average, kilograms.

 $PV_R =$  Weighted-average monomer VOM emission rate for production resin used in the past 12 months, kilograms per megagram.

 $M_R = Mass of production resin used in the past 12 months, megagrams.$ 

 $PV_{PG} = Weighted$ -average monomer VOM emission rate for pigmented gel coat used in the past 12 months, kilograms per megagram.

 $M_{PG} = Mass of pigmented gel coat used in the past 12 months, megagrams.$ 

 $PV_{CG} = Weighted$ -average monomer VOM emission rate for clear gel coat used in the past 12 months, kilograms per megagram.

 $M_{CG} = Mass of clear gel coat used in the past 12 months, megagrams.$ 

 $PV_{TR} = Weighted$ -average monomer VOM emission rate for tooling resin used in the past 12 months, kilograms per megagram.

 $M_{TR} = Mass of tooling resin used in the past 12 months, megagrams.$ 

 $PV_{TG} = Weighted$ -average monomer VOM emission rate for tooling gel coat used in the past 12 months, kilograms per megagram.

 $M_{TG} = Mass of tooling gel coat used in the past 12 months, megagrams.$ 

Equation 4 is used to calculate the weighted average monomer VOM emission rate over the previous 12 month period (PV<sub>OP</sub>) for each operation being averaged in Equation 3.

# Equation 4:

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

Where:

- $PV_{OP} = Weighted$ -average monomer VOM emission rate for each open molding operation (PVR, PVPG, PVCG, PVTR, and PVTG) included in the average, kilograms of monomer VOM per megagram of material applied.
- $M_i = Mass of resin or gel coat, i, used within an operation in the past 12 months, megagrams.$ 
  - n = Number of different open molding resins and gel coats used within an operation in the past 12 months.
- $PV_i =$  The monomer VOM emission rate for resin or gel coat, i, used within an operation in the past 12 months, kilograms of monomer VOM per megagram of material applied. Use the equations in Table 4 to compute PVi.

The monomer VOM emission rates for the specific materials and application methods are given in Table 5.2.

Table 5.2 Monomer VOM Emission Rate Formulas for Open Molding Operations

Material	Application Method	Formula to Calculate Monomer VOM Emission Rate
Production Resin, Tooling	Atomized	0.014 x (Resin VOM%) <sup>2.425</sup>
Resin	Atomized, plus vacuum bagging with roll-out	0.01185 x (Resin VOM%) <sup>2.425</sup>
	Atomized, plus vacuum bagging without roll-out	0.00945 x (Resin VOM%) <sup>2.425</sup>
	Nonatomized	0.014 x (Resin VOM%) <sup>2.275</sup>
·	Nonatomized, plus vacuum bagging with roll-out	0.0110 x (Resin VOM%) <sup>2.275</sup>
	Nonatomized, plus vacuum bagging without roll-out	0.0076 x (Resin VOM%) <sup>2.275</sup>
Pigmented Gel Coat, Clear Gel Coat, Tooling Gel Coat	All methods	0.445 x (Gel coat VOM%) <sup>1.675</sup>

#### 5.2.3 Add-on Controls

In the case that performance requirements or other aspects of an operation require the use of materials that do not meet the monomer VOM emission limits, a source may opt to use add-on control equipment to reduce VOM emissions to below the limit determined by Equation 2. A

source would be considered to be compliant if measured emissions at the outlet of a control device were less than the applicable emission limit for that operation.

#### 5.3 Technical Feasibility of Controls

The Illinois EPA concurs with USEPA's RACT determination in the CTG addressing fiberglass boat manufacturing materials. Illinois EPA also concurs with the determination that the recommendations of the CTG are technically feasible because these recommended control measures are merely based on controls currently in place at affected sources due to the aforementioned 2001 NESHAP. It is also assumed that any source that intended to commence operation of a source in this category in an Illinois non-attainment area would necessarily consider the proposed regulation in the planning of source operations, and that the proposed controls would be technically feasible for any new source.

#### 5.4 Economic Reasonableness and Cost Effectiveness of Controls

Because there are currently no sources in Illinois that will be affected by the proposed regulation of this source category, there will be no associated economic impact for sources in Illinois. The CTG states that the USEPA expects sources in this category will incur little if any increased costs due to the control recommendations. The Illinois EPA considers the controls to be technically feasible and concurs with the USEPA determination of the economic reasonableness of the measures.

### 5.5 Additional Recommendations: Work Practices

In addition to the monomer VOM limits recommended in the USEPA CTG and included in the proposed regulation, the CTG also recommends work practices for fiberglass boat manufacturing materials. The work practices included in the CTG address work practices for resin and gel coat mixing containers and for cleaning activities, and are intended to further reduce VOM emissions from the source category. The CTG states that the emission reductions are unquantifiable, but are beneficial in reducing overall emissions at a source in this category.

For resin and gel coat mixing containers, the CTG recommends that all containers with a capacity of 55 gallons or greater should have a cover with no visible gaps in place at all times.

This does not apply to containers smaller than 55 gallons, or when material is being manually added or removed from a container.

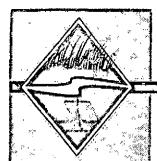
The USEPA CTG further recommends the use of low-VOM and low vapor pressure cleaning materials. It is recommended that VOM cleaning solvents should contain no more than 5% VOM by weight, or have a composite vapor pressure of no more than 0.50 mm Hg at 68 °F.

The proposed regulation includes the recommended work practices from the USEPA CTG in their entirety.

#### References

- Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, U.S.
   Environmental Protection Agency Office of Air Quality Planning and Standards Sector Policies and Programs Division Research Triangle Park, NC, September 2008.
- Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly
   Coatings, U.S. Environmental Protection Agency Office of Air Quality Planning and
   Standards Sector Policies and Programs Division Research Triangle Park, NC, September 2008.
- 3. <u>Control Techniques Guidelines for Miscellaneous Industrial Adhesives</u>, U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Sector Policies and Programs Division Research Triangle Park, NC, September 2008.
- 4. Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Sector Policies and Programs Division Research Triangle Park, NC, September 2008.
- Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives, 73 FR 58481-58491, October 7, 2008.
- 6. National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 72 FR 20227-20237, April 24, 2007.

# **C** 2



## ILLINOIS POLLUTION CONTROL BOARD

RECEIVED CLERK'S OFFICE

MAR 1 8 2010

STATE OF ILLINOIS
Pollution Control Board

COVERNOR

CP AIRMAN
G. Tanner Girard, Ph.D.

March 18, 2010

Warren Ribley, Director Department of Commerce and Economic Opportunity 620 East Adams Street, S-6 Springfield, Illinois 62704

Re: Request for Economic Impact Study for: Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group IV Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219 (R10-20)

Dear Director Ribley:

On March 18, 2010, the Board accepted for hearing a proposal entitled Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group IV Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219 (Board Docket R10-20). Generally, the Illinois Environmental Protection Agency proposes that the Board adopt air pollution regulations to control emissions of volatile organic material from Group IV Consumer & Commercial Products in ozone nonattainment areas classified as moderate and above. Group IV includes the following product categories: miscellaneous metal and plastic parts coatings; automobile and light-duty truck assembly coatings; miscellaneous industrial adhesives; and fiberglass boat manufacturing materials. I write to request that your Department conduct an economic impact study concerning this proposal.

This rulemaking was filed with the Board on March 8, 2010, under the "fast-track" rulemaking authority at Section 28.5 of the Act, which the General Assembly recently re-enacted in Public Act 96-0308, effective August 11, 2009. Section 28.5 requires the Board to proceed toward adoption of the proposed regulations by meeting a series of strict deadlines. Specifically, the Board must hold at least two, and possibly three, hearings on the proposal. Additionally, the Board must submit the proposed amendments to the Joint Committee on Administrative Rules on or before either July 16, 2010, or August 5, 2010 (130 or 150 days after the proposal's filing), depending on whether the Board holds two or three hearings. The Board has scheduled hearings in this rulemaking to begin on April 28, 2010; May 19, 2010; and June 2, 2010. The Board respectfully requests that your Department expedite its determination whether it will conduct an economic impact study on the proposal and respond no later than Thursday, April 1, 2010.

SPRINGFIELD OFFICE

021 North Grand Ave. Essa P.O. Box 19274 Springfield, 11 62794-9274 217-524-8500 FAX 217-524-8508

CHICACO OFFICE

autes R. Thompson Confer 100 West 2 andolph Surte 11-500 Chicago IL 60601 312-314-3620 FAX 312-814-3669 TYY-312-814-6032

WEB SITE
www.ipcb\_state\_illus\_

Since 1998, Section 27(b) of the Environmental Protection Act has required the Board to:

- 1) request that the Department of Commerce and Economic Opportunity (formerly the Department of Commerce and Community Affairs) conduct a study of the economic impact of the proposed rules. The Department may within 30 to 45 days of such request produce a study of the economic impact of the proposed rules. At a minimum, the economic impact study shall address a) economic, environmental, and public health benefits that may be achieved through compliance with the proposed rules, b) the effects of the proposed rules on employment levels, commercial productivity, the economic growth of small businesses with 100 or less employees, and the State's overall economy, and c) the cost per unit of pollution reduced and the variability of company revenues expected to be used to implement the proposed rules; and
- (2) conduct at least one public hearing on the economic impact of those rules. At least 20 days before the hearing, the Board shall notify the public of the hearing and make the economic impact study, or the Department of Commerce and Economic Opportunity's explanation for not producing an economic impact study, available to the public. Such public hearing may be held simultaneously or as a part of any Board hearing considering such new rules. 415 ILCS 5/27(b) (2008).

The Board intends to proceed promptly with this rulemaking as required by Section 28.5 of the Act, and asks that you determine whether DCEO will conduct an economic impact study on the proposal and respond no later than Thursday, April 1, 2010. If I, or my staff, can provide you with any additional information, please let me know.

Thank you in advance for your prompt response.

Sincerely,

G. Tanner Girard Acting Chairman

Pollution Control Board

S. Torra Guard

cc: John T. Therriault, Assistant Clerk of the Board

# **C** 3

## RECEIVED CLERK'S OFFICE

## ILLINOIS POLLUTION CONTROL BOARD March 18, 2010

MAR 1 8 2010

IN THE MATTER OF:

Pollution Control Board

REASONABLY AVAILABLE CONTROL

TECHNOLOGY (RACT) FOR VOLATILE

ORGANIC MATERIAL EMISSIONS FROM

GROUP IV CONSUMER & COMMERCIAL

PRODUCTS: PROPOSED AMENDMENTS

TO 35 ILL. ADM. CODE 211, 218, AND 219

#### **NOTICE OF HEARINGS**

DATES, TIMES, AND LOCATIONS:

FIRST HEARING:

WEDNESDAY, APRIL 28, 2010, TO BE CONTINUED DAY-TO-DAY UNTIL BUSINESS IS COMPLETE

9:00 AM Illinois Pollution Control Board Conference Room, First Floor 1021 N. Grand Ave. East (North Entrance) Springfield, Illinois

SECOND HEARING (IF NECESSARY):

WEDNESDAY, MAY 19, 2010, TO BE CONTINUED DAY-TO-DAY UNTIL BUSINESS IS COMPLETE

10:00 AM
Pollution Control Board Conference Room 11-512
James R. Thompson Center
100 W. Randolph St.
Chicago, Illinois

THIRD HEARING (IF NECESSARY):

WEDNESDAY, JUNE 2, 2010, TO BE CONTINUED DAY-TO-DAY UNTIL BUSINESS IS COMPLETE

10:00 AM
Pollution Control Board Conference Room 11-512
James R. Thompson Center
100 W. Randolph St.
Chicago, Illinois

PURPOSE OF HEARINGS:

Merit and Economic

ATTENDING BOARD MEMBER:

Andrea S. Moore

HEARING OFFICER:

Timothy J. Fox

#### **HEARING OFFICER ORDER**

### **Statutory Requirements**

On March 8, 2010, the Illinois Environmental Protection Agency (Agency) filed this rulemaking proposal pursuant to authorities including the recently re-enacted Section 28.5 of the Environmental Protection Act (Act). See Public Act 96-0308, eff. Aug. 11, 2009 (P.A. 96-0308) (reenacting repealed Section 28.5). Section 28.5 requires the Board to proceed to adoption of the proposed regulations by meeting a series of strict deadlines. The Board has applied those deadlines to this proceeding in its opinion and order of March 18, 2010, and in this notice of hearing and hearing officer order.

Section 28.5 specifies the timing and purpose of each of three hearings and establishes other procedural requirements. Section 28.5(f)(1) provides that "[t]he first hearing shall be held within 55 days of receipt of the rule and shall be confined to testimony by and questions of the Agency's witnesses concerning the scope, applicability, and basis of the rule. Within 7 days after the first hearing, any person may request that the second hearing be held." P.A. 96-0308.

Section 28.5(f)(2) provides that, if it is necessary, "[t]he second hearing shall be scheduled to commence within 30 days of the first day of the first hearing and shall be devoted to presentation of testimony, documents, and comments by affected entities and all other interested parties." P.A. 96-0308. Section 28.5(f)(3) provides that, if it is necessary,

[t]he third hearing shall be scheduled to commence within 14 days after the first day of the second hearing and shall be devoted solely to any Agency response to the material submitted at the second hearing and to any response by other parties. The third hearing shall be cancelled if the Agency indicates to the Board that it does not intend to introduce any additional material. *Id.* 

Section 28.5(f) provides that "[t]he Board must require the written submission of all testimony at least 10 days before a hearing, with simultaneous service to all participants of record in the proceeding as of 15 days prior to hearing, unless a waiver is granted by the Board for good cause." P.A. 96-0308.

Section 28.5(k) provides that, "[f]ollowing the hearings, the Board must close the record 14 days after the availability of the transcript." P.A. 96-0308.

Section 28.5(n) provides that

[t]he Board must complete a fast-track rulemaking by adopting a second notice order no later than 130 days after receipt of the proposal if no third hearing is held and no later than 150 days if the third hearing is held. If the order includes a rule, the Illinois [Pollution Control] Board must file the rule for second notice under the Illinois Administrative Procedure Act within 5 days after adoption of the order. P.A 96-0308; see 5 ILCS 100/5-40 (2008).

Also, Section 28.5(o) provides that, "[u]pon receipt of a statement of no objection to the rule from the Joint Committee on Administrative Rules, the Board must adopt the final order and submit the rule to the Secretary of State for publication and certification within 21 days." P.A. 96-0308.

The Board has no discretion to adjust the strict deadlines established in Section 28.5 of the Act. See P.A. 96-0308. Therefore, the first hearing will begin as indicated above on Wednesday, April 28, 2010, and is not subject to continuation or cancellation by the Board. The second and third hearings, if necessary, will begin on the dates listed above in the notice of hearings.

#### Service and Notice Lists

The Board will establish a notice list and a service list for this proceeding. All persons on the notice list will receive notice of Board opinions and orders and hearing officer orders. 35 Ill. Adm. Code 102.422(a).

Under Section 102.422(b) of the Board's procedural rules,

[t]he hearing officer may establish a service list for any regulatory proceeding, in addition to the notice list. The hearing officer may direct participants to serve copies of all documents upon the persons listed on the service list. . . . For purposes of fast-track rulemakings under Section 28.5 of the Act, participants of record will be the individuals on the service list. 35 Ill. Adm. Code 102.422(b).

In addition to receiving notice of all Board actions and hearing officer orders, persons on the service list will receive pre-filed testimony and other filings in this proceeding. The service list is intended for persons such as those who will testify and participate actively in this rulemaking.

The Board notes that the Agency's proposal included a Technical Support Document (TSD), which lists potentially affected sources. TSD at 20-23 (Table 2.3), 29 (§ 3.6), 36 (Table 4.2), 43 (§ 5.4). The Board begins this rulemaking proceeding by including in the Notice List each of the potentially affected sources listed by the Agency in its TSD. While the Board will mail a copy of the Board's March 18, 2010, order and this hearing officer order to each of those potentially affected sources, the Board will provide copies of any subsequent opinions and orders only to those who specifically indicate to the Board that they wish to remain on either the Service List or Notice List for this proceeding. The Board requests that any entity wishing to

remain on the Service List or Notice List provide the information requested in the form attached to this order as Attachment A to the Board by Friday, April 2, 2010.

In order to clarify the record in this proceeding, Attachment B to this order contains the names, mailing addresses, and contact names for each of the potentially affected entities listed by the Agency in its TSD and to each of which the Board has mailed its March 18, 2010, opinion and order and this hearing officer order.

Note that, through the Clerk's Office On-Line (COOL) on the Board's Web site (<a href="www.ipcb.state.il.us">www.ipcb.state.il.us</a>), persons can request to receive electronic notification. This "enotification" generates an e-mail message when the Board receives and dockets a filing in this proceeding. These newly-filed documents will then be available to view, download, and print free of charge from COOL. Also through COOL, pre-filed testimony, public comments, and other filings are available generally for viewing and downloading. One exception to this availability may be voluminous filings, which will nonetheless be made available upon request to the Clerk's office. With the access to filings provided by COOL, persons who are not on the service list and wish to file only a public comment need not serve their comments on the service list in this proceeding.

#### **Pre-Filing Testimony**

As noted above under "Statutory Requirements," Section 28.5(f) provides strict deadlines for pre-filing testimony. In a "fast-track" rulemaking, "[t]he Board must require the written submission of all testimony at least 10 days before a hearing, with simultaneous service to all participants of record in the proceeding as of 15 days prior to hearing, unless a waiver is granted by the Board for good cause." P.A. 96-0308.

#### Service Lists

For purposes of serving pre-filed testimony, the service list for the first hearing will close on Tuesday, April 13, 2010; the service list for the second hearing will close on Tuesday, May 4, 2010; and the service list for the third hearing will close on Tuesday, May 18, 2010. Any person who submits a fax or e-mail request to be added to the service list to the hearing officer by 4:30 PM on or before those three deadlines will be added to the service list for the remainder of this proceeding. The service list for any of the three hearings will be available after 9:30 AM on the day following each of the three deadlines.

#### First Hearing

For the first hearing, pre-filed testimony must be served on all persons on the service list as of 4:30 PM on Tuesday, April 13, 2010. Persons wishing to pre-file testimony for the first hearing may obtain a copy of the service list by contacting the hearing officer after 9:30 AM on Wednesday, April 14, 2010. All pre-filed testimony for the first hearing must be submitted to the Board no later than Friday, April 16, 2010. See P.A. 96-0308 (requiring pre-filing at least 10 days before hearing). For the purpose of serving pre-filed testimony for the first hearing on the

Board, the "mailbox rule" at 35 Ill. Adm. Code 101.300(c) does not apply. The Board's Clerk must receive this pre-filed testimony before the close of business on Friday, April 16, 2010. Although pre-filed testimony may be filed electronically through COOL, all electronic or approved fax filings must be received by the Clerk's Office no later than 4:30 PM on that date.

#### Second Hearing

For the second hearing, pre-filed testimony must be served on all persons on the service list as of 4:30 PM on Tuesday, May 4, 2010. Persons wishing to pre-file testimony for the second hearing may obtain a copy of the service list by contacting the hearing officer after 9:30 AM on Wednesday, May 5, 2010. All pre-filed testimony for the second hearing must be submitted no later than Friday, May 7, 2010. See P.A. 96-0308 (requiring pre-filing at least 10 days before hearing). For the purpose of serving pre-filed testimony for the second hearing on the Board, the "mailbox rule" at 35 Ill. Adm. Code 101.300(c) does not apply. The Board's Clerk must receive this pre-filed testimony before the close of business on Friday, May 7, 2010. Although pre-filed testimony may be filed electronically through COOL, all electronic or approved fax filings must be received by the Clerk's Office no later than 4:30 PM on that date.

#### **Third Hearing**

For the third hearing, pre-filed testimony must be served on all persons on the service list as of 4:30 PM on Tuesday, May 18, 2010. Persons wishing to pre-file testimony for the third hearing may obtain a copy of the service list by contacting the hearing officer after 9:30 AM on Wednesday, May 19, 2010. All pre-filed testimony for the third hearing must be submitted no later than Friday, May 21, 2010. See P.A. 96-0308 (requiring pre-filing at least 10 days before hearing). For the purpose of serving pre-filed testimony for the third hearing on the Board, the "mailbox rule" at 35 Ill. Adm. Code 101.300(c) does not apply. The Board's Clerk must receive this pre-filed before the close of business on Friday, May 21, 2010. Although pre-filed testimony may be filed electronically through COOL, all electronic or approved fax filings must be received by the Clerk's Office no later than 4:30 PM on that date.

IT IS SO ORDERED.

Timothy J. Fox Hearing Officer

Illinois Pollution Control Board

100 West Randolph Street, Suite 11-500

Chicago, Illinois 60601

(312) 814-6085

(312) 814-3669 (fax)

foxt@ipcb.state.il.us

### ATTACHMENT A

To Hearing Officer Order of March 18, 2010

Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group IV Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219 (R10-20)

I wish to added to the (please check one)
Service List
Notice List
in the Illinois Pollution Control Board rulemaking proceeding identified above:
Name
Organization or Company
Address
City, State, Zip
PLEASE SUPPLY THIS INFORMATION BY FRIDAY, APRIL 2, 2010, TO:
Lynn Patras, Illinois Pollution Control Board
E-mail: patrasl@ipcb.state.il.us
<u>Fax:</u> 312-814-3669
Mail: 100 W. Randolph St., Suite 11-500 James R. Thompson Center Chicago, Illinois 60601

#### **ATTACHMENT B**

To Hearing Officer Order of March 18, 2010

In the Matter of: Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group IV Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219 (R10-20)

Potentially Affected Sources in IL NAAs: Miscellaneous Metal and Plastic Parts Coatings

Company Name	Street Address	City	State	Zip Code	Co. Contact
S & B Finishing Co Inc	3005 W Franklin Blvd	Chicago	IL	60612	Kenneth S Spielman
RS Owens and Co	5521 N Lynch Ave	Chicago	IL	60630	Ed Murawski
Sorini Ring Manufacturing Co Inc	2524 S Blue Island Ave	Chicago	IL	60608	Peter May Sr
Action Athletic Equipment Inc	3144 21st St	Zion	IL	60099	Joseph R Higgins
QC Finishers	10244 Franklin Ave	Franklin Park	IL	60131	Paul Gratzke
Cleveland Steel Container Corp	117 E Lincoln	Peotone	IL	60468	Bob Harding
Vapor Bus International	1010 Johnson Dr	Buffalo Grove	IL	60089	Lynn Mazurowski
Nissan Forklift Corp NA	240 N Prospect St	Marengo	IL	60152	Tom Carlson
National Controls Corp	1725 Western Dr	West Chicago	IL	60185	Jim Carter
Vapor Power	551 S County Line Rd	Bensenville	IL	60131	Rob Pawlak
Chicago American Mfg LLC	4500 W 47th St	Chicago	IL	60632	William Mundell
EO Schweitzer Mfg Co Inc	1520 McCormick Ave	Mundelein	ΪL	60060	James Loris
Alco Spring Industries	2300 Euclid Ave	Chicago Heights	ΙL	60411- 0188	Gordon Sharkey
Brunner And Lay Inc	9300 King St	Franklin Park	IL	60131	David Bullifent
Midwest Metal Coatings LLC	9 Konzen Ct	Granite City	IL	62040	Mike Dake
ElectroMotive	9301 W 55th St	McCook	IL	60525-	Jack Kaps

Diesel Inc				3214	
Empire Comfort Systems	918 Freeburg Ave	Belleville	IL	62222	Shane Hill
Yale Polishing & Plating	5247 S Keeler Ave	Chicago	IL	60632	Margaret Fanning
Atlas Tube Inc	1855 E 122nd St	Chicago	IL	60633	Allan Lambert
Rexnord Industries Inc Bearing Div	2400 Curtiss St	Downers Grove	IL	60515- 4056	Roman Shegelman
E/M Coating Services	129 Eisenhower Ln S	Lombard	IL	60148	Greg Flora
Federal Signal Corp Signal Division	2645 Federal Signal Dr	University Park	IL	60466- 3195	Thomas L Longtin
Reum Corp	3600 Sunset Ave	Waukegan	IL	60087	Debbie O'Conell
Signode Corp	7701 W 71st St	Bridgeview	$\Pi$	60455	Mark E Hollo
American Flange & Manufacturing Co Inc	290 E Fullerton Ave	Carol Stream	IL	60188- 1826	Mark Comella
HA Framburg and Co	941 Cernan Dr	Bellwood	IL	60104- 2254	Jeff Sokol
Icon Identity Solutions	2480 Greenleaf Ave	Elk Grove Village	IL	60007	Shawn Hyken
Hendrickson Bumper & Trim	501 Caton Farm Rd	Crest Hill	IL	60435	Nadya FIgueroa
Ace Plating Co	3433 W 48th Pl	Chicago	IL	60632	Michael Holewinski
BL Downey Co LLC	2125 Gardner Rd	Broadview	IL	60153	Anna Skuratovsky
Replogle Globes Inc	2801 S 25th Ave	Broadview	IL	60155	Edward Dieschbourg
Britt Industries	3010 Malmo Dr	Arlington Heights	IL -	60005	Bill Schroll
Shelco Steel Works Inc	15801 Van Drunen Rd	South Holland	IL	60473	B. Zeller
Elkay Mfg	2700 S 17th Ave	Broadview	IL	60155- 4722	R Dvorak
TC Industries Inc	3703 S Route 31	Crystal Lake	IL	60012- 1412	Gerardo Sarinana
Rayvac Plastic Decorators Inc	47 W 171 Rte 30	Big Rock	IL	60511	Robert D Raymond

Chicago Blower Corp	1675 Glen Ellyn Rd	Glendale Heights	IL	60139- 2503	Diane Cronin
Russell T Bundy Associates Inc dba Pan Glo Chicago	800 Moen Ave	Rockdale	IL	60436	Scott Mouton
S & C Electric Co	6601 N Ridge Blvd	Chicago	IL	60626- 3904	Robert Sullivan
Nylok Fastener Corp	6465 Prosel Ave	Lincolnwood	IL	60712	Peter Henley
Navistar Inc	10400 W North Ave	Melrose Park	IL	60160	Adriana Tremarin
Chem-Plate Industries	1250 Morse Ave	Elk Grove Village	ΙL	60007	Jim See
USPS Chicago Central VMF	740 S Canal St	Chicago	IL	60607- 9361	Curtis A Anderson
Weber-Stephen Inc	200 E Daniels Rd	Palatine	IL	60067- 6237	Chris Childers
Basler Electric Co	12570 Rte 143	Highland	IL	62249- 0269	Jason T Snow
Norwood Marking Systems	250 Industry Ave	Frankfort	IL	60423	Jack Schreiber
Wagner Zip Change	3100 Hirsch	Melrose Park	IL	60160	Paul Mauersberger
Equipto Electronics Corp	435 Woodlawn Ave	Aurora	ΙĽ	60507	Steve Golz
Crown Gym Mat Inc	27 W 929 Industrial Ave	Barrington	IL	60010	Judy Eckert
Morse Automotive Corp	850 W Exchange	Chicago	IL	60609	Brian Kirts
ITT Corp Residential & Commercial Water Div	8200 N Austin Ave	Morton Grove	IL	60053	Jeff Mann
Acco USA Inc	770 S Wolf Rd	Wheeling	IL	60090	Matthew Kaiser
R & B Powder Coating	4000 S Bell	Chicago	$\Pi$	60609	Tony Cash
Arlington Plating Co	600 S Vermont St	Palatine	IL	60078	Richard Macary
Greif Industrial Packaging & Services LLC	4300 W 130th St	Alsip	IL	60803	Nick Sheets
Abbey Finishing Corp	1108 S Kilbourn Ave	Chicago	IL	60624- 3821	Michael Carroll
Nina Enterprises	1350 S Leavitt	Chicago	IL	60608	K S Desai

Inc	St				
Gooder-	2900 State St	Chicago	IL	60411	Paul
henrichsen Co Inc		Heights			O'Connor
ITW Buildex	1349 W Bryn	Itasca	IL	60143	Steven Bell
	Mawr Ave				
Metro East	3200 Missouri	Alorton	IL	62205	Gayle L
Industries Inc	Ave				Ortyl
Eaglebrook	2600 W	Chicago	IL	60608	John Kemper
Plastics Inc	Roosevelt Rd				_
Meyer Steel Drum	2000 S Kilbourn	Chicago	IL	60623	Brian Meyer
Inc	Ave				1
Amsted Rail Co	1700 Walnut St	Granite City	IL	62040-	Jeff Kelly
Inc				3100	
Wheatland Tube	4435 S Western	Chicago	ΙL	60609	Ron Aranda
Co - Chicago	Blvd				
Division	•				
Caterpillar Inc	2200	Joliet	${ m IL}$	60436	Bruce H
	Channahon Rd				Gilruth
Acme Finishing	1595 E Oakton	Elk Grove	IL	60007	Dennis W
Co .	St	Village			Walters
Plastic Decorators	1330 Holmes	Elgin	IL	60123	Cathy Burger
Inc	Rd				
Illinois Central	17550 S	Homewood	$\cdot$ IL	60430	Michael
Railroad ·	Ashland Ave				Avans
Olin Corp	427 N	East Alton	$\mathbb{IL}$	62024-	Michael
	Shamrock St			1197	Redington
American Louver	7700 N Austin	Skokie	ΙL	60076	Carol Salas
Co	Ave				
Meyer Steel Drum	3201 S Millard	Chicago	IL	60623	Edward
Inc					Meyer Sr
Lakewood	501 N	Chicago	IL	60612	Dan Gabor
Engineering &	Sacramento				
Mfg Co	Blvd				
Jessup	1701 Rockland	Lake Bluff	IL	60010-	Dave Reese
Manufacturing Co	Rd			1450	
Meyer Industrial	610 W 81st St	Chicago	IL	60620-	Edward
Container				2511	Meyer Sr
American Stair	642 Forestwood	Romeoville	IL	60446	Max Easton
Corp	Dr				
Astroblast Inc	1141 E Green St	Bensenville	IL	60106	Robert A Gill
Cooper B-Line Inc	509 W Monroe	Highland	IL	62249-	Chris
O . '11 *	St			0326	Dietrich
Caterpillar Inc	Route 31	Aurora	IL.	60507	Ann Hastert
Chicago Heights	211 E Main	Chicago	IL	60412	Rich Gollner
Steel		Heights			

UGN Inc	1001 State St	Chicago	IL	60411	Ken DeRolf
Illinois Tool Works	1201 St Charles Rd	Heights Elgin	IL	60120	Chuck Fairbanks
Machinery Components Inc	1833 Downs Dr	West Chicago	IL	60185- 1805	
Union Pacific Railroad Co	423 N Sacramento	Chicago	IL	60635	Greg Gehrig
Coatings Applications Inc	2671 United Ln	Elk Grove Village	IL	60007	Don Clemente
Temperbent Glass LP	12400 S Laramie Ave	Alsip	IL	60803	William Wilczynski
Clad Rex Inc	11500 King St	Franklin Park	IL	60131- 1310	Michael G Harker
General Electric International Inc	6045 S Nottingham Ave	Chicago	IL	60638	Dan Frey
Action Rack & Mfg Co	4810 W Wrightwood	Chicago	IL	60639	John Hamilton
Inglot Electronics Corp	4878 N Elston Ave	Chicago	IL	60630	Andrew Platowski
Northrop Grumman Systems Corp	1601-1605 Rohlwing Rd	Rolling Meadows	IL	60008	William Cameron
Dehler Manufacturing Co	5801 W Dickens Ave	Chicago	IL	60639	Barry Pinchcofsky
Inc Eagle Electronics Inc	1735 Mitchell Blvd	Schaumburg	IL	60193	Mike Kalaria
Advanced Electronics Inc	721 Winston Dr	West Chicago	IL	60185	Nipul Patel
Borg-Warner Transmission Systems	700 S 25th Ave	Bellwood	IL	60104	Jennifer Berbour
Peerless Industries	3215 W North Ave	Melrose Park	IL	60160	Amir Yaghoobi
Calumet Armature & Electric LLC	1050 W 134th St	Riverdale	IL	60627- 1003	Joseph Delaurentis
Highland Machine and Screw Product Co	700 Fifth St	Highland	IL	62249	Kevin Hemann
Chem-Plate Industries Inc	1990 E Devon	Elk Grove Village	IL	60007	Jim See
John Sterling Corp	11600 Sterling Pkwy	Richmond	IL	60071	John R Sterling
Kinney Electrical	678 Buckeye St	Elgin	IL	60123	Lowell D

Mfg Co					Naber
Elgin Sweeper Co	1300 W Bartlett Rd	Elgin	IL	60121	David Strebel
Fluid Air Inc	2550 White Oak Circle	Aurora	IL	60502- 9678	K.C. Tilton
Krel Laboratories Inc	388 and 383 and 382 N Avers Ave	Chicago	IL	60624	Robert Oleksyn
Hubbell - Wiegmann	501 W Apple St	Freeburg	IL	62243	Ron Heflen
Met-Coil Systems LLC	711 Ogden Ave	Lisle	IL	60532	Gordon Manning
Watco Mechanical Services	435 Old St Louis Rd	Wood River	IL	62095	Steve Prokopich
G & W Electric Co	3500 W 127th St	Blue Island	IL	60406	Pete Gerike
Bee-jay Industries Inc	4650 N Ronald Ave	Harwood Heights	IL	60656	Ken Fefferman
Magnetrol International Inc	5300 Belmont Rd	Downers Grove	IL	60515	James Jani
Commercial Finishes Co Ltd	540 Lively Blvd	Elk Grove Village	IL	60007	Samuel J Legittino
Duraco Products Inc	1109 E Lake St	Streamwood	IL	60107	Donald G Grimaldi

### Potentially Affected Sources in IL NAAs: Miscellaneous Industrial Adhesives

Company Name	Street Address	City	State	Zip Code	Co. Contact
Delta-Unibus Corp	515 North Railroad	Northlake	IL	60164- 1652	Perry A Weyant
Borg-Warner Transmission Systems	700 S 25th Ave	Bellwood	ΙL	60104	Jennifer Berbour
Tapecoat Co Inc	1520 Lyons St	Evanston	IL	60201	Donald Kathrein
Technical	420 Northgate	Wheeling	ΙL	60090	Roger
Laminations &	Pkwy			•	Haase
Coatings Inc					
Universal Chemicals	1124 Elmhurst	Elk Grove	IL	60007	Bette
& Coatings Inc	Rd	Village			Dierwechter
Acme Finishing Co	1595 E Oakton	Elk Grove	$\Pi$	60007	Dennis W
	St	Village			Walters
Clad Rex Inc	11500 King St	Franklin	IL	60131-	Michael G
		Park		1310	Harker

D & K International Inc	525 Crossen	Elk Grove Village	IL	60007	James Broz
Architectural Specialty Products Inc	6312 W 74th St	Chicago	IL	60638	Loren D Jahn
RS Owens and Co	5521 N Lynch Ave	Chicago	IL	60630	Ed Murawski
Richie Bros Auctioneers (America) Inc	2400 Ritchie Rd	Morris	ΙL	60450	Lily Cheng
Hexacomb Corp	11620 Old Hwy 50 W	Trenton	IL	62293	Jim Siegel

Potentially Affected Sources in IL NAAs: Automobile and Light-Duty Truck Coatings

Company Name	Street Address	City	State	Zip Code
Ford Motor Co.	12600 S. Torrence Ave.	Chicago	IL	60633

# C 4

## ILLINOIS POLLUTION CONTROL BOARD March 18, 2010

IN THE MATTER OF:	)	
	)	
REASONABLY AVAILABLE CONTROL	)	R10-20
TECHNOLOGY (RACT) FOR VOLATILE	)	(Rulemaking - Air)
ORGANIC MATERIAL EMISSIONS FROM	)	
GROUP IV CONSUMER & COMMERCIAL	)	
PRODUCTS: PROPOSED AMENDMENTS	)	
TO 35 ILL. ADM. CODE 211, 218, AND 219	)	

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by A.S. Moore):

On March 8, 2010, the Illinois Environmental Protection Agency (Agency or Illinois EPA) filed a rulemaking proposal pursuant to Sections 10, 27, 28, and 28.5 of the Environmental Protection Act (Act). See 415 ILCS 5/10, 27, 28 (2008); Public Act 96-0308, eff. Aug. 11, 2009 (P.A. 96-0308) (reenacting repealed Section 28.5). Among other documents, a Statement of Reasons (SR) and a motion for waiver of copy requirements (Mot.) accompanied the proposal.

The Agency states that its proposal seeks to meet Illinois' obligations under the Clean Air Act (CAA). SR at 1, citing 42 U.S.C. § 7401 et seq. Specifically, the Agency indicates that "the rulemaking is intended to satisfy Illinois' obligation to submit a State Implementation Plan ("SIP") to address requirements under Sections 172 and 182 of the CAA for sources of VOM [volatile organic material] emissions in areas designated as nonattainment with respect to the ozone National Ambient Air Quality Standard ("NAAQS")." SR at 1, citing 42 U.S.C. §§ 7502, 7511a. The Agency reports that, for ozone nonattainment areas, "the State must revise its SIP to include RACT [reasonably available control technology] for sources of VOM emissions covered by a control techniques guideline ("CTG") issued between November 15, 1990, and the date of attainment." SR at 2, citing 42 U.S.C. § 7511a(b)(2). Specifically, the Agency proposes VOM emission controls in response to CTGs issued on October 7, 2008, for the following Group IV Consumer and Commercial Product Categories: miscellaneous metal and plastic parts coatings; auto and light-duty truck coatings; miscellaneous industrial adhesives; and fiberglass boat manufacturing materials. SR at 1, 4.

The Agency filed the proposal pursuant to the "fast-track" rulemaking provisions of Section 28.5 of the Act, and the Board accepts the proposal for hearing. Section 28.5 requires the Board to proceed toward adoption of the proposed regulations by meeting a series of strict deadlines. The Act provides the Board no discretion to extend those deadlines. See generally P.A. 96-0308.

The first of those deadlines provides that the Board within 14 days of receiving the proposal must file the proposed rule for first notice under the Illinois Administrative Procedure Act (5 ILCS 100/1-1 et seq. (2008)). P.A. 96-0308 (subsection (e)). Section 28.5(l) provides

that "[t]he Board must not revise or otherwise change an Agency fast-track rulemaking proposal without agreement of the Agency until after the end of the hearing and comment period. Any revisions to the Agency proposal shall be based on the record of the proceeding." *Id.* (subsection (l)). Therefore, the Board today accepts the Agency's proposal without commenting on its substantive merits and directs the Clerk to cause publication of the proposed rule for first notice in the *Illinois Register*.

In the same 14-day period, the Board must also schedule and provide notice of three hearings, "each of which shall be scheduled to continue from day to day, excluding weekends and State and federal holidays, until completed." P.A. 96-0308 (subsections (e), (f)). Within 55 days of receiving the proposed rule, the Board must hold a first hearing "confined to testimony by and questions of the Agency's witnesses concerning the scope, applicability, and basis of the rule." P.A. 96-0308 (subsection (f)(1)). Then, "[w]ithin 7 days after the first hearing, any person may request that the second hearing be held." *Id*.

A second hearing "shall be scheduled to commence within 30 days of the first day of the first hearing and shall be devoted to presentation of testimony, documents, and comments by affected entities and all other interested parties." P.A. 96-0308 (subsection (f)(2)). A third hearing "shall be scheduled to commence within 14 days after the first day of the second hearing and shall be devoted solely to any Agency response to the material submitted at the second hearing and to any response by other parties." P.A. 96-0308 (subsection (f)(3)). The Board will cancel the third hearing "if the Agency indicates to the Board that it does not intend to introduce any additional material." *Id*.

Accordingly, the Board directs the hearing officer expeditiously to schedule all hearings in this proceeding according to the following statutory deadlines:

First Notice Filing on or before Monday, March 22, 2010 (P.A. 96-0308 (subsection

(e);

First Hearing within 55 days of receiving the proposal, on or before Monday,

May 3, 2010 (P.A. 96-0308 (subsection (f)(1)) (see 5 ILCS 70/1.11

(2008) (Statute on Statutes); 35 Ill. Adm. Code 101.300(a)

(Computation of Time));

Second Hearing within 30 days of the first day of the first hearing, on or before

Wednesday, June 2, 2010 (P.A. 96-0308 (subsection (f)(2));

Third Hearing within 14 days after the first day of the second hearing, on or

before Wednesday, June 16, 2010 (P.A. 96-0308 (subsection

(f)(3))

Second Notice on or before Friday, July 16, 2010, "if no third hearing is held," or

Thursday, August 5, 2010, "if the third hearing is held" (P.A. 96-

0308 (subsection (n));

Final Order within 21 days of "receipt of a statement of no objection to the rule

from the Joint Committee on Administrative Rules" (P.A. 96-0308

(subsection (o)).

As noted above, a "Motion for Waiver of Copy Requirements" accompanied the Agency's rulemaking proposal. The Agency's motion first notes that the Board's procedural rules require it to file an original and nine copies of its proposal with the Clerk. Mot. at 1, citing 35 Ill. Adm. Code 102.200. The Agency also notes that the Act requires it to provide information supporting its proposal. Mot. at 1-2 (listing eight sources), citing 415 ILCS 5/27(a) (2008). In addition, the Agency lists nine documents it proposes to incorporate by reference. Mot. at 2-3.

The Agency first argues that a number of the documents it relied upon in drafting its proposal or that it seeks to incorporate by reference "are readily accessible to or are within the possession of the Board." Mot. at 3. Specifically, the Agency lists the Illinois Environmental Protection Act, the CAA, three portions of the Code of Federal Regulations (CFR), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Mot. at 3 (listing items (g), (h), (i)(2), (i)(3), (i)(4), and (i)(7)). The Agency "moves that the Board waive the requirement that the Illinois EPA provide copies of such documents." Mot. at 3.

Second, the Agency states that Illinois Administrative Procedure Act (IAPA) authorizes an agency to incorporation by reference specified materials without publishing the incorporated material in full. Mot. at 3, citing 5 ILCS 100/5-75(a) (2008). The Agency further states that "the IAPA provides, however, "that such agency shall maintain a copy of the referenced material in at least one of its principal offices and shall make it available to the public upon request." Mot. at 3; citing 5 ILCS 100/5-75(c) (2008). The Agency indicates that it proposes to incorporate by reference four copyright-protected documents, two published by the American Society for Testing and Materials (ASTM) and two published by the American Architectural Manufacturers Association (AAMA). Mot. at 2-3 (listing items (i)(5), (i)(6), (i)(8), and (i)(9)). The Agency requests that the Board allow it to file only the originals of such documents in order to keep its costs "at a minimum." *Id.* at 3-4.

Finally, the Agency states that "[t]he remaining documents in the regulatory proposal consist of over 700 pages." Mot. at 4. The Agency "requests that the Board waive the normal copy requirements and allow Illinois EPA to file the original and four complete copies of the documents." *Id*.

Section 101.500(d) of the Board's procedural rules provides, in pertinent part, that,

[w]ithin 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion. Unless undue delay or material prejudice would result, neither the Board nor the hearing officer will grant any motion before expiration of the 14 day response period. . . . " 35 Ill. Adm. Code 101.500(d).

As noted above, Section 28.5 of the Act requires the Board's rulemaking activities to follow a series of strict deadlines in scheduling and conducting hearings and issuing its opinions

and orders. Under these circumstances, the Board concludes that undue delay would result from allowing the full 14-day response period to run to Monday, March 22, 2010. See 35 Ill. Adm. Code 101.500(d).

Having reviewed the substance of the motion and in the absence to date of any objection, the Board grants the Agency's motion for waiver of copy requirements. First, the Board waives the requirement that the Agency provide copies of the Act, the CAA, three specified portions of the CFR, and the FIFRA, the sources listed in the Agency's motion as items (g), (h), (i)(2), (i)(3), (i)(4), and (i)(7). Second, the Board allows the Agency to file only an original of the two documents published by the ASTM and the two documents published by the AAMA listed in the Agency's motion as items (i)(5), (i)(6), (i)(8), and (i)(9) that the Agency proposes to incorporate by reference. Finally, the Board allows the Agency to file the original and four complete copies the remaining documents comprising its rulemaking proposal.

#### **CONCLUSION**

The Board accepts the Agency's rulemaking proposal for hearing and directs the hearing officer to schedule hearings as required by Section 28.5 of the Act. See P.A. 96-0308. The Board also grants the Agency's motion for waiver of copy requirements. Finally, in its order below, the Board directs the Clerk to file the Agency's proposal for first-notice publication in the Illinois Register.

#### **ORDER**

The Board directs the Clerk to cause the publication of the following rule for first notice in the *Illinois Register*.

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

## PART 211 DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

Section	
211.101	Incorporations by Reference
211.102	Abbreviations and Conversion Factors
	SUBPART B: DEFINITIONS
Section	
211.121	Other Definitions