ILLINOIS POLLUTION CONTROL BOARD
September 5, 2013

IN THE MATTER OF:	)	
DEFINITION OF VOM UPDATE, USEPA REGULATIONS (January 1, 2013 through June 30, 2013 and August 28, 2013)	)))	R14-7 (Identical-in-Substance Rulemaking - Air)

Proposed Rule. Proposal for Public Comment.

OPINION AND ORDER OF THE BOARD (by J.A. Burke):

This rulemaking will 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 exemptions of chemical compounds from regulation as ozone precursors. The update includes all USEPA actions in this regard that occurred during the period from January 1, 2013 through June 30, 2013.

This opinion and order is organized into four segments in the following order: (1) an overview of this proceeding that describes the subject matter and regulatory context; (2) segments that explain opportunities for submission of public comments and participation at a public hearing that the Board will conduct for this proceeding, and which set forth the various currently projected dates towards completion of these amendments; (3) a segment that includes substantive discussion of the federal amendments and resulting Board actions, including tables that outline USEPA amendments that the Board has not followed, deviations from the literal text of the USEPA amendments, and corrections and amendments that are not directly derived from USEPA amendments; and (4) the Board's order, which includes the text of the proposed amendments.

OVERVIEW OF THIS PROCEEDING

Today the Board adopts a proposal for public comment that would add four compounds to the list of those exempted from the definition of volatile organic material (VOM). The amendments proposed today respond to three USEPA actions that resulted in a single set of USEPA amendments to the federal definition of "volatile organic compound" (VOC) codified at 40 C.F.R. 51.100(s). VOM in the Illinois rules and throughout this opinion and order has the same meaning as does VOC in the federal regulations. *Compare* 35 Ill. Adm. Code 211.7150 *with* 40 C.F.R. 51.100(s) (2013).

The Board reserved this docket to accommodate USEPA amendments to the federal definition of VOM during the period January 1, 2013 through June 30, 2013. USEPA amended 40 C.F.R. 51.100(s) twice during that time, on February 12, 2013 (at 78 Fed. Reg. 9823) and February 15, 2013 (78 Fed. Reg. 11101). USEPA, however, subsequently withdrew the

February 15, 2013 amendments on April 18, 2013 (78 Fed. Reg. 23149) in response to adverse public comment.[1]

The USEPA actions during the period from January 1, 2013 through June 30, 2013 are summarized as follows:

February 12, 2013 (78 Fed. Reg. 9823): USEPA exempted four new compounds from the definition of VOM. The four newly exempted compounds are one hydrofluoroether and three hydrofluoropolyethers (HFEs): (difluoromethoxy)(difluoro)methane (CAS 1691-17-4), bis(difluoromethoxy)(difluoro)methane (CAS 78522-47-1), 1,2-bis(difluoro methoxy)-1,1,2,2-tetrafluoroethane (CAS 188690-78-0), and 1-(diflоromethoxy)-2-[(difluoromethoxy)(difluoro)methoxy]-1,1,2,2-tetrafluoroethane (CAS 188690-77-9).

February 15, 2013 (78 Fed. Reg. 11101): USEPA exempted one new compound from the definition of VOM. The newly exempted compound was a chlorofluoroalkene: *trans*-1-chloro-3,3,3-trifluoroprop-1-ene (CAS 102687-65-0).

April 18, 2013 (78 Fed. Reg. 23149): USEPA withdrew the February 15, 2013 exemption.

After July 1, 2013, USEPA undertook one action related to actions taken during the January 1, 2013 through June 30, 2013 nominal time-frame of this docket. That action is described as follows:

August 28, 2013 (78 Fed. Reg. 53029): USEPA exempted *trans*-1-chloro-3,3,3-trifluoro prop-1-ene (CAS 102687-65-0) by the usual rulemaking procedure.

The Board must amend the Illinois definition of VOM in response to the USEPA actions of February 12, 2013. The Board will include the USEPA action of August 28, 2013 for the sake of expedience and administrative convenience.

No action is needed based on the USEPA actions of February 15, 2013 and April 18, 2013. A brief explanation of the February 15, 2013 and April 18, 2013 actions is included in the discussion of the August 28, 2013 action.

Section 9.1(e) of the Environmental Protection Act (Act) (415 ILCS 5/9.1(e) (2012)) 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) (2012). 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) (2012)) for adopting rules that are "identical in substance" to the federal requirements.

[1] The February 15, 2013 action would have exempted *trans*-1-chloro-3,3,3-trifluoroprop-1-ene (also called Solstice 1233zd(E)) (CAS no. 102687-65-0). *See* 78 Fed. Reg. 11101, 11104 (Feb. 15, 2013). The effect of the USEPA withdrawal was to put the addition of this compound at the proposed rule stage. *See* 78 Fed. Reg. 23149 (Apr. 18, 2013); 78 Fed. Reg. 11101, 11102 (Feb. 15, 2013); 78 Fed. Reg. 11119 (Feb. 15, 2013).

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 (2012)) 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 (JCAR). However, as provided in Section 9.1(e) of the Act and explained in the two following segments of this opinion and order, 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) (2012)), and allow for public comment.

PUBLIC COMMENTS

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 R14-7.

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. 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, michael.mccambridge@illinois.gov).

PROPOSED SIP REVISION AND FEDERALLY REQUIRED PUBLIC HEARING

The Board expects that the Illinois Environmental Protection Agency (Agency) will submit the present amendments as a revision to the Illinois State Implementation Plan (SIP) for ozone pursuant to section 110 of the federal Clean Air Act (42 U.S.C. § 7410(a) (2012) and the implementing USEPA regulations. *See* 40 C.F.R. 51.102 and appendix V (2013).

As authorized by 415 ILCS 5/9.1(e), the Board scheduled a public hearing to occur in this rulemaking for the purpose of allowing interested members of the public to comment on the proposed amendments and the anticipated SIP revision that will result from their adoption. The Board will simultaneously conduct the hearing at two locations via teleconference so that persons at both locations may freely participate in the proceedings. Hearing information follows:

1:15 p.m., October 31, 2013

James R. Thompson Center
Illinois Pollution Control Board Hearing Room
100 West Randolph Street, Room 11-512
Chicago

and

Sangamo Building
Illinois Pollution Control Board Hearing Room
1021 North Grand Avenue
Springfield

The record in this docket will include all documents pertaining to this proceeding. All documents in the record are publicly available for inspection and copying as provided in 2 Ill. Adm. Code 2175 (2012). The documents are also freely available online at the Board's webpage: www.ipcb.state.il.us.

The record will not include a copy of the following documents, which are all otherwise publicly available:

- The *Federal Register* notice that prompted this action (referenced elsewhere in this opinion and order);
- Federal statutes and regulations referenced in this opinion and order; and
- Illinois statutes and regulations referenced in this opinion and order.

The Board will cause publication of a Notice of Public Information on Proposed Rules in the *Illinois Register*. In that Notice, the Board will describe the hearing date and time outlined above and set forth information to aid members of the community to obtain and review documents and participate in this proceeding. The Board will try to have that publication occur simultaneous with publication of the Notice of Proposed Amendments. The notices published relative to this proceeding will request that interested persons direct questions to the following person:

Michael J. McCambridge, Staff Attorney
Pollution Control Board
100 West Randolph Street, Room 11-500
Chicago, Illinois 60601
312-814-6924
michael.mccambridge@illinois.gov

The notices published relative to this proceeding will direct interested persons to request documents from or submit documents to the following person:

John T. Therriault, Clerk of the Board
Pollution Control Board
100 West Randolph Street, Room 11-500

Chicago, Illinois 60601
312-814-3629
john.therriault@illinois.gov

After the hearing and public comment period, the Board will promptly issue an opinion and order adopting final rule amendments. The Board will then file the amendments with the Office of the Secretary of State, and a Notice of Adopted Amendments will appear in the *Illinois Register*. Any Agency submission of the associated SIP revision to USEPA will follow that Notice.

TIMETABLE FOR COMPLETING THIS RULEMAKING

Under Section 7.2(b) of the Act (415 ILCS 5/7.2(b) (2010)), 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 February 12, 2013. Therefore, the deadline for the Board to adopt these amendments is February 12, 2014. Adopting this proposal for public comment today, that Board projects the following dates for completion of intermediate activities in this proceeding as follows:

Due date:	**February 12, 2014**
Proposal adopted date:	**September 5, 2013**
Publication submission deadline:	September 16, 2013
Illinois Register publication date:	September 27, 2013
Date of public hearing:	October 31, 2013
End of 45-day public comment period:	November 12, 2013
Adoption date:	**November 21, 2013**
Possible filing and **effective date:**	**December 2, 2013**
Possible *Illinois Register* publication date:	December 13, 2013

This estimated schedule of intermediate activities will allow completion of the amendments two months prior to the due date. Any unforeseen events could delay projected intermediate activities and ultimate completion of these amendments. Nevertheless, the Board intends to adopt amendments no later than February 6, 2014 and file them with the Office of the Secretary of State no later than the statutory deadline of February 12, 2014.

DISCUSSION

Board Actions Directly Based on Federal Amendments

USEPA Action of February 12, 2013. On February 12, 2013 (at 78 Fed. Reg. 9823), USEPA added four HFE compounds to the list of chemical species that are exempt from the federal definition of VOC and, accordingly, are exempt from regulation for control of ozone precursors. USEPA further made limited corrections to exemptions in the existing text.

The newly exempted compounds are the following:

(difluoromethoxy)(difluoro)methane[2]
CAS no.: 1691-17-4
chemical formula: CHF_2OCHF_2
alternative common names: HFE-134; 1,1,3,3-tetrafluorodimethyl ether; 1,1,1',1'-tetrafluorodimethyl ether; bis(difluoromethyl)ether; (difluoromethoxy)difluoro methane; di(difluoromethyl) ether; bis(difluoromethyl) ether; 1,1'-oxybis(1,1-difluoromethane); oxybis(difluoromethane); tetrafluorodimethyl ether

bis(difluoromethoxy)(difluoro)methane
CAS no.: 78522-47-1
chemical formula: $CHF_2OCF_2OCHF_2$
alternative common names: HFE-236cal2; bis(difluoromethoxy)difluoromethane

1,2-bis(difluoromethoxy)-1,1,2,2-tetrafluoroethane
CAS no.: 188690-78-0
chemical formula: $CHF_2OCF_2CF_2OCHF_2$
alternative name: HFE-338pcc13

1-(difloromethoxy)-2-[(difluoromethoxy)(difluoro)methoxy]-1,1,2,2-tetrafluoroethane
CAS no.: 188690-77-9
chemical formula: $CHF_2OCF_2OCF_2CF_2OCHF_2$
alternative common names: HFE-43-10pccc; 1-(difloromethoxy)-2-[(difluoro methoxy)difluoromethoxy]-1,1,2,2-tetrafluoroethane; H-Galden 1040X; H-Galden ZT 130; H-Galden ZT 150; or H-Galden ZT 180

USEPA exempted the four HFE compounds, all of which are sold under the trade name H-Galden, based on a 2005 petition of Solvay Solexis, Inc. The compounds can be used as heat transfer agents (secondary-loop refrigerants) and as fire suppressants. In their intended uses, the four compounds would replace ozone-depleting substances. USEPA determined that these compounds have photochemical reactivity potentials that are about two orders of magnitude lower than ethane (as factored based on their respective k_{OH} rate constants). USEPA further determined that the four compounds have low acute toxicity, no irritation or skin sensitization, no detectible genotoxic activity, and low potential for developmental toxicity. USEPA observed that they have an ozone depletion potential of zero due to their lack of chlorine and bromine. USEPA observed that each of the four compounds has relatively high 20-year and 100-year global warming potentials (GWPs), but that they have GWPs which are comparable to or lower than compounds they would replace. 78 Fed. Reg. at 9824-26.

In addition to adopting four new exemptions, USEPA corrected the chemical name "(1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)" to "1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)" and changed

[2] It appears that "1,1,3,3-tetrafluorodimethyl ether" may be an alternative IUPAC name for this compound.

several commas to semicolons in the listing of exempt compounds in 40 C.F.R. 51.100(s)(1). *See* 78 Fed. Reg. at 9826.

Any person interested in the substance of the exemption of the four HFPE compounds should refer to the February 12, 2015 *Federal Register* discussion that accompanied the USEPA amendments. Alternatively, interested persons could contact USEPA as directed in the *Federal Register* notice.

The Present Board Action. The Board has incorporated the four new exempt HFE compounds without substantive changes. Nevertheless, the Board found minor revisions to the federal text necessary. The primary revisions involve (1) the naming of the new HFE compounds in the list in Section 211.7150; (2) arranging the HFE compounds in alphabetic order in the list; and (3) not implementing USEPA amendments that are not necessary in Section 211.7150. All of these revisions are itemized and summarily outlined in Table 1, which begins on page 10 of this opinion and order, and Table 2, which begins on page 11**Error! Bookmark not defined.**. No further discussion of many of those changes will appear in this opinion and order.

Naming the Newly Exempted Compounds. USEPA codified the four new exemptions using the compounds' structural formulae and industrial designations. USEPA did not include any of the compounds' chemical name. The literal text of USEPA's additions to the listing of exempted compounds in 40 C.F.R. 51.100(s)(1) was as follows (including the ending semicolon):

> HCF_2OCF_2H (HFE-134); $HCF_2OCF_2OHCF_2$ (HFE-236cal2); $CHF_2OCF_2CF_2$-$OCHF_2$ (HFE-338pcc13); $CHF_2OCF_2OCF_2CF_2OCHF_2$ (H-Galden 1040X or H-Galden ZT 130 (or 150 or 180);
> *See* 40 C.F.R. 51.100(s)(1) (2013) (including the February 12, 2013 amendments).

The Board used the CAS numbers given for the four compounds in the *Federal Register* (*see* 78 Fed. Reg. at 9825, 9826) to search various websites[3] for the compounds' chemical names. The Board consulted Table A-1 to subpart A of 40 C.F.R. 98 to obtain the name "HFE-338pcc13" for the compound that USEPA called "$CHF_2OCF_2OCF_2CF_2OCHF_2$ (H-Galden 1040X or H-Galden ZT 130 (or 150 or 180)" by its condensed chemical formula. In this way, the Board identified IUPAC[4] names for all of the compounds and common names for three of them.

The Board codified each of the four new exemptions by its IUPAC name. The Board retained the structural formula and the coded common name given by USEPA, with some minor

[3] The websites included the following websites: National Institute of Standards and Technology, Material Measurement Laboratory, Standard Reference Data Program, Data Gateway, Chemistry WebBook, Search for Species by CAS Registry Number (webbook.nist.gov/chemistry/cas-ser.html); cas.ChemNet.com (www.chemnet.com/cas/); Chemical Book (www.chemicalbook.com); Royal Society for Chemistry, Cambridge (RSC), ChemSpider (www.chemspider.com); and Advanced Chemistry Development, Inc., IUPAC Nomenclature of Organic Chemistry (www.acdlabs.com/iupac/nomenclature/).

[4] The International Union of Pure and Applied Chemistry.

revisions.[5] Principally, the Board revised each condensed structural formula so the hydrogen atoms indicated are placed immediately after the carbon atoms to which they are attached. This is the more conventional format for each moiety of chain compounds. The Board added the coded common name "HFE-338pcc13" for 1,2-bis(difluoromethoxy)-1,1,2,2-tetrafluoroethane. The Board did not add the several common names found and listed above for three of the HFE compounds.

The entries that the Board has made in Section 211.7150 for each compound are summarized as follows:

USEPA Designation in 40 C.F.R. 51.100	Board Designation in Section 211.7150
HCF_2OCF2H (HFE-134)	(difluoromethoxy)(difluoro)methane (CHF_2OCHF_2 or HFE-134)
$HCF_2OCF_2OCF_2H$ (HFE–236cal2)	bis(difluoromethoxy)(difluoro)methane ($CHF_2OCF_2OCHF_2$ or HFE-236cal2)
$HCF_2OCF_2CF_2OCF_2H$ (HFE–338pcc13)	1-(difloromethoxy)-2-[(difluoromethoxy) (difluoro)methoxy]-1,1,2,2-tetrafluoro ethane ($CHF_2OCF_2OCF_2CF_2OCHF_2$ or HFE-43- 10pccc)
$HCF_2OCF_2OCF_2CF_2OCF_2H$ (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180))	1,2-bis(difluoromethoxy)-1,1,2,2-tetra fluoroethane ($CHF_2OCF_2CF_2OCHF_2$ or HFE- 338pcc13)

Request for Public Comments: The Board requests comments on the incorporation of the four new February 12, 2013 USEPA exemptions from the definition of VOM. In particular, the Board requests comments on the chemical names added for each of the four compounds.

USEPA Action of August 28, 2013. USEPA adopted a direct final rule[6] on February 15, 2013 (at 78 Fed. Reg. 11101) that added one hydrochlorofluorocarbon (HCFC) compound to the list of compounds exempt from the definition of VOM. That compound was the following:

[5] These revisions are itemized in Table 2, which begins on page 10 of this opinion and order.

[6] A direct final rule is an action taken without prior publication of a notice of proposed amendments in the *Federal Register*. Instead, USEPA delays the effective date of the direct final rule and expressly states in the *Federal Register* notice that (1) the rule will become effective on a future date, without further action by USEPA, unless USEPA expressly withdraws the rule by a *Federal Register* notice that is published before that date; and (2) USEPA will withdraw the rule if it receives significant adverse comment before a stated date that is about 45 days after the date of the *Federal Register* notice adopting the direct final rule. *See, e.g.,* 78 Fed. Reg. 11101 (Feb. 15, 2013) (particularly, the "Dates" segment). Simultaneous with the notice of direct final rule, USEPA published a notice of proposed rule in the *Federal Register*. *See, e.g.*, 78 Fed. Reg. 11119 (Feb. 15, 2013). Upon receipt of significant adverse comment, USEPA will withdraw the direct final rule, leaving open the option of adoption by a future *Federal Register* notice of final rule. *See, e.g.*, 78 Fed. Reg. 23149 (Apr. 18, 2013).

trans-1-chloro-3,3,3-trifluoroprop-1-ene
CAS no.: 102687-65-0
chemical formula: $CF_3CHCHCl$
alternative names: (*1E*)-1-chloro-3,3,3-trifluoroprop-1-ene; *trans*-1-chloro-3,3,3-trifluoropropylene; Solstice 1233zd(E)

USEPA withdrew the rule on April 18, 2013 (at 78 Fed. Reg. 23149) in response to a significant adverse public comment. *See* 78 Fed. Reg. at 23149; 78 Fed. Reg. 11119 (Feb. 15, 2013). On August 28, 2013 (at 78 Fed. Reg. 53029), USEPA adopted the exemption after consideration of the comments submitted.

USEPA exempted *trans*-1-chloro-3,3,3-trifluoroprop-1-ene, which is sold under the trade name Solstice 1233zd(E), based on a 2011 petition of Honeywell Inc. The compound can be used as an aerosol and non-aerosol solvent; as a blowing agent for insulating foam for refrigerators, freezers, and hot water heaters; and as a refrigerant in commercial chillers and waste heat recovery systems. USEPA determined that the hydroxyl radical reactivity rate (k_{OH}) for Solstice is higher than the k_{OH} of the benchmark compound, ethane. USEPA determined, however, that the maximum incremental reactivity (MIR) is equivalent to ethane on a molar basis and is about two orders of magnitude lower than the MIR of ethane on a mass basis. In its intended uses, the compound would replace ozone-depleting substances that have both higher and lower k_{OH} and MIR values. USEPA further observed that Solstice 1233zd(E) has a very low global warming potential (GWP). USEPA further determined that Solstice 1233zd(E) has similar human health effects as the products for which it will substitute. The most significant include severe eye irritation, skin irritation, and frostbite. USEPA stated that precautions common among use of similar products would limit workplace exposures and address potential health reisks. *See* 78 Fed. Reg. 53029, 53030-31 (Aug. 28, 2013); 78 Fed. Reg. 11101, 11106 (Feb. 15, 2013).

Any person interested in the substance of the exemption of Solstice 1233zd(E) should refer to the February 15, 2015 and August 28, 2013 *Federal Register* discussions that accompanied the USEPA amendments. Alternatively, interested persons could contact USEPA as directed in the *Federal Register* notice.

The Present Board Action. The Board has incorporated the new exempt HCFC compound without substantive changes. Nevertheless, the Board found minor revisions to the federal text necessary. The primary revisions involve (1) the naming of the new HCFC compound in the list in Section 211.7150; and (2) arranging the compound in alphabetic order in the list. As to naming, the Board observes that USEPA omitted the hyphen that should follow the structural prefix "*trans.*" The chemical name should have appeared as "*trans*-1-chloro-3,3,3-trifluoroprop-1-ene." The Board made this correction. These revisions are itemized and summarily outlined in Table 2, which begins on page 11**Error! Bookmark not defined.**. No further discussion relative to alphabetization will appear in this opinion and order.

Deviations from the Literal Text of the Federal Amendments and Non-Federally Derived Corrections and Clarifications

The Board routinely examines federal amendments and the base text of rules open for amendments to find any areas that need correction or clarification. JCAR and the Office of the Secretary of State also routinely examine the text and suggest corrections and clarifications. Sometimes suggestions arise from the Illinois Environmental Protection Agency, USEPA, or members of the regulated community. The Board often makes revisions as a result.

The revisions thus made are not directly derived from federal amendments. The Board is ever mindful of the limited discretion authorized in the context of an identical-in-substance proceeding. The Board is limited to "those changes that are necessary for compliance with the Illinois Administrative Code," "technical changes that in no way change the scope or meaning of any portion of the regulations," and "apparent typographical and grammatical errors." *See* 415 ILCS 5/7.2(a) and (a)(7) (2012). Thus, the Board will only make minor, non-substantive corrections and clarifications in this context. These corrections are non-substantive in effect.

Tables follow that document the corrections and clarifications made in this proceeding. The first lists the deviation from the literal text of the USEPA amendments involved in this proceeding. The second lists the correction made in this docket that was not prompted by federal amendments.

Tabulations of Deviations from the Literal Text of the Federal Amendments and Miscellaneous Board Housekeeping Amendments

The tables below list numerous corrections and amendments that are not based on current federal amendments. Table 1 (beginning immediately below) lists a number of federal amendments that the Board has not included in this docket. Table 1 gives a brief explanation why the Board has declined to make each. Table 2 (beginning immediately after Table 1 on page 11) includes deviations made in this proposal for public comment from the verbatim text of the federal amendments. Table 3 (beginning immediately after Table 2 on page 12) contains corrections and clarifications that the Board made in the base text involved in this proposal. The amendments listed in Table 3 are not directly derived from the current federal amendments. Some of the entries in these tables are discussed further in appropriate segments of the general discussion beginning at page 5 of this opinion.

Table 1: Federal Amendments That Are Not Necessary in This Docket

Provision Citations 40 C.F.R./ 35 Ill. Adm. Code	USEPA Amendment/ Explanation Why Not Made in This Docket

50.100(s)(1)/ 211.7150	Change the commas after "methyl acrylate," "1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C3F7OCH3, 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)," and "methyl formate (HCOOCH3)" to semicolons./ The structure of the corresponding Illinois provision, which lists each exempt compound on a separate line, does not require the use of punctuation to separate entries.
50.100(s)(1)/ 211.7150	Add a hard hyphen to change "1,1,1,2,2,3,3-heptafluoro-3-methoxypropane" to "1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane."/ The soft hyphen is appropriate, as the hyphen is not necessary unless the methoxy moiety appears at the end of a line and a line break is necessary or desirable.

Table 2:
Deviations from the Text of the Federal Amendments

Illinois Section	40 C.F.R. Section	Revision(s)
211.2170, "bis(difluoro methoxy)(difluoro) methane"	50.100(s)(1), "$HCF_2OCF_2OCF_2H$"	Added the chemical name "bis(difluoro methoxy)(difluoro)methane"; changed "$HCF_2OCF_2OHCF_2$" to "CHF_2OCF_2-$OCHF_2$" and moved it into the parentheses; added the conjunction "or"; moved the listing into alphabetic order.
211.2170, "1,2-bis (difluoromethoxy)-1,1,2,2-tetrafluoro ethane"	50.100(s)(1), "$HCF_2OCF_2CF_2OCF_2H$"	Added the chemical name "1,2-bis (difluoromethoxy)-1,1,2,2-tetrafluoro ethane"; changed "$CHF_2OCF_2CF_2$-$OCHF_2$" to "$CHF_2OCF_2OCHF_2$" and moved it into the parentheses; added the conjunction "or"; moved the listing into alphabetic order.
211.2170, "trans-1-chloro-3,3,3-trifluoro-prop-1-ene"	50.100(s)(1), "*trans* 1-chloro-3,3,3-trifluoro-prop-1-ene"	Corrected the spelling "*trans* 1-chloro-3,3,3-trifluoroprop-1-ene" to "trans-1-chloro-3,3,3-trifluoroprop-1-ene"; moved the listing into alphabetic order.

211.2170, “(difluoro methoxy)(difluoro) methane”	50.100(s)(1), “HCF_2OCF_2H”	Added the chemical name “(difluoro methoxy)(difluoro)methane”; changed “$HCF_2OCF_2OCF_2H$” to “CHF_2OCHF_2” and moved it into the parentheses; added the conjunction “or”; moved the listing into alphabetic order.
211.2170, “1-(difloro methoxy)-2-[(difluoro methoxy)(difluoro) methoxy]-1,1,2,2-tetra fluoroethane”	50.100(s)(1), “$HCF_2OCF_2OCF_2CF_2O$-CF_2H”	Added the chemical name “1-(difloro methoxy)-2-[(difluoromethoxy) (difluoro)methoxy]-1,1,2,2-tetrafluoro ethane”; changed “$HCF_2OCF_2OCF_2$-CF_2OCF_2H” to “$CHF_2OCF_2OCF_2CF_2$-$OCHF_2$” and moved it into the parentheses; added the conjunction “or”; moved the listing into alphabetic order.

Table 3:
Board Housekeeping Amendments

Section	Source	Revision(s)
211.7150, “2-chloro-1,1,1,2-tetrafluoro-ethane”	Board	Moved the entry into correct alphabetic order.
211.7150, “3-ethoxy-1,1,1,2,3,4,4,5,5,6,6, 6-dodecafluoro-2-(trifluoromethyl)hex ane”	Board	Moved the entry into correct alphabetic order.
211.7150, “ethylfluoride”	Board	Moved the entry into correct alphabetic order.
211.7150, “2-(ethoxydifluoro-methyl)-1,1,1,2,3, 3,3-heptafluoro-propane”	Board	Corrected the condensed structural formula “((CF3)2CFCF2OC2H5)” to “($(CF_3)_2CFCF_2OC_2H_5$).”
211.7150, “1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane”	Board	Corrected the condensed structural formula “C4F9OC2H5” to “$C_4F_9OC_2H_5$.”

211.7150, "methyl formate"	Board	Corrected the condensed structural formula "HCOOCH3" to "$CHOOCH_3$."
211.7150, "1,1,1,2, 2,3,3,4,4-Nona-fluoro-4-methoxy-butane"	Board	Corrected the condensed structural formula "C4F9OCH3" to "$C_4F_9OCH_3$."

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

The Board traditionally included historical summaries of the State and federal definitions of VOM in each opinion and order. That summary traces the evolution of the federal *Recommended Policy on the Control of Volatile Organic Compounds*; USEPA's codification of the policy as a definition in 40 C.F.R. 51.100(s); subsequent amendments of 40 C.F.R. 51.100(s); the several dockets that the Board has reserved to accommodate federal amendments, including indication of the several amendments to the definition of VOM that the Board has made based on USEPA's actions.

In a break from past tradition, the Board no longer includes the lengthy summaries in opinions and orders relating to the definition of VOM. The Board maintains an updated version of the historical summaries on the Board's website: www.ipcb.state.il.us. Persons wishing to review the historical summaries of the federal and State exemptions from the definitions of VOM must consult the Board's website or Board staff to do so.

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

Section
211.101 Incorporated and Referenced Materials
211.102 Abbreviations and Conversion Factors

SUBPART B: DEFINITIONS

211.660 Automotive/Transportation Plastic Parts
211.665 Auxiliary Boiler
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
211.715 Bedliner
211.730 Binders
211.735 Black Coating
211.740 Brakehorsepower (rated-bhp)
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
211.825 Camouflage Coating
211.830 Can
211.850 Can Coating
211.870 Can Coating Line
211.880 Cap Sealant
211.890 Capture
211.910 Capture Device
211.930 Capture Efficiency
211.950 Capture System
211.953 Carbon Adsorber
211.954 Cavity Wax
211.955 Cement
211.960 Cement Kiln
211.965 Ceramic Tile Installation Adhesive
211.970 Certified Investigation
211.980 Chemical Manufacturing Process Unit
211.990 Choke Loading
211.995 Circulating Fluidized Bed Combustor
211.1000 Class II Finish
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
211.1128 Closed Molding
211.1130 Closed Purge System
211.1150 Closed Vent System

211.1170 Coal Refuse
211.1190 Coating
211.1210 Coating Applicator
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211.1290 Coil Coating Line
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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
211.1435 Container Glass
211.1455 Contact Adhesive
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
211.1560 Cove Base
211.1565 Cove Base Installation Adhesive
211.1570 Crude Oil
211.1590 Crude Oil Gathering
211.1610 Crushing
211.1630 Custody Transfer
211.1650 Cutback Asphalt
211.1655 Cyanoacrylate Adhesive
211.1670 Daily-Weighted Average VOM Content
211.1690 Day
211.1700 Deadener
211.1710 Degreaser
211.1730 Delivery Vessel
211.1740 Diesel Engine
211.1745 Digital Printing

211.1750 Dip Coating
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
211.1872 Ejection Cartridge Sealant
211.1875 Elastomeric Materials
211.1876 Electric Dissipating Coating
211.1877 Electric-Insulating Varnish
211.1878 Electrical Apparatus Component
211.1880 Electrical Switchgear Compartment Coating
211.1882 Electrodeposition Primer (EDP)
211.1883 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
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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
211.2040 Etching Filler
211.2050 Ethanol Blend Gasoline
211.2055 Ethylene Propylenediene Monomer (DPDM) Roof Membrane
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
211.2200 Extreme High-Gloss Coating
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
211.2320 Finish Primer Surfacer
211.2330 Firebox
211.2350 Fixed-Roof Tank
211.2355 Flare
211.2357 Flat Glass
211.2358 Flat Wood Paneling
211.2359 Flat Wood Paneling Coating Line
211.2360 Flexible Coating
211.2365 Flexible Operation Unit
211.2368 Flexible Packaging
211.2369 Flexible Vinyl
211.2370 Flexographic Printing
211.2390 Flexographic Printing Line
211.2410 Floating Roof
211.2415 Fog Coat
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
211.2525 Gasket/Gasket Sealing Material
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
211.2615 General Work Surface
211.2620 Generator
211.2622 Glass Bonding Primer
211.2625 Glass Melting Furnace
211.2630 Gloss Reducers
211.2650 Grain
211.2670 Grain-Drying Operation
211.2690 Grain-Handling and Conditioning Operation
211.2710 Grain-Handling Operation
211.2730 Green-Tire Spraying
211.2750 Green Tires
211.2770 Gross Heating Value
211.2790 Gross Vehicle Weight Rating
211.2800 Hardwood Plywood
211.2810 Heated Airless Spray
211.2815 Heat Input

211.2820 Heat Input Rate
211.2825 Heat-Resistant Coating
211.2830 Heatset
211.2840 Heatset Web Letterpress Printing Line
211.2850 Heatset Web Offset Lithographic Printing Line
211.2870 Heavy Liquid
211.2890 Heavy Metals
211.2910 Heavy Off-Highway Vehicle Products
211.2930 Heavy Off-Highway Vehicle Products Coating
211.2950 Heavy Off-Highway Vehicle Products Coating Line
211.2955 High Bake Coating
211.2956 High Build Primer Surfacer
211.2958 High Gloss Coating
211.2960 High-Performance Architectural Coating
211.2965 High Precision Optic
211.2970 High Temperature Aluminum Coating
211.2980 High Temperature Coating
211.2990 High Volume Low Pressure (HVLP) Spray
211.3010 Hood
211.3030 Hot Well
211.3050 Housekeeping Practices
211.3070 Incinerator
211.3090 Indirect Heat Transfer
211.3095 Indoor Floor Covering Installation Adhesive
211.3100 Industrial Boiler
211.3110 Ink
211.3120 In-Line Repair
211.3130 In-Process Tank
211.3150 In-Situ Sampling Systems
211.3170 Interior Body Spray Coat
211.3190 Internal-Floating Roof
211.3210 Internal Transferring Area
211.3215 Janitorial Cleaning
211.3230 Lacquers
211.3240 Laminate
211.3250 Large Appliance
211.3270 Large Appliance Coating
211.3290 Large Appliance Coating Line
211.3300 Lean-Burn Engine
211.3305 Letterpress Printing Line
211.3310 Light Liquid
211.3330 Light-Duty Truck
211.3350 Light Oil
211.3355 Lime Kiln
211.3370 Liquid/Gas Method
211.3390 Liquid-Mounted Seal

211.3410 Liquid Service
211.3430 Liquids Dripping
211.3450 Lithographic Printing Line
211.3470 Load-Out Area
211.3475 Load Shaving Unit
211.3480 Loading Event
211.3483 Long Dry Kiln
211.3485 Long Wet Kiln
211.3487 Low-NOx Burner
211.3490 Low Solvent Coating
211.3500 Lubricating Oil
211.3505 Lubricating Wax/Compound
211.3510 Magnet Wire
211.3530 Magnet Wire Coating
211.3550 Magnet Wire Coating Line
211.3555 Maintenance Cleaning
211.3570 Major Dump Pit
211.3590 Major Metropolitan Area (MMA)
211.3610 Major Population Area (MPA)
211.3620 Manually Operated Equipment
211.3630 Manufacturing Process
211.3650 Marine Terminal
211.3660 Marine Vessel
211.3665 Mask Coating
211.3670 Material Recovery Section
211.3690 Maximum Theoretical Emissions
211.3695 Maximum True Vapor Pressure
211.3705 Medical Device
211.3707 Medical Device and Pharmaceutical Manufacturing
211.3710 Metal Furniture
211.3730 Metal Furniture Coating
211.3750 Metal Furniture Coating Line
211.3760 Metallic Coating
211.3770 Metallic Shoe-Type Seal
211.3775 Metal to Urethane/Rubber Molding or Casting Adhesive
211.3780 Mid-Kiln Firing
211.3785 Military Specification Coating
211.3790 Miscellaneous Fabricated Product Manufacturing Process
211.3810 Miscellaneous Formulation Manufacturing Process
211.3820 Miscellaneous Industrial Adhesive Application Operation
211.3830 Miscellaneous Metal Parts and Products
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
211.3915 Mobile Equipment

211.3925 Mold Seal Coating
211.3930 Monitor
211.3950 Monomer
211.3960 Motor Vehicles
211.3961 Motor Vehicle Adhesive
211.3965 Motor Vehicle Refinishing
211.3966 Motor Vehicle Weatherstrip Adhesive
211.3967 Mouth Waterproofing Sealant
211.3968 Multi-Colored Coating
211.3969 Multi-Component Coating
211.3970 Multiple Package Coating
211.3975 Multipurpose Construction Adhesive
211.3980 Nameplate Capacity
211.3985 Natural Finish Hardwood Plywood Panel
211.3990 New Grain-Drying Operation (Repealed)
211.4010 New Grain-Handling Operation (Repealed)
211.4030 No Detectable Volatile Organic Material Emissions
211.4050 Non-Contact Process Water Cooling Tower
211.4052 Non-Convertible Coating
211.4055 Non-Flexible Coating
211.4065 Non-Heatset
211.4067 NO_x Trading Program
211.4070 Offset
211.4080 One-Component Coating
211.4090 One Hundred Percent Acid
211.4110 One-Turn Storage Space
211.4130 Opacity
211.4150 Opaque Stains
211.4170 Open Top Vapor Degreasing
211.4190 Open-Ended Valve
211.4210 Operator of a Gasoline Dispensing Operation or Operator of a Gasoline Dispensing Facility
211.4220 Optical Coating
211.4230 Organic Compound
211.4250 Organic Material and Organic Materials
211.4260 Organic Solvent
211.4270 Organic Vapor
211.4280 Other Glass
211.4285 Outdoor Floor Covering Installation Adhesive
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
211.4455 Pan-Backing Coating
211.4460 Panel
211.4470 Paper Coating
211.4490 Paper Coating Line
211.4510 Particulate Matter
211.4530 Parts Per Million (Volume) or PPM (Vol)
211.4540 Perimeter Bonded Sheet Flooring
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
211.4735 Plastic
211.4740 Plastic Part
211.4750 Plasticizers
211.4760 Plastic Solvent Welding Adhesive
211.4765 Plastic Solvent Welding Adhesive Primer
211.4768 Pleasure Craft
211.4769 Pleasure Craft Surface Coating
211.4770 PM-10
211.4790 Pneumatic Rubber Tire Manufacture
211.4810 Polybasic Organic Acid Partial Oxidation Manufacturing Process
211.4830 Polyester Resin Material(s)
211.4850 Polyester Resin Products Manufacturing Process
211.4870 Polystyrene Plant
211.4890 Polystyrene Resin
211.4895 Polyvinyl Chloride Plastic (PVC Plastic)
211.4900 Porous Material
211.4910 Portable Grain-Handling Equipment
211.4930 Portland Cement Manufacturing Process Emission Source
211.4950 Portland Cement Process or Portland Cement Manufacturing Plant
211.4960 Potential Electrical Output Capacity
211.4970 Potential to Emit
211.4990 Power Driven Fastener Coating
211.5010 Precoat
211.5012 Prefabricated Architectural Coating
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 Coating
211.5062 Pretreatment Wash Primer
211.5065 Primary Product
211.5070 Prime Coat
211.5075 Primer Sealant
211.5080 Primer Sealer
211.5090 Primer Surfacer Coat
211.5110 Primer Surfacer Operation
211.5130 Primers
211.5140 Printed Interior Panel
211.5150 Printing
211.5170 Printing Line
211.5185 Process Emission Source
211.5190 Process Emission Unit
211.5195 Process Heater
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
211.5335 Radiation Effect Coating
211.5340 Rated Heat Input Capacity
211.5350 Reactor
211.5370 Reasonably Available Control Technology (RACT)
211.5390 Reclamation System
211.5400 Red Coating
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
211.5520 Reinforced Plastic Composite
211.5530 Repair
211.5535 Repair Cleaning
211.5550 Repair Coat
211.5570 Repaired
211.5580 Repowering
211.5585 Research and Development Operation
211.5590 Residual Fuel Oil

211.5600 Resist Coat
211.5610 Restricted Area
211.5630 Retail Outlet
211.5640 Rich-Burn Engine
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
211.5800 Rubber
211.5810 Safety Relief Valve
211.5830 Sandblasting
211.5850 Sanding Sealers
211.5860 Scientific Instrument
211.5870 Screening
211.5875 Screen Printing
211.5880 Screen Printing on Paper
211.5885 Screen Reclamation
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
211.5985 Sheet Rubber Lining Installation
211.5987 Shock-Free Coating
211.5990 Shotblasting
211.6010 Side-Seam Spray Coat
211.6012 Silicone-Release Coating
211.6015 Single-Ply Roof Membrane
211.6017 Single-Ply Roof Membrane Adhesive Primer
211.6020 Single-Ply Roof Membrane Installation and Repair Adhesive
211.6025 Single Unit Operation
211.6030 Smoke
211.6050 Smokeless Flare
211.6060 Soft Coat
211.6063 Solar-Absorbent Coating
211.6065 Solids Turnover Ratio (R_T)
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
211.6405 Sterilization Indicating Ink
211.6410 Storage Tank or Storage Vessel
211.6420 Strippable Spray Booth Coating
211.6425 Stripping
211.6427 Structural Glazing
211.6430 Styrene Devolatilizer Unit
211.6450 Styrene Recovery Unit
211.6460 Subfloor
211.6470 Submerged Loading Pipe
211.6490 Substrate
211.6510 Sulfuric Acid Mist
211.6530 Surface Condenser
211.6535 Surface Preparation
211.6540 Surface Preparation Materials
211.6550 Synthetic Organic Chemical or Polymer Manufacturing Plant
211.6570 Tablet Coating Operation
211.6580 Texture Coat
211.6585 Thin Metal Laminating Adhesive
211.6587 Thin Particleboard
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
211.6635 Tileboard
211.6640 Tire Repair
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
211.6740 Translucent Coating
211.6750 Tread End Cementing
211.6770 True Vapor Pressure
211.6780 Trunk Interior Coating
211.6790 Turnaround
211.6810 Two-Piece Can
211.6825 Underbody Coating
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
211.6885 Vacuum Metalizing Coating
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
211.7220 Waterproof Resorcinol Glue
211.7230 Weak Nitric Acid Manufacturing Process
211.7240 Weatherstrip Adhesive
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

211.APPENDIX A Rule into Section Table

211.APPENDIX B Section into Rule Table

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

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. 108, 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 R07-18 at 31 Ill. Reg. 14254, effective September 25, 2007; amended in R08-6 at 32 Ill. Reg. 1387, effective January 16, 2008; amended in R07-19 at 33 Ill. Reg. 11982, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13326, effective August 31, 2009; amended in R10-7 at 34 Ill. Reg. 1391, effective January 11, 2010; amended in R10-8 at 34 Ill. Reg. 9069, effective June 25, 2010; amended in R10-20 at 34 Ill. Reg. 14119, effective September 14, 2010; amended in R11-23 at 35 Ill. Reg. 13451, effective July 27, 2011; amended in R12-24 at 37 Ill. Reg. 1662, effective

January 28, 2013; amended in R13-1 at 37 Ill. Reg. 1913, effective February 4, 2013; amended in R14-7 at 37 Ill. Reg. _____, effective _____.

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

"Volatile organic material" (also "VOM") or "volatile organic compound" (also "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 organic compound that participates in atmospheric photochemical reactions, other than the compounds listed in this subsection (a). 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)
Bis(difluoromethoxy)(difluoro)methane ($CHF_2OCF_2OCHF_2$ or HFE-236cal2)
1,2-Bis(difluoromethoxy)-1,1,2,2-tetrafluoroethane ($CHF_2OCF_2CF_2OCHF_2$ or HFE-338pcc13)
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)
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
trans-1-chloro-3,3,3-trifluoroprop-1-ene
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)
(Difloromethoxy)(difluoro)methane (CHF_2OCHF_2 or HFE-134)

1-(Difloromethoxy)-2-[(difluoromethoxy)(difluoro)methoxy]-1,1,2,2-tetrafluoroethane ($CHF_2OCF_2OCF_2CF_2OCHF_2$ or HFE-43-10pccc)
2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3)
Dimethyl carbonate
Ethane
2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ~~((CF3)2CFCF2OC2H5)~~ ($(CF_3)_2CFCF_2OC_2H_5$)
~~Ethylfluoride (HFC-161)~~
3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500)
1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (~~C4F9OC2H5~~ $C_4F_9OC_2H_5$ or HFE-7200)
~~3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500)~~
Ethylfluoride (HFC-161)
1,1,1,2,2,3,3-Heptafluoro-3-methoxypropane (~~n-C3F7OCH3~~ n-$C_3F_7OCH_3$ 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 ~~(HCOOCH3)~~ ($CHOOCH_3$)
1,1,1,2,2,3,3,4,4-Nonafluoro-4-methoxybutane (~~C4F9OCH3~~ $C_4F_9OCH_3$ 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

Propylene carbonate (4-methyl-1,3-dioxolan-2-one)
Siloxanes: cyclic, branched, or linear completely-methylated
1,1,2,2-Tetrafluoroethane (HFC-134)

1,1,1,2-Tetrafluoroethane (HFC-134a)
trans-1,3,3,3-Tetrafluoropropene (HFO-1234ze)
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.

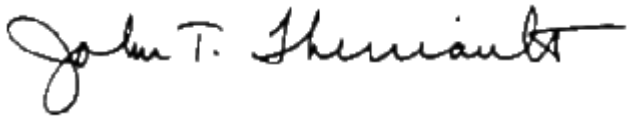
d) The USEPA will not be bound by any State determination as to appropriate methods for testing or monitoring negligibly-reactive compounds if such determination is not reflected in any of the test methods in subsection (b) above.

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 37 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on September 5, 2013, by a vote of 4-0.



John T. Therriault, Clerk
Illinois Pollution Control Board