

ILLINOIS POLLUTION CONTROL BOARD

October 18, 2007

IN THE MATTER OF: )  
)  
EXEMPTIONS FROM THE DEFINITION ) R08-6  
OF VOM, USEPA AMENDMENTS ) (Identical-in-Substance Rulemaking - Air)  
(January 1, 2007 through June 30, 2007) )

Proposed Rule. Proposal for Public Comment.

OPINION AND ORDER OF THE BOARD (by G.T. Girard):

This rulemaking is designed to update the definition of “volatile organic material” (VOM) in the Board’s air pollution regulations (35 Ill. Adm. Code 211.7150). The update is needed to ensure that Illinois’ regulations reflect the United States Environmental Protection Agency’s (USEPA) most recent exemption of chemical compounds from regulation as ozone precursors.

Today the Board adopts a proposal for public comment that would add a single compound to the list of those exempted from the definition of VOM. That compound is 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane, which is also known as HFE-7300 or L-14787. The Board also clarifies the amendments adopted in Exemptions from the Definition of VOM, USEPA Amendments (July 1, 2004 through December 31, 2004), R05-16 (May 19, 2005) at the request of the Illinois Environmental Protection Agency (Agency) as necessary for federal authorization.

Section 9.1(e) of the Environmental Protection Act (Act) (415 ILCS 5/9.1(e) (2006)) mandates this rulemaking. That statutory provision requires the Board to exclude from the definition of VOM those compounds determined by USEPA to be exempt from regulation under the state implementation plans for ozone “due to negligible photochemical reactivity.” 415 ILCS 5/9.1(e) (2006). In addition, Section 9.1(e) of the Act requires the Board to conduct this rulemaking pursuant to the provisions of Section 7.2(b) of the Act (415 ILCS 5/7.2(b) (2006)) for adopting rules that are “identical in substance” to the federal requirements.

Section 9.1(e) also provides that Title VII of the Act and Section 5-35 of the Administrative Procedure Act (APA) (5 ILCS 100/5-35 (2006)) do not apply to this type of rulemaking. Accordingly, the Board will not adopt a “First Notice” proposal, or a “Second Notice” proposal for review by the Joint Committee on Administrative Rules. However, as provided in Section 9.1(e) of the Act, the Board, before adopting final rule amendments, will provide notice of this rulemaking proposal in the *Illinois Register*, hold one public hearing on the proposal as required by the federal Clean Air Act (33 U.S.C. § 7410(a) (2005)), and allow for public comment.

In this opinion, the Board first sets forth the timetable for completing this rulemaking, followed by a description of the USEPA action necessitating these rule amendments. The Board

then provides information on the hearing and public comment period for this proceeding. Finally, the Board summarizes the history of federal and Illinois actions dealing with VOM exemptions. The Board's proposed rule amendments to the definition of VOM are set forth in the order following this opinion.

### **TIMETABLE FOR COMPLETING THIS RULEMAKING**

Under Section 7.2(b) of the Act (415 ILCS 5/7.2(b) (2006)), the Board must complete this rulemaking within one year after the date of the earliest set of federal amendments considered in this docket. USEPA adopted such amendments on January 18, 2007. Therefore, the deadline for the Board to adopt these amendments is January 18, 2008.

The Board scheduled the adoption of this "proposal for public comment" ahead of the date projected as necessary to timely complete this rulemaking. This will allow the Board to adopt final rules approximately six months before the one-year deadline. This scheduling will give the regulated community the earliest opportunity to use the newly-exempt compound, and allow the State to take advantage as soon as possible of the emissions inventory and improved air quality benefits that may accrue through the new exemption.

The Board projects the following timetable in completing this rulemaking:

Due date:	January 18, 2008
Date of Board vote to propose amendments:	October 18, 2007
Submission for <i>Illinois Register</i> publication:	October 22, 2007
Probable <i>Illinois Register</i> publication date:	November 2, 2007
Public hearing date:	December 5, 2007
Probable end of 45-day public comment period:	December 17, 2007
Date of Board vote to adopt amendments:	December 20, 2007
Probable filing and effective date:	December 31, 2007
Probable <i>Illinois Register</i> publication date:	January 11, 2008

### **DESCRIPTION OF USEPA ACTIONS AND BOARD AMENDMENTS**

The amendments proposed today respond to a single USEPA amendment to the federal definition of "volatile organic compound" (VOC), which has the same meaning as VOM as used in the Illinois regulations. The Board includes a correction to the existing definition of VOM at the request of the Agency. The following discussion describes the amendments.

#### **The Addition of a Newly Exempted Compound**

On January 18, 2007 (at 72 Fed. Reg. 2193), USEPA added a single compound to the list of chemical species that are exempt from the federal definition of VOC and, accordingly, which are exempt from regulation for control of ozone precursors. That compound is 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane. It is also known as HFE-7300 or L-14787, and it has the empirical formula  $C_2F_5CF(OCH_3)CF(CF_3)_2$ . With regard to the

uses for this compound, USEPA stated as follows in the preamble discussion of the amendment adding this compound to the list of those exempted:

HFE-7300 has a variety of potential uses including as a heat transfer fluid and substitute for ozone depleting substances and substances with high global warming potentials, such as hydrofluorocarbons, perfluorocarbons, and perfluoropolyethers. HFE-7300 may be used in azeotropic mixtures for use in coating deposition, cleaning, and lubricating applications.  
72 Fed. Reg. 7293 (Jan. 18, 2007)

The Board today proposes to incorporate these federal amendments into the Illinois regulatory definition of VOM at 35 Ill. Adm. Code 211.7150, with only minor differences from the federal rule text. The table below provides the Board's proposed deviations from the federal text.

**Deviations from the Text of the Federal Amendments**

<b>Illinois Section</b>	<b>40 C.F.R. Section</b>	<b>Revision(s)</b>
211.7150(a) "HFE-7300"	51.100(s)(1)	Located the compound in alphabetical name order; removed the parenthetical "(1)" from before the chemical name; capitalized the chemical name; added the alternative chemical designation "L-14787" and the empirical formula "C <sub>2</sub> F <sub>5</sub> CF(OCH <sub>3</sub> )CF(CF <sub>3</sub> ) <sub>2</sub> "

**Correction of the Existing Text of the Definition of VOM**

One amendment corrects the text of the existing definition of VOM. This is to change the text as previously amended based on earlier federal amendments. In Exemptions from the Definition of VOM, USEPA Amendments (July 1, 2004 through December 31, 2004), R05-16 (May 19, 2005), the Board adopted amendments to the definition of VOM based on federal amendments of November 29, 2004 (69 Fed. Reg. 69298). USEPA excluded an additional compound from the VOC definition, for purposes of emissions limitations and VOC content requirements, but retained the compound as VOC for purposes of recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements.

When incorporating the November 29, 2004 federal amendments in docket R05-16, the Board deviated from the text of the federal amendments. The Board added the exempted compound, *tert*-butyl acetate, to the list of exempted compounds in Section 211.7150(a), in addition to the federally derived text in Section 211.7150(e). USEPA, however, listed *tert*-butyl acetate in 40 C.F.R. 51.100(s)(5) without also adding it to the listing of exempted compounds in corresponding 40 C.F.R. 51.100(s)(1).

As an attachment to what the Board has designated Public Comment 1 (PC 1), the Agency filed a document entitled, "Issue Paper: Exclusion of tertiary-Butyl Acetate from the

Definition of VOM at 35 Ill. Adm. Code 211.715” (“Issue Paper”). (See the discussion of public comments at page 6 of this opinion and order.) The Issue Paper states that USEPA has not approved the Illinois exemption of *tert*-butyl acetate from the definition of VOM because the compound’s appearance in subsection (a) of the Illinois definition could lead to confusion that the compound is totally exempt. The exemption in subsection (e), which closely follows the corresponding USEPA exemption of *tert*-butyl acetate, is clearly limited in the same way as is the federal exemption.

There are two possible ways to amend the Illinois definition of VOM that will dispel any possible confusion as to the scope of the exemption of *tert*-butyl acetate from the definition. Option A is to delete the appearance of “*tert*-butyl acetate” from the list of exempt compounds in subsection (a). This approach would more closely follow the text of corresponding 40 C.F.R. 51.100(s)(1), in which *tert*-butyl acetate does not appear.

The disadvantage of pursuing Option A could lead to other confusion. It could cause confusion as to the applicability of subsections (b) through (d) to *tert*-butyl acetate. Subsection (b) sets forth monitoring requirements for VOM emissions. Subsection (c) allows the Agency to require monitoring for exempted compounds to prove their quantity in emissions. Subsection (d) states the fact that USEPA is not bound by a State determination as to monitoring methods for exempted compounds beyond those methods cited in subsection (b). Each of these three provisions relate to determining emissions of compounds that have “negligible photochemical reactivity” or “negligibly-reactive compounds.”

Subsection (a) lists compounds that are exempted from the definition of VOM because they have “negligible photochemical reactivity.” Subsection (e) lists *tert*-butyl acetate as partially exempt from the definition of VOM, but does not mention it as having negligible photochemical reactivity or as a negligibly reactive compound. *See* 35 Ill. Adm. Code 211.7150 (2006); 40 C.F.R. 51.100(s) (2006) (the subsection pertaining to *tert*-butyl acetate does not include this language). This could lead to confusion as to whether subsections (b) through (d) apply to *tert*-butyl acetate listed in subsection (e). The Board has chosen not to revert to the literal text of corresponding 40 C.F.R. 51.100(s)(1) because that text is imprecise and potentially confusing.

Option B for correction of the text would retain *tert*-butyl acetate in the listing of negligibly reactive compounds at subsection (a), with the addition of language that would direct attention to subsection (e). This would eliminate the possibility for confusion of whether subsections (b) through (d) apply to *tert*-butyl acetate. It would also minimize or eliminate the possibility for confusion that *tert*-butyl acetate has a blanket, rather than a limited, exemption from the definition of VOM. The Board perceives three basic methods for doing this.

Method 1 is the addition of a Board note that directs attention to subsection (e) for limitations on the exemption of some compounds. The Board disfavors this approach, since the Board note would necessarily be added at the end of the listing of negligibly reactive compounds in subsection (a). This physical separation between the listing and the direction for limitations could cause some readers to miss the reference to subsection (e).

Method 2 would involve adding a parenthetical reference to subsection (e) for limitations on the exemption immediately after the listing for *tert*-butyl acetate. Using this approach, the listing for *tert*-butyl acetate would appear as follows (with the newly added language highlighted):

tertiary-Butyl acetate (subject to subsection (e) of this Section)

This would eliminate the possibility of missing the reference to subsection (e). The Board has chosen not to use this method in favor of a third method suggested by the Agency.

Method 3 for directing attention to subsection (e) for limitations on the exemption of *tert*-butyl acetate involves adding language to the preamble of subsection (a) that directs attention to subsection (e). The Agency suggested this in the Issue Paper attached to PC 1. The Agency suggested the following revisions to the preamble to subsection (a) (with deletions marked with overstrike and additions underlined):

- a) This includes any such organic compound other than the following, which have been determined by USEPA to have negligible photochemical reactivity: The following listed compounds are not VOM for purposes of VOM limitations or VOM content requirements. However, certain of these compounds are considered VOM for purposes of recordkeeping, emissions reporting, and inventory requirements, as described in 211.7150(e).

This approach would eliminate the possibility for confusion, but the Board believes that minor adjustment of the suggested language could enhance the clarity of the preamble statement.

The Board has chosen to amend Section 211.7150(a), using the approach described by the Agency, but with minor modifications to the Agency-suggested language. The following revision selected by the Board will clearly and concisely refer the regulated community to the limitations of subsection (e):

- a) This definition of VOM includes any ~~such~~ organic compound that participates in atmospheric photochemical reactions, other than the following compounds listed in this subsection (a), which have been determined by USEPA to have negligible photochemical reactivity: USEPA has determined that the compounds listed in this subsection (a) have negligible photochemical reactivity. USEPA has excluded the listed negligibly-reactive compounds from the definition of VOM for purposes of VOM limitations or VOM content requirements. However, USEPA has required that certain of these compounds be considered VOM for purposes of recordkeeping, emissions reporting, and inventory requirements, as described in subsection (e) of this Section.

## **PUBLIC COMMENTS AND PUBLIC HEARING**

The Board invites public comment on the proposed amendments. The Board will receive public comments until at least 45 days after a notice of these proposed amendments appears in the *Illinois Register*. Anyone may file a public comment with the Board at:

Office of the Clerk  
Pollution Control Board  
James R. Thompson Center  
100 W. Randolph Street, Suite 11-500  
Chicago, Illinois 60601

All comments relating to this rulemaking should clearly refer to docket number R08-6.

All filings with the Clerk of the Board must be served on the hearing officer and on those persons on the Service List for this rulemaking. The service list is available on the Board's Web page, at [www.ipcb.state.il.us](http://www.ipcb.state.il.us). Before filing any document with the Clerk, please check with the Clerk's Office to confirm that you are using the most recent version of the Service List. The hearing officer assigned to this rulemaking is Michael J. McCambridge (312-814-6924, [mccambm@ipcb.state.il.us](mailto:mccambm@ipcb.state.il.us)).

As of the adoption of this proposal for public comment, the Board received a single comment from the Agency. That comment was a series of e-mails exchanged with the hearing officer. The comment is described as follows:

PC 1 Several e-mails and responses exchanged between Shannon Bilbruck, of the Agency, and Michael J. McCambridge, Board Hearing Officer, between September 20, 2007 and October 10, 2007, including an attachment entitled, "Issue Paper: Exclusion of tertiary-Butyl Acetate from the Definition of VOM at 35 Ill. Adm. Code 211.715."

As required by the federal Clean Air Act (33 U.S.C. § 7410(a) (2006)), the Board has also scheduled a public hearing in this rulemaking. Hearing information follows:

1:30 p.m., Wednesday, December 5, 2007  
James R. Thompson Center  
Illinois Pollution Control Board Hearing Room 11-512  
100 W. Randolph Street  
Chicago

After the hearing and public comment period, the Board will promptly issue an opinion and order adopting final rule amendments.

## MISCELLANEOUS HOUSEKEEPING AMENDMENTS

In addition to the proposed amendments related to USEPA's actions, a limited number of "housekeeping" amendments are being proposed today. These proposed changes are not based on the federal amendments discussed above. Rather, these are corrections and clarifications needed in the Board's existing rule text involved in this proposal. These include the amendments that are prompted by the USEPA objections to the existing text, discussed above. The table below lists the Board's proposed "housekeeping" amendments.

### Housekeeping Amendments

Section	Source	Revision(s)
211.7150 preamble	Board	Changed "'volatile organic material (VOM)'" to "'volatile organic material' (also 'VOM')"; changed "'volatile organic compound (VOC)'" to "'volatile organic compound' (also 'VOC')"
211.7150(a) preamble	Board, Agency	Added "definition of VOM"; changed "such organic compound" to "organic compound that participates in atmospheric photochemical reactions"; changed "following compounds" to "compounds listed in this subsection (a)"; removed "which have been . . . photochemical reactivity" and the offsetting comma; changed the ending colon to a period; added the sentence "USEPA has required . . . VOM content."; added the sentence "However, USEPA has required . . . , as described in subsection (e) of this Section."

## HISTORICAL SUMMARY OF THE FEDERAL RECOMMENDED POLICY ON THE CONTROL OF VOLATILE ORGANIC COMPOUNDS AND ITS IMPLEMENTATION IN ILLINOIS

Beginning in 1977, USEPA's *Recommended Policy on the Control of Volatile Organic Compounds* (Recommended Policy) exempt certain chemical compounds from the definition of VOC or VOM.<sup>1</sup> These compounds were exempt due to their negligible photochemical reactivity (*i.e.*, their reduced capacity for partaking in the complex atmospheric chemical reactions that result in the formation in tropospheric ozone). Ultimately, in 1991, USEPA codified its Recommended Policy in the *Code of Federal Regulations* at 40 C.F.R. 51.100(s) in its definition of VOC.

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<sup>1</sup> USEPA consistently uses the term "VOC" rather than "VOM," but both designations refer to the same matter. All references in this opinion and order to "VOM" refer to what USEPA calls "VOC."

Specifically, on July 8, 1977, USEPA established its Recommended Policy in the *Federal Register* at 42 Fed. Reg. 35314. At that time, USEPA stated that the following compounds should be exempt from regulation due to their negligible photochemical reactivity:

methane;  
ethane;  
methylene chloride (dichloromethane)<sup>2</sup>;  
1,1,1-trichloroethane (methyl chloroform); and  
trichlorotrifluoroethane (CFC-113 or Freon 113).

USEPA clarified its policy on June 4, 1979, at 44 Fed. Reg. 32043, and May 16, 1980, at 45 Fed. Reg. 32424.

USEPA later amended its Recommended Policy by adding exempt compounds. On July 22, 1980, at 45 Fed. Reg. 48941, USEPA added five chlorofluorocarbons (CFCs) and one fluorocarbon (FC)<sup>3</sup>:

trichlorofluoromethane (CFC-11);  
dichlorodifluoromethane (CFC-12);  
chlorodifluoromethane (CFC-22);  
trifluoromethane (FC-23);  
dichlorotetrafluoroethane (CFC-114); and  
chloropentafluoroethane (CFC-115).

On January 18, 1989, at 54 Fed. Reg. 1987, USEPA added four hydrohalocarbon compounds (HFCs and HCFCs) to the list of those exempt:

dichlorotrifluoroethane (HCFC-123);  
tetrafluoroethane (HFC-134a);  
dichlorofluoroethane (HCFC-141b); and  
chlorodifluoroethane (HCFC-142b).

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<sup>2</sup> USEPA's July 8, 1977 discussion mentioned methylene chloride and several other compounds, but none was included in either Table 1, which actually listed the recommended-exempt compounds, and methylene chloride did not appear in Table 2, which listed low-reactivity compounds. However, the June 4, 1979 and May 16, 1980 clarifications and later amendments make it clear that USEPA considered methylene chloride exempt as of the initial publication of the Recommended Policy on July 8, 1977.

<sup>3</sup> This action purported to add trichlorotrifluoroethane (CFC-113), but that compound was originally listed on July 8, 1977, although then given the parenthetical designation "Freon-113." That USEPA counted this single compound twice was further apparent in the action of January 18, 1989, discussed in the text below, when it referred to a list of exempt compounds that included "eight additional chlorofluorocarbons (CFCs)."

Finally, on March 18, 1991, at 52 Fed. Reg. 11418, USEPA revisited certain compounds earlier denied exemption and revised the Recommended Policy for the last time, to exclude five additional hydrohalocarbon compounds and four classes of fluorocarbon compounds. The five hydrohalocarbon compounds were:

2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);  
 pentafluoroethane (HFC-125);  
 1,1,2,2-tetrafluoroethane (HFC-134);  
 1,1,1-trifluoroethane (HFC-143a); and  
 1,1-difluoroethane (HFC-152a).

The four classes of fluorocarbon compounds were:

cyclic, branched, or linear, completely-fluorinated alkanes;  
 cyclic, branched, or linear, completely-fluorinated ethers with no unsaturations;  
 cyclic, branched, or linear, completely-fluorinated tertiary amines with no unsaturations;  
 and  
 sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

On March 18, 1991, at 56 Fed. Reg. 11387, USEPA proposed codifying the Recommended Policy in its definition of VOC at 40 C.F.R. 51.100(s). This proposed action was undertaken in conjunction with the last amendments to the Recommended Policy discussed above. USEPA adopted the amended definition of VOC on February 3, 1992, at 57 Fed. Reg. 3945. This USEPA codification included all the compounds and classes of compounds previously included as exempt in the Recommended Policy. It also included test methods for determining compliance with the VOC emissions limits, and a provision addressing situations where the test method also measured exempt compounds.

USEPA subsequently amended the 40 C.F.R. 51.100(s) definition of VOM on a number of occasions. Those are summarized as follows:

<b>Date of Amendment (Federal Citation)</b>	<b>Compound(s) Exempted</b>	<b>Date Exempted in Illinois (Board Docket)</b>
October 5, 1994 (59 Fed. Reg. 50696)	parachlorobenzotrifluoride (PCBTF) cyclic, branched, or linear completely- methylated siloxanes	July 12, 1995 (R95-2)
June 16, 1995 (60 Fed. Reg. 31633)	acetone (2-propanone or dimethylketone)	October 19, 1995 (R95-16)
February 7, 1996 (61 Fed. Reg. 4588)	perchloroethylene	February 6, 1997 (R96-16)

<b>Date of Amendment (Federal Citation)</b>	<b>Compound(s) Exempted</b>	<b>Date Exempted in Illinois (Board Docket)</b>
October 8, 1996 (61 Fed. Reg. 52847)	1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee) 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	May 16, 1997 (R97-17)
August 22, 1997 (62 Fed. Reg. 44900)	1-chloro-1-fluoroethane (HCFC-151a) chlorofluoromethane (HCFC-31) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a) Difluoromethane (HFC-32) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OCH <sub>3</sub> ) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OC <sub>2</sub> H <sub>5</sub> ) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub> or HFE-7200) ethylfluoride (HFC-161) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub> or HFE-7100) 1,1,1,3,3-pentafluorobutane (HFC-365mfc) 1,1,2,2,3-pentafluoropropane (HFC-245ca) 1,1,2,3,3-pentafluoropropane (HFC-245ea) 1,1,1,2,3-pentafluoropropane (HFC-245eb) 1,1,1,3,3-pentafluoropropane (HFC-245fa)	June 22, 1998 (R98-17)
April 9, 1998 (63 Fed. Reg. 17331)	Methyl acetate	June 22, 1998 (R98-17)
November 29, 2004 (69 Fed. Reg. 69290)	1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (HFE-7000) 3-ethoxy 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500) 1,1,1,2,3,3,3-heptafluoropropane (HFC-227ea) Methyl formate	May 23, 2005 (R05-16)

<b>Date of Amendment (Federal Citation)</b>	<b>Compound(s) Exempted</b>	<b>Date Exempted in Illinois (Board Docket)</b>
November 29, 2004 (69 Fed. Reg. 69298)	<i>t</i> -butyl acetate <sup>4</sup>	May 23, 2005 (R05-16)
January 18, 2007 (72 Fed. Reg. 69298)	1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300 and L-14787)	January 18, 2008 (Projected based on the due date for this docket) (R08-6)

**HISTORICAL SUMMARY OF EXCLUSIONS FROM  
THE ILLINOIS DEFINITION OF VOM**

Public Act 80-1299, effective August 2, 1978, added Section 9.1 to the Act. Subsection (e) of Section 9.1 (formerly subsection (c)) requires the Board to incorporate exemptions into the Illinois definition of VOM based on the federal exemptions. This provision required the Board to use the Section 7.2 identical-in-substance procedure (exempt from Section 27 of the Act (415 ILCS 5/27 (2002) and the notice provisions of the APA) to incorporate the federal exemptions into the Illinois definition of VOM.

The Board initially adopted the exemptions as part of Section 27 general rulemakings. In dockets R78-3 and R78-4 (consolidated), on August 23, 1979, as part of the original Reasonably Available Control Technology (RACT) rules, the Board adopted a definition of VOM that excluded methane and ethane, expressly declining to exempt methylene chloride, 1,1,1-trichloroethane, and CFC-113. In docket R80-5, on December 30, 1982, as part of the RACT II rules, the Board added methylene chloride and 1,1,1-trichloroethane to the list of exempt compounds. Finally, in docket R86-37, on December 22, 1987, the Board added the other six CFC and one FC compounds that USEPA had excluded in its Recommended Policy up to that date.

After that time, the Board repeatedly used the identical-in-substance procedure to incorporate federal additions to the list of exempt compounds. In docket R89-8, on October 18, 1989, the Board amended the definition of VOM to exempt the additional compounds excluded by USEPA on January 18, 1989. In docket R91-10, on September 12, 1991, the Board added the one HCFC, four HFCs, and four classes of compounds exempt by USEPA on March 18, 1991.

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<sup>4</sup> USEPA excluded *t*-butyl acetate from the definition of VOC for purposes of emissions control and VOC content requirements. USEPA retained *t*-butyl acetate as a VOC for purposes of recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements.

In docket R91-24, on July 30, 1992, the Board further updated the Illinois definition of VOM for purposes of the metropolitan Chicago and East St. Louis areas.<sup>5</sup>

Beginning in 1992, with USEPA's codification of the compounds excluded from VOC, the Board had a way to readily determine the status of the list of exempt compounds: by referring to the "List of Sections Affected" in the *Code of Federal Regulations*. At that time, the Board started treating the updates to the definition of VOM in the same manner that the Board treats all other identical-in-substance subject matters. The Board began routinely reserving dockets for each succeeding six-month period and specifically monitoring for federal revisions. Accordingly, the Board has opened several dockets assigned to this subject matter, and the Board has dismissed dockets when USEPA did not amend its definition in the relevant time-frame. Before USEPA's codification of excluded compounds, the Board relied on the Illinois Environmental Protection Agency and the regulated community to specifically draw the Board's attention to any amendments to USEPA's Recommended Policy. The Board has consistently worked to ensure that the Illinois definition of VOM is the same as that used by USEPA, and that any federal revisions are promptly reflected in the Illinois definition.

What follows is a summary listing of all Board dockets related to exemptions from the definition of VOM. This table indicates the docket number of each proceeding, the date and nature of the Board action on each docket, and the general subject matter of each. Those entries that appear in bold italic amended the definition of VOM to exempt new compounds.

<b>Board Docket</b>	<b>Board Action and Date. (Explanation/Docket Contents)</b>
<b><i>R78-3 &amp; R78-4</i></b>	<b><i>Adopted August 23, 1979. (RACT regulations (general rulemaking); established a definition of VOM, exempting ethane and methane)</i></b>
<b><i>R80-5</i></b>	<b><i>Adopted December 30, 1982. (RACT II regulations (general rulemaking); generally amending the definition of VOM, exempting methylene chloride and 1,1,1-trichloroethane)</i></b>
<b><i>R86-37</i></b>	<b><i>Adopted December 22, 1987. (Amendments to VOM regulations (general rulemaking); exempting chlorodifluoromethane, chloropentafluoroethane, dichlorodifluoromethane, dichlorotetrafluoroethane, trichlorofluoromethane, trichlorotrifluoroethane, and trifluoromethane)</i></b>
<b><i>R89-8</i></b>	<b><i>Adopted October 18, 1989. (USEPA amendments of January 18, 1989; exempting chlorodifluoroethane, dichlorofluoroethane, dichlorotrifluoroethane, and tetrafluoroethane)</i></b>

<sup>5</sup> The amendments in docket R91-24 extended the exemptions to the definitions of VOM formerly found in 35 Ill. Adm. Code 218 and 219, which the Board added in dockets R91-7 and R91-8, on July 25, 1991. However, in docket R93-9, on September 9, 1993, the Board consolidated all definitions into 35 Ill. Adm. Code 211.

<b>Board Docket</b>	<b>Board Action and Date. (Explanation/Docket Contents)</b>
<b>R91-10</b>	<i>Adopted September 12, 1991. (USEPA amendments of March 18, 1991; exempting 2-chloro-1,1,1,2-tetrafluoroethane, 1,1-difluoroethane (hfc-152a), pentafluoroethane, 1,1,2,2-tetrafluoroethane, 1,1,1-trifluoroethane, and four classes of perfluorocarbon compounds (cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulphur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine))</i>
<b>R91-24</b>	<i>Adopted July 30, 1992. (Extended exemptions to Chicago and Metro-East areas and responded to the February 3, 1992 USEPA codification of the exemptions)</i>
R92-6	Dismissed April 9, 1992. (No USEPA amendments during July 1, 1991 through December 31, 1991)
R92-15	Dismissed August 13, 1992. (No USEPA amendments during January 1, 1992 through June 30, 1992)
R93-3	Dismissed January 21, 1993. (No USEPA amendments during July 1, 1992 through December 31, 1992)
R93-21	Dismissed September 23, 1993. (No USEPA amendments during January 1, 1993 through June 30, 1993)
R94-3	Dismissed March 31, 1994. (No USEPA amendments during July 1, 1993 through December 31, 1993)
R94-22	Dismissed October 6, 1994. (No USEPA amendments during January 1, 1994 through June 30, 1994)
<b>R95-2</b>	<i>Adopted July 7, 1995. (USEPA amendments during July 1, 1994 through December 31, 1994: those of October 5, 1994; exempting parachlorobenzotrifluoride and a class of methylated siloxane compounds (cyclic, branched, or linear completely-methylated siloxanes))</i>
<b>R95-16</b>	<i>Adopted October 19, 1995. (USEPA amendments during January 1, 1995 through June 30, 1995: those of June 16, 1995; exempting acetone)</i>
R96-6	Dismissed February 15, 1996. (No USEPA amendments during July 1, 1995 through December 31, 1995)

<b>Board Docket</b>	<b>Board Action and Date. (Explanation/Docket Contents)</b>
<b>R96-16</b>	<i>Adopted February 6, 1997. (USEPA amendments during July 1, 1996 through December 31, 1996: those of February 7, 1996; exempting perchloroethylene)</i>
R97-1	Dismissed October 17, 1996. (USEPA amendments during January 1, 1995 through June 30, 1995: those of February 7, 1996 were included in docket R96-16)
<b>R97-17</b>	<i>Adopted May 15, 1997. (USEPA amendments during July 1, 1996 through December 31, 1996: those of October 8, 1996; exempting 1,2-dichloro-1,1,2,2,3-pentafluoropropane, 3,3-dichloro-1,1,1,2,2-pentafluoropropane, and 1,1,1,2,3,4,4,5,5,5-decafluoropentane)</i>
R98-1	Dismissed August 7, 1997. (No USEPA amendments during January 1, 1997 through June 30, 1997)
<b>R98-17</b>	<i>Adopted June 17, 1998. (USEPA amendments during July 1, 1997 through December 31, 1997 and April 9, 1998: those of August 25, 1997 and April 9, 1998; exempting chlorofluoromethane, 1-chloro-1-fluoroethane, 1,2-dichloro-1,1,2-trifluoroethane, difluoromethane, 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane, 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane, 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane, ethyl-fluoride, 1,1,1,2,3,3-hexafluoropropane, 1,1,1,3,3,3-hexafluoropropane, methyl acetate, 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane, 1,1,2,2,3-pentafluoropropane, 1,1,2,3,3-pentafluoropropane, 1,1,1,2,3-pentafluoropropane, 1,1,1,3,3-pentafluoropropane, and 1,1,1,3,3-pentafluorobutane)</i>
R99-5	Dismissed August 20, 1998. (USEPA amendments during January 1, 1998, through June 30, 1998: those of April 9, 1998 were included in docket R98-17)
R99-11	Dismissed February 18, 1999. (No USEPA amendments during July 1, 1998, and December 31, 1998)
R00-1	Dismissed August 19, 1999. (No USEPA amendments during January 1, 1999, through June 30, 1999)
R00-9	Dismissed February 17, 2000. (No USEPA amendments during July 1, 1999, through December 31, 1999)
R01-6	Dismissed July 27, 2000. (No USEPA amendments during January 1, 2000, through June 30, 2000)

<b>Board Docket</b>	<b>Board Action and Date. (Explanation/Docket Contents)</b>
R01-19	Dismissed March 1, 2001. (No USEPA amendments during July 1, 2000, and December 31, 2000)
R02-4	Dismissed August 23, 2001. (No USEPA amendments during January 1, 2001, through June 30, 2001)
R02-15	Dismissed February 21, 2002. (No USEPA amendments during July 1, 2001 through December 31, 2001)
R03-3	Dismissed August 8, 2002. (No USEPA amendments during January 1, 2002 and June 30, 2002)
R03-14	Dismissed February 6, 2003. (No USEPA amendments during July 1, 2002 and December 31, 2002)
R04-2	Dismissed August 7, 2003. (No USEPA amendments during January 1, 2003 and June 30, 2003)
R04-19	Dismissed March 4, 2004. (No USEPA amendments during July 1, 2003 through December 31, 2003)
R05-5	Dismissed September 16, 2004. (No USEPA amendments during January 1, 2004 through June 30, 2004)
<b>R05-16</b>	<b><i>Adopted May 19, 2005. (USEPA amendments during July 1, 2004 through December 31, 2004: those of November 29, 2004; exempting tert-butyl acetate, 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)-hexane, 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane, and 1,1,1,2,3,3,3-heptafluoropropane, methyl formate)</i></b>
R06-3	Dismissed September 1, 2005. (No USEPA amendments during January 1, 2005 through June 30, 2005)
R06-14	Dismissed May 18, 2006. (No USEPA amendments during July 1, 2005 through December 31, 2005)
R07-1	Dismissed September 21, 2006. (No USEPA amendments during January 1, 2006 and June 30, 2006)
R07-10	Dismissed February 1, 2007. (No USEPA amendments during July 1, 2006 through December 31, 2006)

Board Docket	Board Action and Date. (Explanation/Docket Contents)
R08-6	<i>This docket, with a due date of January 18, 2008. (USEPA amendments during January 1, 2007 through June 30, 2007: those of January 18, 2007; exempting 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane)</i>

The following table lists the compounds exempt from the definition of VOM to date in alphabetical order. The table sets forth the date USEPA excluded each compound from the definition of VOC and the date on which the Board subsequently voted to exempt each from the definition of VOM in Illinois.

Exempt Compound	Date of Federal Exemption	Date Exempt in Illinois
Acetone (2-propanone or dimethylketone)	June 16, 1995	October 19, 1995
<i>t</i> -Butyl acetate	November 29, 2004	May 23, 2005
1-Chloro-1,1-difluoroethane (HCFC-142b)	January 18, 1989	October 18, 1989
Chlorodifluoromethane (CFC-22)	July 22, 1980	December 22, 1987
1-Chloro-1-fluoroethane (HCFC-151a)	August 22, 1997	June 17, 1998
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	March 18, 1991	September 12, 1991
Chlorofluoromethane (HCFC-31)	August 22, 1997	June 17, 1998
Chloropentafluoroethane (CFC-115)	July 22, 1980	December 22, 1987
1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300 and L-14787)	January 18, 2007	This docket.
1,1,1,2,3,4,4,5,5,5-Decafluoropentane (HFC 43-10mee)	October 8, 1996	May 15, 1997
Dichlorodifluoromethane (CFC-12)	July 22, 1980	December 22, 1987
1,1-Dichloro-1-fluoroethane (HCFC-141b)	January 18, 1989	October 18, 1989
3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	October 8, 1996	May 15, 1997
1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	October 8, 1996	May 15, 1997
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114)	July 22, 1980	December 22, 1987
1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	August 22, 1997	June 17, 1998
1,1-Difluoroethane (HFC-152a)	March 18, 1991	September 12, 1991
Difluoromethane (HFC-32)	August 22, 1997	June 17, 1998
2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OCH <sub>3</sub> )	August 22, 1997	June 17, 1998
Ethane	July 8, 1977	August 23, 1979
2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OC <sub>2</sub> H <sub>5</sub> )	August 22, 1997	June 17, 1998
Ethylfluoride (HFC-161)	August 22, 1997	June 17, 1998
1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub> or HFE-7200)	August 22, 1997	June 17, 1998

<b>Exempt Compound</b>	<b>Date of Federal Exemption</b>	<b>Date Exempt in Illinois</b>
3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500)	November 29, 2004	May 23, 2005
1,1,1,2,2,3,3-Heptafluoro-3-methoxypropane (n-C <sub>3</sub> F <sub>7</sub> OCH <sub>3</sub> or HFE-7000)	November 29, 2004	May 23, 2005
1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea)	November 29, 2004	May 23, 2005
1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)	August 22, 1997	June 17, 1998
1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)	August 22, 1997	June 17, 1998
Methane	July 8, 1977	August 23, 1979
Methyl acetate	April 9, 1998	June 17, 1998
Methylene chloride (dichloromethane)	July 8, 1977	December 30, 1982
Methyl formate (HCOOCH <sub>3</sub> )	November 29, 2004	May 23, 2005
1,1,1,2,2,3,3,4,4-Nonafluoro-4-methoxybutane (C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub> or HFE-7100)	August 22, 1997	June 17, 1998
Parachlorobenzotrifluoride (PCBTF)	October 5, 1994	July 7, 1995
1,1,1,3,3-Pentafluorobutane (HFC-365mfc)	August 22, 1997	June 17, 1998
Pentafluoroethane (HFC-125)	March 18, 1991	September 12, 1991
1,1,2,2,3-Pentafluoropropane (HFC-245ca)	August 22, 1997	June 17, 1998
1,1,2,3,3-Pentafluoropropane (HFC-245ea)	August 22, 1997	June 17, 1998
1,1,1,2,3-Pentafluoropropane (HFC-245eb)	August 22, 1997	June 17, 1998
1,1,1,3,3-Pentafluoropropane (HFC-245fa)	August 22, 1997	June 17, 1998
Perchloroethylene (tetrachloroethylene)	February 7, 1996	February 6, 1997
Perfluorocarbon compounds: Cyclic, branched, or linear, completely fluorinated alkanes	March 18, 1991	September 12, 1991
Perfluorocarbon compounds: Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations	March 18, 1991	September 12, 1991
Perfluorocarbon compounds: Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations	March 18, 1991	September 12, 1991
Perfluorocarbon compounds: Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine	March 18, 1991	September 12, 1991
Siloxanes: cyclic, branched, or linear completely-methylated	October 5, 1994	July 7, 1995
1,1,2,2-Tetrafluoroethane (HFC-134)	March 18, 1991	September 12, 1991
1,1,1,2-Tetrafluoroethane (HFC-134a)	January 18, 1989	October 18, 1989
1,1,1-Trichloroethane (methyl chloroform)	July 8, 1977	December 30, 1982
Trichlorofluoromethane (CFC-11)	July 22, 1980	December 22, 1987
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)	July 8, 1977	December 22, 1987
1,1,1-Trifluoro-2,2-dichloroethane (HCFC-123)	January 18, 1989	October 18, 1989
1,1,1-Trifluoroethane (HFC-143a)	March 18, 1991	September 12, 1991
Trifluoromethane (HFC-23)	July 22, 1980	December 22, 1987

**ORDER**

The Board directs the Clerk to provide notice in the *Illinois Register* of the following proposed amendments to the definition of VOM at 35 Ill. Adm. Code 211.7150:

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

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211.101	Incorporations by Reference
211.102	Abbreviations and Conversion Factors

SUBPART B: DEFINITIONS

Section	
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211.122	Definitions (Repealed)
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211.150	Accumulator
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211.350	Air Oxidation Process
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211.410	Air Pollution Control Equipment
211.430	Air Suspension Coater/Dryer
211.450	Airless Spray
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211.479	Allowance
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211.490	Annual Grain Through-Put

211.495	Anti-Glare/Safety Coating
211.510	Application Area
211.530	Architectural Coating
211.550	As Applied
211.560	As-Applied Fountain Solution
211.570	Asphalt
211.590	Asphalt Prime Coat
211.610	Automobile
211.630	Automobile or Light-Duty Truck Assembly Source or Automobile or Light-Duty Truck Manufacturing Plant
211.650	Automobile or Light-Duty Truck Refinishing
211.660	Automotive/Transportation Plastic Parts
211.670	Baked Coatings
211.680	Bakery Oven
211.685	Basecoat/Clearcoat System
211.690	Batch Loading
211.695	Batch Operation
211.696	Batch Process Train
211.710	Bead-Dipping
211.730	Binders
211.750	British Thermal Unit
211.770	Brush or Wipe Coating
211.790	Bulk Gasoline Plant
211.810	Bulk Gasoline Terminal
211.820	Business Machine Plastic Parts
211.830	Can
211.850	Can Coating
211.870	Can Coating Line
211.890	Capture
211.910	Capture Device
211.930	Capture Efficiency
211.950	Capture System
211.953	Carbon Adsorber
211.955	Cement
211.960	Cement Kiln
211.970	Certified Investigation
211.980	Chemical Manufacturing Process Unit
211.990	Choke Loading
211.1010	Clean Air Act
211.1050	Cleaning and Separating Operation
211.1070	Cleaning Materials
211.1090	Clear Coating
211.1110	Clear Topcoat
211.1120	Clinker
211.1130	Closed Purge System
211.1150	Closed Vent System

211.1170	Coal Refuse
211.1190	Coating
211.1210	Coating Applicator
211.1230	Coating Line
211.1250	Coating Plant
211.1270	Coil Coating
211.1290	Coil Coating Line
211.1310	Cold Cleaning
211.1312	Combined Cycle System
211.1316	Combustion Turbine
211.1320	Commence Commercial Operation
211.1324	Commence Operation
211.1328	Common Stack
211.1330	Complete Combustion
211.1350	Component
211.1370	Concrete Curing Compounds
211.1390	Concentrated Nitric Acid Manufacturing Process
211.1410	Condensate
211.1430	Condensible PM-10
211.1465	Continuous Automatic Stoking
211.1467	Continuous Coater
211.1470	Continuous Process
211.1490	Control Device
211.1510	Control Device Efficiency
211.1515	Control Period
211.1520	Conventional Air Spray
211.1530	Conventional Soybean Crushing Source
211.1550	Conveyorized Degreasing
211.1570	Crude Oil
211.1590	Crude Oil Gathering
211.1610	Crushing
211.1630	Custody Transfer
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211.1770	Distillate Fuel Oil
211.1780	Distillation Unit
211.1790	Drum
211.1810	Dry Cleaning Operation or Dry Cleaning Facility
211.1830	Dump-Pit Area
211.1850	Effective Grate Area
211.1870	Effluent Water Separator
211.1875	Elastomeric Materials

211.1880	Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Shielding Coatings
211.1885	Electronic Component
211.1890	Electrostatic Bell or Disc Spray
211.1900	Electrostatic Prep Coat
211.1910	Electrostatic Spray
211.1920	Emergency or Standby Unit
211.1930	Emission Rate
211.1950	Emission Unit
211.1970	Enamel
211.1990	Enclose
211.2010	End Sealing Compound Coat
211.2030	Enhanced Under-the-Cup Fill
211.2050	Ethanol Blend Gasoline
211.2070	Excess Air
211.2080	Excess Emissions
211.2090	Excessive Release
211.2110	Existing Grain-Drying Operation (Repealed)
211.2130	Existing Grain-Handling Operation (Repealed)
211.2150	Exterior Base Coat
211.2170	Exterior End Coat
211.2190	External Floating Roof
211.2210	Extreme Performance Coating
211.2230	Fabric Coating
211.2250	Fabric Coating Line
211.2270	Federally Enforceable Limitations and Conditions
211.2285	Feed Mill
211.2290	Fermentation Time
211.2300	Fill
211.2310	Final Repair Coat
211.2330	Firebox
211.2350	Fixed-Roof Tank
211.2360	Flexible Coating
211.2365	Flexible Operation Unit
211.2370	Flexographic Printing
211.2390	Flexographic Printing Line
211.2410	Floating Roof
211.2420	Fossil Fuel
211.2425	Fossil Fuel-Fired
211.2430	Fountain Solution
211.2450	Freeboard Height
211.2470	Fuel Combustion Emission Unit or Fuel Combustion Emission Source
211.2490	Fugitive Particulate Matter
211.2510	Full Operating Flowrate
211.2530	Gas Service
211.2550	Gas/Gas Method

211.2570	Gasoline
211.2590	Gasoline Dispensing Operation or Gasoline Dispensing Facility
211.2610	Gel Coat
211.2620	Generator
211.2630	Gloss Reducers
211.2650	Grain
211.2670	Grain-Drying Operation
211.2690	Grain-Handling and Conditioning Operation
211.2710	Grain-Handling Operation
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211.2750	Green Tires
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211.2790	Gross Vehicle Weight Rating
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211.2930	Heavy Off-Highway Vehicle Products Coating
211.2950	Heavy Off-Highway Vehicle Products Coating Line
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211.3210	Internal Transferring Area
211.3230	Lacquers
211.3250	Large Appliance
211.3270	Large Appliance Coating
211.3290	Large Appliance Coating Line
211.3310	Light Liquid
211.3330	Light-Duty Truck
211.3350	Light Oil
211.3370	Liquid/Gas Method
211.3390	Liquid-Mounted Seal
211.3410	Liquid Service

211.3430	Liquids Dripping
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211.3470	Load-Out Area
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211.3483	Long Dry Kiln
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211.3490	Low Solvent Coating
211.3500	Lubricating Oil
211.3510	Magnet Wire
211.3530	Magnet Wire Coating
211.3550	Magnet Wire Coating Line
211.3570	Major Dump Pit
211.3590	Major Metropolitan Area (MMA)
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211.3690	Maximum Theoretical Emissions
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211.3790	Miscellaneous Fabricated Product Manufacturing Process
211.3810	Miscellaneous Formulation Manufacturing Process
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211.3850	Miscellaneous Metal Parts and Products Coating
211.3870	Miscellaneous Metal Parts or Products Coating Line
211.3890	Miscellaneous Organic Chemical Manufacturing Process
211.3910	Mixing Operation
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211.3930	Monitor
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211.3960	Motor Vehicles
211.3965	Motor Vehicle Refinishing
211.3970	Multiple Package Coating
211.3980	Nameplate Capacity
211.3990	New Grain-Drying Operation (Repealed)
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211.4050	Non-Contact Process Water Cooling Tower
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211.4065	Non-Heatset
211.4067	NOx Trading Program
211.4070	Offset
211.4090	One Hundred Percent Acid
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211.4130	Opacity
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211.4190	Open-Ended Valve
211.4210	Operator of a Gasoline Dispensing Operation or Operator of a Gasoline Dispensing Facility
211.4230	Organic Compound
211.4250	Organic Material and Organic Materials
211.4260	Organic Solvent
211.4270	Organic Vapor
211.4290	Oven
211.4310	Overall Control
211.4330	Overvarnish
211.4350	Owner of a Gasoline Dispensing Operation or Owner of a Gasoline Dispensing Facility
211.4370	Owner or Operator
211.4390	Packaging Rotogravure Printing
211.4410	Packaging Rotogravure Printing Line
211.4430	Pail
211.4450	Paint Manufacturing Source or Paint Manufacturing Plant
211.4470	Paper Coating
211.4490	Paper Coating Line
211.4510	Particulate Matter
211.4530	Parts Per Million (Volume) or PPM (Vol)
211.4550	Person
211.4590	Petroleum
211.4610	Petroleum Liquid
211.4630	Petroleum Refinery
211.4650	Pharmaceutical
211.4670	Pharmaceutical Coating Operation
211.4690	Photochemically Reactive Material
211.4710	Pigmented Coatings
211.4730	Plant
211.4740	Plastic Part
211.4750	Plasticizers
211.4770	PM-10
211.4790	Pneumatic Rubber Tire Manufacture
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211.4830	Polyester Resin Material(s)
211.4850	Polyester Resin Products Manufacturing Process
211.4870	Polystyrene Plant

211.4890	Polystyrene Resin
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211.4930	Portland Cement Manufacturing Process Emission Source
211.4950	Portland Cement Process or Portland Cement Manufacturing Plant
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211.4970	Potential to Emit
211.4990	Power Driven Fastener Coating
211.5010	Precoat
211.5015	Preheater Kiln
211.5020	Preheater/Precalciner Kiln
211.5030	Pressure Release
211.5050	Pressure Tank
211.5060	Pressure/Vacuum Relief Valve
211.5061	Pretreatment Wash Primer
211.5065	Primary Product
211.5070	Prime Coat
211.5080	Primer Sealer
211.5090	Primer Surfacer Coat
211.5110	Primer Surfacer Operation
211.5130	Primers
211.5150	Printing
211.5170	Printing Line
211.5185	Process Emission Source
211.5190	Process Emission Unit
211.5210	Process Unit
211.5230	Process Unit Shutdown
211.5245	Process Vent
211.5250	Process Weight Rate
211.5270	Production Equipment Exhaust System
211.5310	Publication Rotogravure Printing Line
211.5330	Purged Process Fluid
211.5340	Rated Heat Input Capacity
211.5350	Reactor
211.5370	Reasonably Available Control Technology (RACT)
211.5390	Reclamation System
211.5410	Refiner
211.5430	Refinery Fuel Gas
211.5450	Refinery Fuel Gas System
211.5470	Refinery Unit or Refinery Process Unit
211.5480	Reflective Argent Coating
211.5490	Refrigerated Condenser
211.5500	Regulated Air Pollutant
211.5510	Reid Vapor Pressure
211.5530	Repair
211.5550	Repair Coat
211.5570	Repaired

211.5580	Repowering
211.5590	Residual Fuel Oil
211.5600	Resist Coat
211.5610	Restricted Area
211.5630	Retail Outlet
211.5650	Ringelmann Chart
211.5670	Roadway
211.5690	Roll Coater
211.5710	Roll Coating
211.5730	Roll Printer
211.5750	Roll Printing
211.5770	Rotogravure Printing
211.5790	Rotogravure Printing Line
211.5810	Safety Relief Valve
211.5830	Sandblasting
211.5850	Sanding Sealers
211.5870	Screening
211.5880	Screen Printing on Paper
211.5890	Sealer
211.5910	Semi-Transparent Stains
211.5930	Sensor
211.5950	Set of Safety Relief Valves
211.5970	Sheet Basecoat
211.5980	Sheet-Fed
211.5990	Shotblasting
211.6010	Side-Seam Spray Coat
211.6025	Single Unit Operation
211.6030	Smoke
211.6050	Smokeless Flare
211.6060	Soft Coat
211.6070	Solvent
211.6090	Solvent Cleaning
211.6110	Solvent Recovery System
211.6130	Source
211.6140	Specialty Coatings
211.6145	Specialty Coatings for Motor Vehicles
211.6150	Specialty High Gloss Catalyzed Coating
211.6170	Specialty Leather
211.6190	Specialty Soybean Crushing Source
211.6210	Splash Loading
211.6230	Stack
211.6250	Stain Coating
211.6270	Standard Conditions
211.6290	Standard Cubic Foot (scf)
211.6310	Start-Up
211.6330	Stationary Emission Source

211.6350	Stationary Emission Unit
211.6355	Stationary Gas Turbine
211.6360	Stationary Reciprocating Internal Combustion Engine
211.6370	Stationary Source
211.6390	Stationary Storage Tank
211.6400	Stencil Coat
211.6410	Storage Tank or Storage Vessel
211.6420	Strippable Spray Booth Coating
211.6430	Styrene Devolatilizer Unit
211.6450	Styrene Recovery Unit
211.6470	Submerged Loading Pipe
211.6490	Substrate
211.6510	Sulfuric Acid Mist
211.6530	Surface Condenser
211.6540	Surface Preparation Materials
211.6550	Synthetic Organic Chemical or Polymer Manufacturing Plant
211.6570	Tablet Coating Operation
211.6580	Texture Coat
211.6590	Thirty-Day Rolling Average
211.6610	Three-Piece Can
211.6620	Three or Four Stage Coating System
211.6630	Through-the-Valve Fill
211.6650	Tooling Resin
211.6670	Topcoat
211.6690	Topcoat Operation
211.6695	Topcoat System
211.6710	Touch-Up
211.6720	Touch-Up Coating
211.6730	Transfer Efficiency
211.6750	Tread End Cementing
211.6770	True Vapor Pressure
211.6790	Turnaround
211.6810	Two-Piece Can
211.6830	Under-the-Cup Fill
211.6850	Undertread Cementing
211.6860	Uniform Finish Blender
211.6870	Unregulated Safety Relief Valve
211.6880	Vacuum Metallizing
211.6890	Vacuum Producing System
211.6910	Vacuum Service
211.6930	Valves Not Externally Regulated
211.6950	Vapor Balance System
211.6970	Vapor Collection System
211.6990	Vapor Control System
211.7010	Vapor-Mounted Primary Seal
211.7030	Vapor Recovery System

211.7050	Vapor-Suppressed Polyester Resin
211.7070	Vinyl Coating
211.7090	Vinyl Coating Line
211.7110	Volatile Organic Liquid (VOL)
211.7130	Volatile Organic Material Content (VOMC)
211.7150	Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)
211.7170	Volatile Petroleum Liquid
211.7190	Wash Coat
211.7200	Washoff Operations
211.7210	Wastewater (Oil/Water) Separator
211.7230	Weak Nitric Acid Manufacturing Process
211.7250	Web
211.7270	Wholesale Purchase - Consumer
211.7290	Wood Furniture
211.7310	Wood Furniture Coating
211.7330	Wood Furniture Coating Line
211.7350	Woodworking
211.7400	Yeast Percentage

Appendix A Rule into Section Table

Appendix B Section into Rule Table

AUTHORITY: Implementing Sections 9, 9.1, 9.9 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 9.9, 10, 27 and 28.5].

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 201: Definitions, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5, at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13590; amended in R82-1 (Docket A) at 10 Ill. Reg. 12624, effective July 7, 1986; amended in R85-21(A) at 11 Ill. Reg. 11747, effective June 29, 1987; amended in R86-34 at 11 Ill. Reg. 12267, effective July 10, 1987; amended in R86-39 at 11 Ill. Reg. 20804, effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 787, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7284, effective April 8, 1988; amended in R86-10 at 12 Ill. Reg. 7621, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg. 10862, effective June 27, 1989; amended in R89-8 at 13 Ill. Reg. 17457, effective January 1, 1990; amended in R89-16(A) at 14 Ill. Reg. 9141, effective May 23, 1990; amended in R88-30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901, effective May 14, 1991; amended in R91-10 at 15 Ill. Reg. 15564, effective October 11, 1991; amended in R91-6 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16 Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16504, effective September 27, 1993; amended in R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg. 1253, effective January 18, 1994; amended in R94-12 at 18 Ill. Reg. 14962, effective September 21, 1994; amended in R94-14 at 18 Ill. Reg. 15744, effective October 17, 1994; amended in R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg.

16929, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6823, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7344, effective May 22, 1995; amended in R95-2 at 19 Ill. Reg. 11066, effective July 12, 1995; amended in R95-16 at 19 Ill. Reg. 15176, effective October 19, 1995; amended in R96-5 at 20 Ill. Reg. 7590, effective May 22, 1996; amended in R96-16 at 21 Ill. Reg. 2641, effective February 7, 1997; amended in R97-17 at 21 Ill. Reg. 6489, effective May 16, 1997; amended in R97-24 at 21 Ill. Reg. 7695, effective June 9, 1997; amended in R96-17 at 21 Ill. Reg. 7856, effective June 17, 1997; amended in R97-31 at 22 Ill. Reg. 3497, effective February 2, 1998; amended in R98-17 at 22 Ill. Reg. 11405, effective June 22, 1998; amended in R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4582, effective March 15, 2001; amended in R01-17 at 25 Ill. Reg. 5900, effective April 17, 2001; amended in R05-16 at 29 Ill. Reg. 8181, effective May 23, 2005; amended in R05-11 at 29 Ill. Reg. 8892, effective June 13, 2005; amended in R04-12/20 at 30 Ill. Reg. 9654, effective May 15, 2006; amended in R08-6 at 32 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

## SUBPART B: DEFINITIONS

### Section 211.7150 Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)

“Volatile organic material” (“VOM”) or “volatile organic compound” (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions.

- a) This **definition of VOM** includes any **such** organic compound **that participates in atmospheric photochemical reactions**, other than the **following** compounds **listed in this subsection (a), which have been determined by USEPA to have negligible photochemical reactivity**: **USEPA has determined that the compounds listed in this subsection (a) have negligible photochemical reactivity. USEPA has excluded the listed negligibly-reactive compounds from the definition of VOM for purposes of VOM limitations or VOM content requirements. However, USEPA has required that certain of these compounds be considered VOM for purposes of recordkeeping, emissions reporting, and inventory requirements, as described in subsection (e) of this Section.**

Acetone (2-propanone or dimethylketone)

tertiary-Butyl acetate

1-Chloro-1,1-difluoroethane (HCFC-142b)

Chlorodifluoromethane (CFC-22)

1-Chloro-1-fluoroethane (HCFC-151a)

2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)

Chlorofluoromethane (HCFC-31)

Chloropentafluoroethane (CFC-115)

1,1,1,2,2,3,4,5,5,5-Decafluoro-3-methoxy-4-trifluoromethyl-pentane  
(HFE-7300, L-14787, or  $C_2F_5CF(OCH_3)CF(CF_3)_2$ )

1,1,1,2,3,4,4,5,5,5-Decafluoropentane (HFC 43-10mee)

Dichlorodifluoromethane (CFC-12)  
 1,1-Dichloro-1-fluoroethane (HCFC-141b)  
 3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)  
 1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)  
 1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114)  
 1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)  
 1,1-Difluoroethane (HFC-152a)  
 Difluoromethane (HFC-32)  
 2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane  
 ((CF<sub>3</sub>)<sub>2</sub>CF<sub>2</sub>OCH<sub>3</sub>)  
 Ethane  
 2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane  
 ((CF<sub>3</sub>)<sub>2</sub>CF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>)  
 Ethylfluoride (HFC-161)  
 1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub> or HFE-7200)  
 3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane  
 (HFE-7500)  
 1,1,1,2,2,3,3-Heptafluoro-3-methoxypropane (n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub> or HFE-7000)  
 1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea)  
 1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)  
 1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)  
 Methane  
 Methyl acetate  
 Methylene chloride (dichloromethane)  
 Methyl formate (HCOOCH<sub>3</sub>)  
 1,1,1,2,2,3,3,4,4-Nonafluoro-4-methoxybutane (C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub> or HFE-7100)  
 Parachlorobenzotrifluoride (PCBTf)  
 1,1,1,3,3-Pentafluorobutane (HFC-365mfc)  
 Pentafluoroethane (HFC-125)  
 1,1,2,2,3-Pentafluoropropane (HFC-245ca)  
 1,1,2,3,3-Pentafluoropropane (HFC-245ea)  
 1,1,1,2,3-Pentafluoropropane (HFC-245eb)  
 1,1,1,3,3-Pentafluoropropane (HFC-245fa)  
 Perchloroethylene (tetrachloroethylene)  
 Perfluorocarbon compounds that fall into the following classes:  
     Cyclic, branched, or linear, completely fluorinated alkanes  
     Cyclic, branched, or linear, completely fluorinated ethers with no  
         unsaturations  
     Cyclic, branched, or linear, completely fluorinated tertiary amines  
         with no unsaturations  
     Sulfur-containing perfluorocarbons with no unsaturations and with  
         sulfur bonds only to carbon and fluorine  
 Siloxanes: cyclic, branched, or linear completely-methylated  
 1,1,2,2-Tetrafluoroethane (HFC-134)

1,1,1,2-Tetrafluoroethane (HFC-134a)  
 1,1,1-Trichloroethane (methyl chloroform)  
 Trichlorofluoromethane (CFC-11)  
 1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)  
 1,1,1-Trifluoro-2,2-dichloroethane (HCFC-123)  
 1,1,1-Trifluoroethane (HFC-143a)  
 Trifluoromethane (HFC-23)

- b) For purposes of determining VOM emissions and compliance with emissions limits, VOM will be measured by the test methods in the approved implementation plan or 40 CFR 60, Appendix A, incorporated by reference at 35 Ill. Adm. Code 215.105, 218.112, and 219.112, as applicable, or by source-specific test methods that have been established pursuant to a permit issued under a program approved or promulgated under Title V of the Clean Air Act; under 40 CFR 51, Subpart I or Appendix S, incorporated by reference at 35 Ill. Adm. Code 218.112 and 219.112; or under 40 CFR 52.21, incorporated by reference at 35 Ill. Adm. Code 218.112 and 219.112, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOM if the amount of such compounds is accurately quantified and the exclusion is approved by the Agency.
- c) As a precondition to excluding these negligibly-reactive compounds as VOM, or at any time thereafter, the Agency may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Agency, the amount of negligibly-reactive compounds in the source's emissions.
- d) The USEPA will not be bound by any State determination as to appropriate methods for testing or monitoring negligibly-reactive compounds if such determination is not reflected in any of the test methods in subsection (b) above.
- e) The following compound is VOM for the purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements that apply to VOM, and it must be uniquely identified in emission reports, but it is not VOM for the purposes of VOM emissions limitations or VOM content requirements: t-butyl acetate.

(Source: Amended at 32 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on October 18, 2007, by a vote of 4-0.

A handwritten signature in black ink that reads "John T. Therriault". The signature is written in a cursive style with a long horizontal stroke at the end.

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John T. Therriault, Assistant Clerk  
Illinois Pollution Control Board