

Rulemaking Hearing Rules
of
Tennessee Department of Environment and Conservation
Bureau of Environment
Division of Air Pollution Control

Chapter 1200-3-18
Volatile Organic Compounds

Amendments

Paragraphs (26) and (88) of rule 1200-3-18-.01 are amended to include additional compounds in the list of organic compounds which are not considered to be volatile organic compounds.

Chapter 1200-3-18 is amended in the following two respects:

Paragraph (26) of rule 1200-3-18-.01 Definitions is amended by substituting for the present paragraph a different paragraph so that, as amended, the resulting paragraph shall read:

(26) “Exempt compounds” means any of the following compounds:

- (a) Carbon monoxide; carbon dioxide; carbonic acid; metallic carbides and carbonates; ammonium carbonate; methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,1,2,2-trifluoroethane(CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 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);1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 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); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1-chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OCH₃); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OC₂H₅); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (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)
- (b) Perfluorocarbon compounds which fall into these classes:
 - 1. Cyclic, branched, or linear, completely fluorinated alkanes
 - 2. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

3. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
 4. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- (c) The following compound(s) are not exempt for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are exempt for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

Authority: T.C.A. §§4-5-201 et seq., 4-5-202, and 68-201-105. Administrative History: Original rule filed May 15, 1979; effective July 10, 1979. Amendment filed April 23, 1981; effective December 14, 1981. Amendment filed September 21, 1988; effective November 6, 1988. Amendment filed April 23, 1992; effective June 7, 1992. Repeal and new rule filed March 8, 1993; effective April 22, 1993. Amendment filed July 27, 1995; effective October 9, 1995. Amendment filed May 30, 1996; effective August 10, 1996. Amendment filed October 31, 1997; effective January 12, 1998. Amendment filed June 18, 1999; effective September 1, 1999.

Paragraph (88) of rule 1200-3-18-.01 Definitions is amended by substituting for the present paragraph a different paragraph so that, as amended, the resulting paragraph shall read:

(88) “Volatile organic compounds (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

- (a) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 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); 1,1-difluoroethane (HFC-152a); perchlorobenzotrifluoride (PCBTf); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 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); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1-chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OCH₃); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OC₂H₅); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (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); methyl formate (HCOOCH₃); and perfluorocarbon compounds which fall into these classes:

1. Cyclic, branched, or linear, completely fluorinated alkanes;

2. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
 3. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
 4. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- (b) For purposes of determining compliance with emissions limits, VOC will be measured by the test methods in the approved State implementation plan (SIP) or 40 CFR part 60, Appendix A, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by the Technical Secretary.
- (c) As a precondition to excluding these compounds as VOC or at any time thereafter, the Technical Secretary may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Technical Secretary, the amount of negligibly-reactive compounds in the source's emissions.
- (d) For purposes of enforcement for a specific source, the test methods specified in these regulations, in the approved SIP, or in a permit issued pursuant to these regulations shall be used.
- (e) The following compound(s) are VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

Authority: T.C.A. §§4-5-201 et.seq., 4-5-202, and 68-201-105. Administrative History: Original rule filed May 15, 1979; effective July 10, 1979. Amendment filed April 23, 1981; effective December 14, 1981. Amendment filed September 21, 1988; effective November 6, 1988. Amendment filed April 23, 1992; effective June 7, 1992. Repeal and new rule filed March 8, 1993; effective April 22, 1993. Amendment filed July 27, 1995; effective October 9, 1995. Amendment filed May 30, 1996; effective August 10, 1996. Amendment filed October 31, 1997; effective January 12, 1998. Amendment filed June 18, 1999; effective September 1, 1999.

The rulemaking hearing rule set out herein was properly filed in the Department of State on the 7th day of March, 2006, and will become effective on the 21st day of May, 2006.