



6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R03-OAR-2017-0544; FRL-9972-40-Region 3]**

**Approval and Promulgation of Air Quality Implementation Plans;  
Virginia; Revisions to the Regulatory Definition of Volatile Organic Compound**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve two state implementation plan (SIP) revisions (Revision C16 and Revision I16) formally submitted by the Commonwealth of Virginia. These revisions pertain to amendments made to the definition of “volatile organic compound” (VOC) in the Virginia Administrative Code to conform with EPA’s regulatory definition of VOC. Specifically, these amendments remove the record keeping and reporting requirements for t-butyl acetate (also known as tertiary butyl acetate or TBAC; Chemical Abstracts Service [CAS] number: 540-88-5) and add 1,1,2,2-Tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane (also known as HFE-347pcf2; CAS number: 406-78-0) as a compound excluded from the regulatory definition of VOC, which match actions EPA has taken. EPA is approving these revisions to update the definition of VOC in the Virginia SIP under the Clean Air Act (CAA).

**DATES:** Written comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R03-OAR-2017-

0544 at <http://www.regulations.gov>, or via email to [pino.maria@epa.gov](mailto:pino.maria@epa.gov). For comments submitted at [Regulations.gov](http://www.regulations.gov), follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from [Regulations.gov](http://www.regulations.gov). For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “For Further Information Contact” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Sara Calcinore, (215) 814-2043, or by e-mail at [calcinore.sara@epa.gov](mailto:calcinore.sara@epa.gov).

**SUPPLEMENTARY INFORMATION:** On July 31, 2017, the Commonwealth of Virginia, through the Virginia Department of Environmental Quality (VADEQ), submitted two SIP revisions (Revisions C16 and Revision I16). Revision C16 requested that the definition of VOC be updated in the Virginia SIP to conform with EPA’s February 25, 2016 (81 FR 9339) final rulemaking updating EPA’s regulatory definition of VOC in 40 CFR 51.100(s) to remove the recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory

requirements related to the use of TBAC as a VOC. Revision I16 requests that the definition of VOC be updated in the Virginia SIP to conform with EPA's August 1, 2016 (81 FR 50330) final rulemaking updating EPA's regulatory definition of VOC in 40 CFR 51.100(s) to add 1,1,2,2-Tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane to the list of compounds excluded from EPA's regulatory definition of VOC.

## **I. Background**

VOCs are organic compounds of carbon that, in the presence of sunlight, react with sources of oxygen molecules, such as nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO), in the atmosphere to produce tropospheric ozone, commonly known as smog. Common sources that may emit VOCs include paints, coatings, housekeeping and maintenance products, and building and furnishing materials. Outdoor emissions of VOCs are regulated by EPA primarily to prevent the formation of ozone.

VOCs have different levels of volatility, depending on the compound, and react at different rates to produce varying amounts of ozone. VOCs that are non-reactive or of negligible reactivity to form ozone react slowly and/or form less ozone; therefore, reducing their emissions has limited effects on local or regional ozone pollution. Section 302(s) of the CAA specifies that EPA has the authority to define the meaning of VOC and what compounds shall be treated as VOCs for regulatory purposes. It is EPA's policy that organic compounds with a negligible level of reactivity should be excluded from the regulatory definition of VOC in order to focus control efforts on compounds that significantly affect ozone concentrations. EPA uses the reactivity of ethane as the threshold for determining whether a compound has negligible reactivity. Compounds that are less reactive than, or equally reactive to, ethane under certain assumed

conditions may be deemed negligibly reactive and, therefore, suitable for exemption by EPA from the regulatory definition of VOC. The policy of excluding negligibly reactive compounds from the regulatory definition of VOC was first laid out in the “Recommended Policy on Control of Volatile Organic Compounds” (42 FR 35314, July 8, 1977) and was supplemented subsequently with the “Interim Guidance on Control of Volatile Organic Compounds in Ozone State Implementation Plans” (70 FR 54046, September 13, 2005). The regulatory definition of VOC as well as a list of compounds that are designated by EPA as negligibly reactive can be found at 40 CFR 51.100(s).

On September 30, 1999, EPA proposed to revise the regulatory definition of VOC in 40 CFR 51.100(s) to exclude TBAC as a VOC (64 FR 52731). In most cases, when a negligibly reactive VOC is exempted from the definition of VOC, emissions of that compound are no longer recorded, collected, or reported to states or the EPA as part of VOC emissions. However, EPA’s final rule excluded TBAC from the definition of VOC for purposes of VOC emissions limitations or VOC content requirements, but continued to define TBAC as a VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements that apply to VOC (69 FR 69298, November 29, 2004) (2004 Final Rule). This was primarily due to EPA’s conclusion in the 2004 Final Rule that “negligibly reactive” compounds may contribute significantly to ozone formation if present in sufficient quantities and that emissions of these compounds need to be represented accurately in photochemical modeling analyses. Per EPA’s 2004 Final Rule, Virginia partially excluded TBAC from the regulatory definition of VOC, which was approved into Virginia’s SIP on August 18, 2006 (71 FR 47742).

When EPA exempted TBAC from the VOC definition for purposes of control requirements in

the 2004 Final Rule, EPA created a new category of compounds and a new reporting requirement that required that emissions of TBAC be reported separately by states and, in turn, by industry. However, EPA did not issue any guidance on how TBAC emissions should be tracked and reported. Therefore, the data that was reported as a result of these requirements was incomplete and inconsistent. Also, in the 2004 Final Rule, EPA stated that the primary objective of the recordkeeping and reporting requirements for TBAC was to address the cumulative impacts of “negligibly reactive” compounds and suggested that future exempt compounds may also be subject to such requirements. However, such requirements were not included in any other proposed or final VOC exemptions.

Because having high quality data on TBAC emissions alone was unlikely to be useful in assessing the cumulative impacts of “negligibly reactive” compounds on ozone formation, EPA subsequently concluded that the recordkeeping and reporting requirements for TBAC were not achieving their primary objective of informing more accurate photochemical modeling in support of SIP submissions. Also, there was no evidence that TBAC was being used at levels that would cause concern for ozone formation and that the requirements were not providing sufficient information to evaluate the cumulative impacts of exempted compounds. Therefore, because the requirements were not addressing EPA’s concerns as they were intended, EPA revised the regulatory definition of VOC under 40 CFR 51.100(s) to remove the recordkeeping and reporting requirements for TBAC (February 25, 2016, 81 FR 9341). EPA’s rationale for this action is explained in more detail in the final rule for that action. *See* 81 FR 50330 (August 1, 2016).

On August 1, 2016, EPA promulgated a final rule revising the regulatory definition of VOC in 40 CFR 51.100(s) to add HFE-347pcf2 to the list of compounds excluded from the regulatory

definition of VOC (81 FR 50330). This action was based on EPA's consideration of the compound's negligible reactivity and low contribution to ozone as well as the low likelihood of risk to human health or the environment. EPA's rationale for this action is explained in more detail in the final rule for this action. *See* 81 FR 50330 (August 1, 2016).

## **II. Summary of SIP Revision and EPA Analysis**

In order to conform with EPA's current regulatory definition of VOC in 40 CFR 51.100(s), the Virginia State Air Pollution Control Board amended the definition of VOC in 9 VAC 5-10-20. These amendments removed the recordkeeping and reporting requirements for TBAC (Revision C16) and added HFE-347pcf2 to the list of compounds excluded from the regulatory definition of VOC (Revision I16). Revision C16 was adopted by the State Air Pollution Control Board on June 17, 2016 and was effective as of December 15, 2016. Revision I16 was adopted by the State Air Pollution Control Board on December 5, 2014 and was effective as of July 30, 2015. VADEQ formally submitted Revision C16 and Revision I16 as two separate SIP revisions on July 31, 2017.

Virginia's amendments to the definition of VOC in 9 VAC 5-10-20 are in accordance with EPA's regulatory changes to the definition of VOC in 40 CFR 51.100(s) and are therefore approvable for the Virginia SIP in accordance with CAA section 110. Also, because EPA has made the determination that TBAC and HFE-347pcf2 are of negligible reactivity and therefore have low contributions to ozone as well as low likelihood of risk to human health or the environment, removing these chemicals from the definition of VOC in the Virginia SIP as well as the recordkeeping and reporting requirements for these chemicals will not interfere with attainment of any NAAQS, reasonable further progress, or any other requirement of the CAA.

Thus, the removal of the recordkeeping and reporting requirements for TBAC and the addition of HFR-347pcf2 to the list of compounds excluded from the regulatory definition of VOC is in accordance with CAA section 110(l).

### **III. Proposed Action**

EPA is proposing to approve both Revision C16 and Revision I16, submitted on July 31, 2017, as revisions to the Virginia SIP, as the submissions meet the requirements of CAA section 110. Revision C16 updates the regulatory definition of VOC in the Virginia SIP and removes the recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements related to the use of TBAC as a VOC. Revision I16 updates the regulatory definition of VOC in the Virginia SIP to add HFE-347pcf2 to the list of compounds excluded from the regulatory definition of VOC. EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action.

### **IV. General Information Pertaining to SIP Submittals from the Commonwealth of Virginia**

In 1995, Virginia adopted legislation that provides, subject to certain conditions, for an environmental assessment (audit) “privilege” for voluntary compliance evaluations performed by a regulated entity. The legislation further addresses the relative burden of proof for parties either asserting the privilege or seeking disclosure of documents for which the privilege is claimed. Virginia's legislation also provides, subject to certain conditions, for a penalty waiver for violations of environmental laws when a regulated entity discovers such violations pursuant to a voluntary compliance evaluation and voluntarily discloses such violations to the Commonwealth and takes prompt and appropriate measures to remedy the violations. Virginia’s Voluntary Environmental Assessment Privilege Law, Va. Code Sec. 10.1-1198, provides a privilege that

protects from disclosure documents and information about the content of those documents that are the product of a voluntary environmental assessment. The Privilege Law does not extend to documents or information that: (1) Are generated or developed before the commencement of a voluntary environmental assessment; (2) are prepared independently of the assessment process; (3) demonstrate a clear, imminent and substantial danger to the public health or environment; or (4) are required by law.

On January 12, 1998, the Commonwealth of Virginia Office of the Attorney General provided a legal opinion that states that the Privilege law, Va. Code Sec. 10.1-1198, precludes granting a privilege to documents and information “required by law,” including documents and information “required by federal law to maintain program delegation, authorization or approval,” since Virginia must “enforce federally authorized environmental programs in a manner that is no less stringent than their federal counterparts. . . .” The opinion concludes that “[r]egarding § 10.1-1198, therefore, documents or other information needed for civil or criminal enforcement under one of these programs could not be privileged because such documents and information are essential to pursuing enforcement in a manner required by federal law to maintain program delegation, authorization or approval.”

Virginia’s Immunity law, Va. Code Sec. 10.1-1199, provides that “[t]o the extent consistent with requirements imposed by federal law,” any person making a voluntary disclosure of information to a state agency regarding a violation of an environmental statute, regulation, permit, or administrative order is granted immunity from administrative or civil penalty. The Attorney General’s January 12, 1998 opinion states that the quoted language renders this statute inapplicable to enforcement of any federally authorized programs, since “no immunity could be

afforded from administrative, civil, or criminal penalties because granting such immunity would not be consistent with federal law, which is one of the criteria for immunity.”

Therefore, EPA has determined that Virginia’s Privilege and Immunity statutes will not preclude the Commonwealth from enforcing its program consistent with the federal requirements. In any event, because EPA has also determined that a state audit privilege and immunity law can affect only state enforcement and cannot have any impact on federal enforcement authorities, EPA may at any time invoke its authority under the CAA, including, for example, sections 113, 167, 205, 211 or 213, to enforce the requirements or prohibitions of the state plan, independently of any state enforcement effort. In addition, citizen enforcement under section 304 of the CAA is likewise unaffected by this, or any, state audit privilege or immunity law.

## **V. Incorporation by Reference**

In this proposed rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the updated definition of VOC in 9 VAC 5-10-20 of the Virginia Administrative Code that removed the recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements related to the use of TBAC as a VOC and added HFE-347pcf2 to the list of compounds excluded from the regulatory definition of VOC. EPA has made, and will continue to make, these materials generally available through <http://www.regulations.gov> and at the EPA Region III Office (please contact the person identified in the “For Further Information Contact” section of this preamble for more information).

## **VI. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866.
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

This action amending the definition of VOC in the Virginia SIP to conform with the regulatory definition of VOC in 40 CFR 51.100(s) is not approved to apply on any Indian reservation land as defined in 18 U.S.C. 1151 or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 et seq.

Dated: December 12, 2017.

Cosmo Servidio,  
Regional Administrator,  
Region III.

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