6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R01-OAR-2017-0696; FRL-9979-82-Region 1]**

# Air Plan Approval; Vermont; Infrastructure State Implementation Plan Requirements for the 2012 $PM_{2.5}$ NAAQS

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

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve elements of a State Implementation Plan (SIP) submission from Vermont that addresses the infrastructure requirements of the Clean Air Act (CAA or Act)—including the interstate transport provisions—for the 2012 fine particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS). The infrastructure requirements are designed to ensure that the structural components of each state's air quality management program are adequate to meet the state's responsibilities under the CAA. This action is being taken under the Clean Air Act.

**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-R01-OAR-2017-0696, to the www.regulations.gov web site or via email to simcox.alison@epa.gov. For comments submitted to the www.regulations.gov web site, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from www.regulations.gov. For either manner of submission, the 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. The 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 www.epa.gov/dockets/commenting-epa-dockets. Publicly available docket materials are available at www.regulations.gov or at the U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square – Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding legal holidays.

**FOR FURTHER INFORMATION CONTACT:** Alison C. Simcox, Air Quality Unit, U.S. Environmental Protection Agency, EPA New England Regional Office, 5 Post Office Square - Suite 100, (Mail code OEP05-2), Boston, MA 02109 - 3912, tel. (617) 918-1684; simcox.alison@epa.gov.

**SUPPLEMENTARY INFORMATION:** Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA.

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## I. Background and Purpose

### A. What Vermont SIP submissions does this rulemaking address?

This rulemaking addresses a SIP submission from the Vermont Department of Environmental Conservation (VT DEC). The state submitted its infrastructure SIP for the 2012 fine particle ($PM_{2.5}$[1]) National Ambient Air Quality Standard (NAAQS) on October 31, 2017. This included an enclosure addressing the "Good Neighbor" (or "transport") provisions for the 2012 $PM_{2.5}$ NAAQS (Section 110(a)(2)(D)(i)(I) of the CAA). Under sections 110(a)(1) and (2) of the CAA, states are required to submit infrastructure SIPs to ensure that SIPs provide for implementation, maintenance, and enforcement of the NAAQS, including the 2012 $PM_{2.5}$ NAAQS.

**B. What is the scope of this rulemaking?**

EPA is acting on a SIP submission from Vermont that addresses the infrastructure requirements of CAA sections 110(a)(1) and 110(a)(2) for the 2012 $PM_{2.5}$ NAAQS.

The requirement for states to make a SIP submission of this type arises out of CAA sections 110(a)(1) and 110(a)(2). Pursuant to these sections, each state must submit a SIP that provides for the implementation, maintenance, and enforcement of each primary or secondary NAAQS. States must make such SIP submission "within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a new or revised NAAQS." This requirement is triggered by the promulgation of a new or revised NAAQS and is not conditioned upon EPA's taking any other action. Section 110(a)(2) includes the specific elements that "each such plan" must address.

EPA commonly refers to such SIP submissions intended to satisfy the requirements of CAA sections 110(a)(1) and 110(a)(2) as "infrastructure SIP" submissions. Although the term

[1] $PM_{2.5}$ refers to particulate matter of 2.5 microns or less in diameter, often referred to as "fine" particles.

"infrastructure SIP" does not appear in the CAA, EPA uses the term to distinguish this type of SIP submission from submissions that are intended to satisfy other SIP requirements under the CAA, such as "nonattainment SIP" or "attainment plan SIP" submissions to address the nonattainment planning requirements of part D of title I of the CAA.

This rulemaking will not cover three substantive areas that are not integral to acting on a state's infrastructure SIP submission: (i) existing provisions related to excess emissions during periods of start-up, shutdown, or malfunction at sources ("SSM" emissions) that may be contrary to the CAA and EPA's policies addressing such excess emissions; (ii) existing provisions related to "director's variance" or "director's discretion" that purport to permit revisions to SIP-approved emissions limits with limited public process or without requiring further approval by EPA, that may be contrary to the CAA ("director's discretion"); and, (iii) existing provisions for Prevention of Significant Deterioration (PSD) programs that may be inconsistent with current requirements of EPA's "Final New Source Review (NSR) Improvement Rule," 67 FR 80186 (December 31, 2002), as amended by 72 FR 32526 (June 13, 2007) ("NSR Reform"). Instead, EPA has the authority to address each one of these substantive areas separately. A detailed history, interpretation, and rationale for EPA's approach to infrastructure SIP requirements can be found in EPA's May 13, 2014, proposed rule entitled, "Infrastructure SIP Requirements for the 2008 Lead NAAQS" in the section, "What is the scope of this rulemaking?" *See* 79 FR 27241 at 27242–45.

**II. What guidance is EPA using to evaluate these SIP submissions?**

EPA highlighted the statutory requirement to submit infrastructure SIPs within 3 years of promulgation of a new NAAQS in an October 2, 2007, guidance document entitled "Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 1997 8-hour Ozone and

$PM_{2.5}$ National Ambient Air Quality Standards" (2007 Guidance). EPA has issued additional guidance documents and memoranda, including a September 13, 2013, guidance document entitled "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)" (2013 Guidance) and a September 25, 2009, guidance document entitled "Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS)" (2009 Guidance).[2]

With respect to the Good Neighbor provision, the most recent relevant document was a memorandum published on March 17, 2016, entitled "Information on the Interstate Transport 'Good Neighbor' Provision for the 2012 Fine Particulate Matter National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)" (2016 memorandum). The 2016 memorandum describes EPA's past approach to addressing interstate transport, and provides EPA's general review of relevant modeling data and air quality projections as they relate to the 2012 annual $PM_{2.5}$ NAAQS. The 2016 memorandum provides information relevant to EPA Regional office review of the CAA section 110 (a)(2)(D)(i)(I) "Good Neighbor" provision requirements in infrastructure SIPs with respect to the 2012 annual $PM_{2.5}$ NAAQS. This rulemaking considers information provided in that memorandum.

**III. EPA's review.**

In this notice of proposed rulemaking, EPA is proposing action on a SIP submission from the state of Vermont. In its submission, Vermont presents a detailed list of Vermont Laws and previously SIP-approved Air Quality Regulations showing how the various components of its

[2] This memorandum and other referenced guidance documents and memoranda are included in the docket for this action.

EPA-approved SIP meet each of the requirements of section 110(a)(2) of the CAA for the 2012 $PM_{2.5}$ NAAQS. The following review evaluates the state's submissions in light of section 110(a)(2) requirements and relevant EPA guidance.

For Vermont's October 31, 2017 submission addressing the 2012 $PM_{2.5}$ NAAQS, we reviewed all Section 110(a)(2) elements, including the transport provisions, but excluding the three areas discussed above under the scope of this rulemaking.

**A. Section 110(a)(2)(A)–Emission limits and other control measures.**

This section (also referred to in this action as an element) of the Act requires SIPs to include enforceable emission limits and other control measures, means or techniques, schedules for compliance, and other related matters. However, EPA has long interpreted emission limits and control measures for attaining the standards as being due when nonattainment planning requirements are due.[3] In the context of an infrastructure SIP, EPA is not evaluating the existing SIP provisions for this purpose. Instead, EPA is only evaluating whether the state's SIP has basic structural provisions for the implementation of the NAAQS.

Vermont's infrastructure submittal for this element cites Vermont Statutes Annotated (V.S.A) and several Vermont Air Pollution Control Regulations (VT APCR) as follows: Vermont's 10 V.S.A. § 554, "Powers," authorizes the Secretary of the Vermont Agency of Natural Resources (ANR) to "[a]dopt, amend and repeal rules, implementing the provisions" of Vermont's air pollution control laws set forth in 10 V.S.A. chapter 23. It also authorizes the Secretary to "conduct studies, investigations and research relating to air contamination and air pollution" and to "[d]etermine by appropriate means the degree of air contamination and air

[3] See, for example, EPA's final rule on "National Ambient Air Quality Standards for Lead." 73 FR 66964, 67034 (November 12, 2008).

pollution in the state and the several parts thereof." Ten V.S.A. § 556, "Permits for the construction or modification of air contaminant sources," requires applicants to obtain permits for constructing or modifying air contaminant sources, and 10 V.S.A. § 558, "Emission control requirements," authorizes the Secretary "to establish emission control requirements … necessary to prevent, abate, or control air pollution." EPA approved 10 V.S.A. § 554 on June 27, 2017 (82 FR 29005).

The Vermont submittal cites more than 20 specific rules that the state has adopted to control the emissions of $PM_{2.5}$ and its precursors: sulfur dioxide ($SO_2$), volatile organic compounds (VOCs), and nitrogen oxides (NOx). A few, with their EPA approval citation[4] are listed here: § 5-201 – Open Burning Prohibited (63 FR 19825; April 22,1998); § 5-251 – Control of Nitrogen Oxides Emissions (81 FR 50342; August 1, 2016); § 5-252 – Control of Sulfur Dioxide Emissions (81 FR 50342; August 1, 2016); § 5-261 – Control of Hazardous Air Contaminants (47 FR 6014; February 10, 1982); § 5-502 – Major Stationary Sources and Major Modifications (81 FR 50342; August 1, 2016); § 5-702 – Excessive Smoke Emissions from Motor Vehicles (45 FR 10775; February 19, 1980).

Based upon EPA's review of the submittals, EPA proposes that Vermont meets the infrastructure SIP requirements of section 110(a)(2)(A) with respect to the 2012 $PM_{2.5}$ NAAQS.

As previously noted, EPA is not proposing to approve or disapprove any existing state provisions or rules related to SSM or director's discretion in the context of section 110(a)(2)(A).

**B. Section 110(a)(2)(B)–Ambient air quality monitoring/data system.**

[4] The citations reference the most recent EPA approval of the stated rule, or of revisions to the rule. For example, §5-252 was initially approved on February 4, 1977 (42 FR 6811), with various revisions being approved since then, with the most recent approval of revisions to the applicability section occurring on August 1, 2016 (81 FR 50342).

This section requires SIPs to provide for establishing and operating ambient air quality monitors, collecting and analyzing ambient air quality data, and making these data available to EPA upon request. Each year, states submit annual air monitoring network plans to EPA for review and approval. EPA's review of these annual monitoring plans includes our evaluation of whether the state: (i) monitors air quality at appropriate locations throughout the state using EPA-approved Federal Reference Methods or Federal Equivalent Method monitors; (ii) submits data to EPA's Air Quality System (AQS) in a timely manner; and (iii) provides EPA Regional Offices with prior notification of any planned changes to monitoring sites or the network plan.

State law authorizes the Secretary of ANR, or authorized representative, to "conduct studies, investigations and research relating to air contamination and air pollution" and to "[d]etermine by appropriate means the degree of air contamination and air pollution in the state and the several parts thereof." *See* 10 V.S.A. § 554(8), (9). VT DEC, one of several departments within ANR, operates an air quality monitoring network, and EPA approved the state's 2017 Annual Air Monitoring Network Plan for $PM_{2.5}$ on August 23, 2017.[5] Furthermore, VT DEC populates AQS with air quality monitoring data in a timely manner, and provides EPA with prior notification when considering a change to its monitoring network or plan. EPA proposes that VT DEC has met the infrastructure SIP requirements of section 110(a)(2)(B) with respect to the 2012 $PM_{2.5}$ NAAQS.

**C. Section 110(a)(2)(C)–Program for enforcement of control measures and for construction or modification of stationary sources.**

States are required to include a program providing for enforcement of the emission limits and control measures described in section 110(a)(2)(A) and for the regulation of construction of new

[5] See EPA approval letter located in the docket for this action.

or modified stationary sources to meet NSR requirements under PSD and nonattainment new source review (NNSR) programs. Part C of the CAA (sections 160-169B) addresses PSD, while part D of the CAA (sections 171-193) addresses NNSR requirements.[6] The evaluation of each state's submission addressing the infrastructure SIP requirements of section 110(a)(2)(C) covers the following: (i) enforcement of SIP measures; (ii) PSD program for major sources and major modifications; and (iii) a permit program for minor sources and minor modifications.

Sub-Element 1: Enforcement of SIP Measures

State law provides the Secretary of ANR with the authority to enforce air pollution control requirements, including SIP-approved 10 V.S.A. § 554, which authorizes the Secretary of ANR to "[i]ssue orders as may be necessary to effectuate the purposes of [the state's air pollution control laws] and enforce the same by all appropriate administrative and judicial proceedings." In addition, Vermont's SIP-approved regulations VT APCR § 5-501, "Review of Construction or Modification of Air Contaminant Sources," and VT APCR § 5-502, "Major Stationary Sources and Major Modifications," establish requirements for permits to construct, modify or operate major air contaminant sources.

EPA proposes that Vermont has met the enforcement of SIP measures requirements of section 110(a)(2)(C) with respect to the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 2: PSD Program for Major Sources and Major Modifications.

PSD applies to new major sources or modifications made to major sources for pollutants where the area in which the source is located is in attainment of, or unclassifiable with regard to,

[6] EPA considers the evaluation of permit provisions that implement Part D to be outside the scope of an infrastructure SIP action because SIPs incorporating necessary local nonattainment area controls are due on separate schedules, pursuant to CAA section 172 and the various pollutant-specific subparts 2 through 5 of part D. Thus, our review under section 110(a)(2)(C) does not evaluate the nonattainment NSR program required by part D of the Act. We are only evaluating the state's PSD program as required by part C of the Act and the state's minor source program (applicable regardless of attainment status) as required by section 110(a)(2)(C).

the relevant NAAQS. The EPA interprets the CAA to require each state to make an infrastructure SIP submission for a new or revised NAAQS demonstrating that the air agency has a complete PSD permitting program in place satisfying the current requirements for all regulated NSR pollutants. VT DEC's EPA–approved PSD rules, contained at VT APCR Subchapters I, IV, and V, contain provisions that address applicable requirements for all regulated NSR pollutants, including GHGs.

With respect to current requirements for $PM_{2.5}$, we evaluate Vermont's PSD program for consistency with two EPA rules. The first is a final rule issued May 16, 2008, entitled "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers ($PM_{2.5}$)" (2008 NSR Rule). *See* 73 FR 28321. The 2008 NSR Rule finalized several new requirements for SIPs to address sources that emit direct $PM_{2.5}$ and other pollutants that contribute to secondary $PM_{2.5}$ formation, including requirements for NSR permits to address pollutants responsible for the secondary formation of $PM_{2.5}$, otherwise known as precursors. As part of identifying precursors to $PM_{2.5}$, the 2008 NSR Rule also required states to revise the definition of ''significant'' as it relates to a net emissions increase or the potential of a source to emit pollutants. Finally, the 2008 NSR Rule requires states to account for $PM_{2.5}$ and $PM_{10}$ condensables for applicability determinations and in establishing emissions limitations for $PM_{2.5}$ and $PM_{10}$ in PSD permits beginning on or after January 1, 2011.[7] These requirements are codified in 40 CFR 51.166(b) and 52.21(b). States were required to revise their SIPs consistent with these changes to the federal regulations. On August 1, 2016 (81 FR 50342), EPA approved

[7] On January 4, 2013, the U.S. Court of Appeals for the D.C. Circuit held that EPA should have issued the 2008 NSR Rule in accordance with the CAA's requirements for $PM_{10}$ nonattainment areas (Title I, Part D, subpart 4), and not the general requirements for nonattainment areas under subpart 1. *Nat. Res. Def. Council v. EPA*, 706 F.3d 428. The EPA's approval of Vermont's infrastructure SIP as to elements C, D(i)(II), or J with respect to the PSD requirements promulgated by the 2008 NSR Rule does not conflict with the court's opinion. For more information, *see* 80 FR 42446, July 17, 2015).

revisions to Vermont's PSD program satisfying these requirements of the 2008 NSR Rule. *See also* 82 FR 15671 at 15674-75 (March 30, 2017); 82 FR 29005 (June 27, 2017).

The second is a final rule issued October 20, 2010, entitled "Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC)" (2010 NSR Rule). *See* 75 FR 64864. This rule established several components for making PSD permitting determinations for $PM_{2.5}$, including adding the required elements for $PM_{2.5}$ into a state's existing system of "increment analysis," which is the mechanism used in the PSD permitting program to estimate significant deterioration of ambient air quality for a pollutant in relation to new source construction or modification. The 2010 NSR Rule revised the existing system for determining increment consumption by establishing a new "major source baseline date" for $PM_{2.5}$ and by establishing a trigger date for $PM_{2.5}$ in relation to the definition of "minor source baseline date." Lastly, the 2010 NSR Rule revised the definition of "baseline area" to include a level of significance of 0.3 micrograms per cubic meter, annual average, for $PM_{2.5}$. These requirements are codified in 40 CFR 51.166(b) and (c) and in 40 CFR 52.21(b) and (c). States were required to revise their SIPs consistent with these changes to the federal regulations.

On August 1, 2016 (81 FR 50342) and September 14, 2016 (81 FR 63102), EPA approved revisions to the Vermont SIP that address certain aspects of EPA's 2010 NSR rule. In addition, on March 19, 2018, EPA approved the state's method for determining the amount of PSD increments available to a new or modified major source. *See* 83 FR 11884. As a result, Vermont's approved PSD program meets the current requirements for $PM_{2.5}$.

On March 19, 2018 (83 FR 11884), EPA also approved revisions to Vermont's PSD program that addressed the PSD requirements of EPA's "Final Rule to Implement the 8- Hour Ozone

National Ambient Air Quality Standard—Phase 2; Final Rule To Implement Certain Aspects of the 1990 Amendments Relating to New Source Review and Prevention of Significant Deterioration as They Apply in Carbon Monoxide, Particulate Matter, and Ozone NAAQS; Final Rule for Reformulated Gasoline," which obligated states to revise their PSD programs to explicitly identify NOX as a precursor to ozone. *See* 70 FR 71612 (November 29, 2005). Therefore, Vermont's approved PSD program meets the current requirements for ozone.

With respect to GHGs, on June 23, 2014, the United States Supreme Court issued a decision addressing the application of PSD permitting requirements to GHG emissions. *Utility Air Regulatory Group v. Envtl. Prot. Agency*, 134 S.Ct. 2427. The Supreme Court said that EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD permit. The Court also said that EPA could continue to require that PSD permits, otherwise required based on emissions of pollutants other than GHGs, contain limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

In accordance with the Supreme Court decision, on April 10, 2015, the U.S. Court of Appeals for the District of Columbia Circuit (the D.C. Circuit) issued an amended judgment vacating the regulations that implemented Step 2 of the EPA's PSD and Title V Greenhouse Gas Tailoring Rule, but not the regulations that implement Step 1 of that rule. Step 1 of the Tailoring Rule covers sources that are required to obtain a PSD permit based on emissions of pollutants other than GHGs. Step 2 applied to sources that emitted only GHGs above the thresholds triggering the requirement to obtain a PSD permit. The amended judgment preserves, without the need for additional rulemaking by EPA, the application of the BACT requirement to GHG emissions from Step 1 or "anyway" sources. With respect to Step 2 sources, the D.C. Circuit's amended

judgment vacated the regulations at issue in the litigation, including 40 CFR 51.166(b)(48)(v), "to the extent they require a stationary source to obtain a PSD permit if greenhouse gases are the only pollutant (i) that the source emits or has the potential to emit above the applicable major source thresholds, or (ii) for which there is a significant emission increase from a modification."

On August 19, 2015 (80 FR 50199), EPA amended its PSD and Title V regulations to remove from the Code of Federal Regulations portions of those regulations that the D.C. Circuit specifically identified as vacated. EPA intends to further revise the PSD and Title V regulations to fully implement the Supreme Court and D.C. Circuit rulings in a separate rulemaking. This future rulemaking will include revisions to additional definitions in the PSD regulations.

Some states have begun to revise their existing SIP-approved PSD programs in light of these court decisions, and some states may prefer not to initiate this process until they have more information about the additional planned revisions to EPA's PSD regulations. EPA is not expecting states to have revised their PSD programs in anticipation of EPA's additional actions to revise its PSD program rules in response to the court decisions for purposes of infrastructure SIP submissions. At present, EPA has determined that Vermont's SIP is sufficient to satisfy element C with respect to GHGs because the PSD permitting program previously approved by EPA into the SIP continues to require that PSD permits (otherwise required based on emissions of pollutants other than GHGs) contain limitations on GHG emissions based on the application of BACT. Although the approved Vermont PSD permitting program may currently contain provisions that are no longer necessary in light of the Supreme Court decision, this does not render the infrastructure SIP submission inadequate to satisfy element C. The SIP contains the necessary PSD requirements at this time, and the application of those requirements is not impeded by the presence of other previously-approved provisions regarding the permitting of

sources of GHGs that EPA does not consider necessary at this time in light of the Supreme Court decision. Accordingly, the Supreme Court decision does not affect EPA's proposed approval of Vermont's infrastructure SIP as to the requirements of element C.

For the purposes of the 2012 $PM_{2.5}$ NAAQS infrastructure SIPs, EPA reiterates that NSR Reform regulations are not in the scope of these actions. Therefore, we are not taking action on existing NSR Reform regulations for Vermont.

The EPA is proposing to approve Vermont's infrastructure SIP for the 2012 $PM_{2.5}$ NAAQS with respect to the requirement in section 110(a)(2)(C) to include a PSD permitting program in the SIP that covers the requirements for all regulated NSR pollutants as required by part C of the Act.

Sub-Element 3: Preconstruction Permitting for Minor Sources and Minor Modifications

To address the pre-construction regulation of the modification and construction of minor stationary sources and minor modifications of major stationary sources, an infrastructure SIP submission should identify the existing EPA-approved SIP provisions and/or include new provisions that govern the minor source pre-construction program that regulate emissions of the relevant NAAQS pollutants. EPA approved revisions to Vermont's minor NSR program on August 1, 2016 (81 FR 50342). Vermont and EPA rely on the existing minor NSR program to ensure that new and modified sources not captured by the major NSR permitting programs, VT APCR § 5-502, do not interfere with attainment and maintenance of the 2012 $PM_{2.5}$ NAAQS.

We are proposing to find that Vermont has met the requirement to have a SIP-approved minor new source review permit program as required under Section 110(a)(2)(C) for the 2012 $PM_{2.5}$ NAAQS.

**D. Section 110(a)(2)(D)–Interstate transport.**

This section contains a comprehensive set of air quality management elements pertaining to the transport of air pollution with which states must comply. It covers the following five topics, categorized as sub-elements: Sub-element 1, Significant contribution to nonattainment, and interference with maintenance of a NAAQS; Sub-element 2, PSD; Sub-element 3, Visibility protection; Sub-element 4, Interstate pollution abatement; and Sub-element 5, International pollution abatement. Sub-elements 1 through 3 above are found under section 110(a)(2)(D)(i) of the Act, and these items are further categorized into the four prongs discussed below, two of which are found within sub-element 1. Sub-elements 4 and 5 are found under section 110(a)(2)(D)(ii) of the Act and include provisions insuring compliance with sections 115 and 126 of the Act relating to interstate and international pollution abatement.

Sub-Element 1: Section 110(a)(2)(D)(i)(I)–Contribute to Nonattainment (prong 1) and Interfere with Maintenance of the NAAQS (prong 2)

Section 110(a)(2)(D)(i)(I) of the CAA requires a SIP to prohibit any emissions activity in the state that will contribute significantly to nonattainment or interfere with maintenance of the NAAQS in any downwind state. EPA commonly refers to these requirements as prong 1 (significant contribution to nonattainment) and prong 2 (interference with maintenance), or jointly as the "Good Neighbor" or "transport" provisions of the CAA. This rulemaking proposes action on the portion of Vermont's October 31, 2017 SIP submission that addresses the prong 1 and 2 requirements with respect to the 2012 $PM_{2.5}$ NAAQS.

EPA has developed a consistent framework for addressing the prong 1 and 2 interstate-transport requirements with respect to the $PM_{2.5}$ NAAQS in several previous federal rulemakings. The four basic steps of that framework include: (1) identifying downwind receptors that are expected to have problems attaining or maintaining the NAAQS; (2)

identifying which upwind states contribute to these identified problems in amounts sufficient to warrant further review and analysis; (3) for states identified as contributing to downwind air quality problems, identifying upwind emissions reductions necessary to prevent an upwind state from significantly contributing to nonattainment or interfering with maintenance of the NAAQS downwind; and (4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, reducing the identified upwind emissions through adoption of permanent and enforceable measures. This framework was most recently applied with respect to $PM_{2.5}$ in the Cross-State Air Pollution Rule (CSAPR), which addressed both the 1997 and 2006 $PM_{2.5}$ standards, as well as the 1997 ozone standard. *See* 76 FR 48208 (August 8, 2011).

EPA's analysis for CSAPR, conducted consistent with the four-step framework, included air-quality modeling that evaluated the impacts of 38 eastern states on identified receptors in the eastern United States. EPA indicated that, for step 2 of the framework, states with impacts on downwind receptors that are below the contribution threshold of 1% of the relevant NAAQS would not be considered to significantly contribute to nonattainment or interfere with maintenance of the relevant NAAQS, and would, therefore, not be included in CSAPR. *See* 76 FR 48220, August 8, 2011. EPA further indicated that such states could rely on EPA's analysis for CSAPR as technical support in order to demonstrate that their existing or future interstate transport SIP submittals are adequate to address the transport requirements of 110(a)(2)(D)(i)(I) with regard to the relevant NAAQS. *Id.*

In addition, as noted above, on March 17, 2016, EPA released the 2016 memorandum to provide information to states as they develop SIPs addressing the Good Neighbor provision as it pertains to the 2012 $PM_{2.5}$ NAAQS. Consistent with step 1 of the framework, the 2016

memorandum provides projected future-year annual $PM_{2.5}$ design values for monitors throughout the country based on quality-assured and certified ambient-monitoring data and recent air-quality modeling and explains the methodology used to develop these projected design values. The memorandum also describes how the projected values can be used to help determine which monitors should be further evaluated to potentially address if emissions from other states significantly contribute to nonattainment or interfere with maintenance of the 2012 $PM_{2.5}$ NAAQS at these monitoring sites. The 2016 memorandum explained that the pertinent year for evaluating air quality for purposes of addressing interstate transport for the 2012 $PM_{2.5}$ NAAQS is 2021, the attainment deadline for 2012 $PM_{2.5}$ NAAQS nonattainment areas classified as Moderate. Accordingly, because the available data included 2017 and 2025 projected average and maximum $PM_{2.5}$ design values calculated through the CAMx photochemical model, the memorandum suggests approaches states might use to interpolate $PM_{2.5}$ values at sites in 2021.

For all, but one, monitoring sites in the eastern United States, the modeling data provided in the 2016 memorandum showed that monitors were expected to both attain and maintain the 2012 $PM_{2.5}$ NAAQS in both 2017 and 2025. The modeling results project that this one monitor, the Liberty monitor, (ID number 420030067), located in Allegheny County, Pennsylvania, will be above the 2012 annual $PM_{2.5}$ NAAQS in 2017, but only under the model's maximum projected conditions, which are used in EPA's interstate transport framework to identify maintenance receptors. The Liberty monitor (along with all the other Allegheny County monitors) is projected to both attain and maintain the NAAQS in 2025. The 2016 memorandum suggests that under such a condition (again, where EPA's photochemical modeling indicates an area will maintain the 2012 annual $PM_{2.5}$ NAAQS in 2025, but not in 2017), further analysis of the site should be performed to determine if the site may be a nonattainment or maintenance receptor in 2021

(which, again, is the attainment deadline for moderate $PM_{2.5}$ areas). The memorandum also indicates that for certain states with incomplete ambient monitoring data, additional information including the latest available data, should be analyzed to determine whether there are potential downwind air quality problems that may be impacted by transported emissions. This rulemaking considers these analyses for Vermont, as well as additional analysis conducted by EPA during review of Vermont's submittal.

To develop the projected values presented in the memorandum, EPA used the results of nationwide photochemical air-quality modeling that it recently performed to support several rulemakings related to the ozone NAAQS. Base-year modeling was performed for 2011. Future-year modeling was performed for 2017 to support the proposed CSAPR Update for the 2008 Ozone NAAQS. *See* 80 FR 75705 (December 3, 2015). Future-year modeling was also performed for 2025 to support the Regulatory Impact Assessment of the final 2015 Ozone NAAQS.[8] The outputs from these model runs included hourly concentrations of $PM_{2.5}$ that were used in conjunction with measured data to project annual average $PM_{2.5}$ design values for 2017 and 2025. Areas that were designated as moderate $PM_{2.5}$ nonattainment areas for the 2012 annual $PM_{2.5}$ NAAQS in 2014 must attain the NAAQS by December 31, 2021, or as expeditiously as practicable. Although neither the available 2017 nor 2025 future-year modeling data correspond directly to the future-year attainment deadline for moderate $PM_{2.5}$ nonattainment areas, EPA believes that the modeling information is still helpful for identifying potential nonattainment and maintenance receptors in the 2017-2021 period. Assessing downwind $PM_{2.5}$ air-quality problems based on estimates of air-quality concentrations in a future year aligned with the relevant attainment deadline is consistent with the instructions from the United States

[8] *See* 2015 ozone NAAQS RIA at: www3.epa.gov/ttnecas1/docs/20151001ria.pdf

Court of Appeals for the District of Columbia Circuit in *North Carolina v. EPA*, 531 F.3d 896, 911-12 (D.C. Cir. 2008), that upwind emission reductions should be harmonized, to the extent possible, with the attainment deadlines for downwind areas.

*Vermont's Submissions for Prongs 1 and 2*

On October 31, 2017, VT DEC submitted an infrastructure SIP for the 2012 $PM_{2.5}$ NAAQS that addressed prongs 1 and 2 for the 2012 $PM_{2.5}$ NAAQS. Vermont's SIP submittal relied in part on EPA's analysis performed for the CSAPR rulemaking to conclude that the state will not significantly contribute to nonattainment or interfere with maintenance of the 2012 $PM_{2.5}$ NAAQS in any downwind area.

EPA analyzed the state's October 2017 submittal to determine whether it fully addressed the prong 1 and 2 transport provisions with respect to the 2012 $PM_{2.5}$ NAAQS. As discussed below, EPA concludes that emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors ($NO_x$ and $SO_2$) in Vermont will not significantly contribute to nonattainment or interfere with maintenance of the 2012 $PM_{2.5}$ NAAQS in any other state.

As noted, the modeling discussed in EPA's 2016 memorandum identified one potential maintenance receptor for the 2012 $PM_{2.5}$ NAAQS at the Liberty monitor (ID number 420030067), located in Allegheny County, Pennsylvania. The memorandum also identified certain states with incomplete ambient monitoring data as areas that may require further analysis to determine whether there are potential downwind air quality problems that may be impacted by transported emissions.

While developing the 2011 CSAPR rulemaking, EPA modeled the impacts of all 38 eastern states in its modeling domain on fine particulate matter concentrations at downwind receptors in other states in the 2012 analysis year in order to evaluate the contribution of upwind states on

downwind states with respect to the 1997 and 2006 $PM_{2.5}$. Although the modeling was not conducted for purposes of analyzing upwind states' impacts on downwind receptors with respect to the 2012 $PM_{2.5}$ NAAQS, the contribution analysis for the 1997 and 2006 standards can be informative for evaluating Vermont's compliance with the Good Neighbor provision for the 2012 standard.

This CSAPR modeling showed that Vermont had a very small impact (0.002 $\mu g/m^3$ annual $PM_{2.5}$) on the Liberty monitor in Allegheny County, Pennsylvania, which is the only out-of-state monitor that may be a nonattainment or maintenance receptor in 2021. (A spreadsheet showing CSAPR contributions for ozone and $PM_{2.5}$ is included in docket EPA-HQ-OAR-2009-0491-4228.) Although EPA has not proposed a particular threshold for evaluating the 2012 $PM_{2.5}$ NAAQS, EPA notes that Vermont's impact on the Liberty monitor is far below the threshold of 1% for the annual 2012 $PM_{2.5}$ NAAQS (i.e., 0.12 $\mu g/m^3$) that EPA previously used to evaluate the contribution of upwind states to downwind air-quality monitors. Therefore, even if the Liberty monitor were considered a receptor for purposes of transport, the EPA proposes to conclude that Vermont will not significantly contribute to nonattainment, or interfere with maintenance, of the 2012 $PM_{2.5}$ NAAQS at that monitor.

In addition, the Liberty monitor is already close to attaining the 2012 $PM_{2.5}$ NAAQS, and expected emissions reductions in the next four years will lead to additional reductions in measured $PM_{2.5}$ concentrations. There are both local and regional components to measured $PM_{2.5}$ levels. All monitors in Allegheny County have a regional component, with the Liberty monitor most strongly influenced by local sources. This is confirmed by the fact that annual average measured concentrations at the Liberty monitor have consistently been 2-4 $\mu g/m^3$ higher than other monitors in Allegheny County.

Specifically, previous CSAPR modeling showed that regional emissions from upwind states, particularly $SO_2$ and NOx emissions, contribute to $PM_{2.5}$ nonattainment at the Liberty monitor. In recent years, large $SO_2$ and NOx reductions from power plants have occurred in Pennsylvania and states upwind from the Greater Pittsburgh region. Pennsylvania's energy sector emissions of $SO_2$ will have decreased 166,000 tons between 2015-2017 as a result of CSAPR implementation. This is due to both the installation of emissions controls and retirements of electric generating units (EGUs). Projected power plant closures and additional emissions controls in Pennsylvania and upwind states will help further reduce both direct $PM_{2.5}$ and $PM_{2.5}$ precursors. Regional emission reductions will continue to occur from current on-the-books federal and state regulations such as the federal on-road and non-road vehicle programs, and various rules for major stationary emissions sources. *See* proposed approval of the Ohio Infrastructure SIP for the 2012 $PM_{2.5}$ NAAQS (82 FR 57689; December 7, 2017).

In addition to regional emissions reductions and plant closures, additional local reductions to both direct $PM_{2.5}$ and $SO_2$ emissions are expected to occur and should contribute to further declines in Allegheny County's $PM_{2.5}$ monitor concentrations. For example, significant $SO_2$ reductions have recently occurred at US Steel's integrated steel mill facilities in southern Allegheny County as part of a 1-hr $SO_2$ NAAQS SIP.[9] Reductions are largely due to declining sulfur content in the Clairton Coke Work's coke oven gas (COG). Because this COG is burned at US Steel's Clairton Coke Works, Irvin Mill, and Edgar Thompson Steel Mill, these reductions in sulfur content should contribute to much lower $PM_{2.5}$ precursor emissions in the immediate future. The Allegheny $SO_2$ SIP also projects lower $SO_2$ emissions resulting from vehicle fuel

[9] www.achd.net/air/pubs/SIPs/SO2_2010_NAAQS_SIP_9-14-2017.pdf

standards, reductions in general emissions due to declining population in the Greater Pittsburgh region, and several shutdowns of significant sources of emissions in Allegheny County.

EPA modeling projections, the recent downward trend in local and upwind emissions reductions, the expected continued downward trend in emissions between 2017 and 2021, and the downward trend in monitored $PM_{2.5}$ concentrations all indicate that the Liberty monitor will attain and be able to maintain the 2012 annual $PM_{2.5}$ NAAQS by 2021. *See* proposed approval of the Ohio Infrastructure SIP (82 FR 57689, December 7, 2017).

As noted in the 2016 memorandum, several states have had recent data-quality issues identified as part of the $PM_{2.5}$ designations process. In particular, some ambient $PM_{2.5}$ data for certain time periods between 2009 and 2013 in Florida, Illinois, Idaho, Tennessee, and Kentucky did not meet all data-quality requirements under 40 CFR part 50, appendix L. The lack of data means that the relevant areas in those states could potentially be in nonattainment or be maintenance receptors in 2021. However, EPA's analysis for the 2011 CSAPR rulemaking with respect to the 2006 $PM_{2.5}$ NAAQS determined that Vermont's impact to all these downwind receptors would be well below the 1% contribution threshold for this NAAQS. That conclusion informs the analysis of Vermont's contributions for purposes of the 2012 $PM_{2.5}$ NAAQS as well. Given this, and the fact, discussed below, that the state's $PM_{2.5}$ design values for all ambient monitors have been well below the 2012 $PM_{2.5}$ NAAQS during the period from 2009 to 2013, EPA concludes that it is highly unlikely that Vermont significantly contributes to nonattainment or interferes with maintenance of the 2012 $PM_{2.5}$ NAAQS in areas with data-quality issues.[10]

[10] Vermont's $PM_{2.5}$ design values for all ambient monitors from 2004-2006 through 2013-2015 are available on Table 6 of the 2015 Design Value Report at https://19january2017snapshot.epa.gov/air-trends/air-quality-design-values_.html.

Information in Enclosure 5 of Vermont's October 2017 SIP submission (Vermont Good Neighbor SIP) corroborates EPA's proposed conclusion that Vermont's SIP meets its obligations under CAA section 110(a)(2)(D)(i)(I). This enclosure includes 2011-2015 design values for the 2012 PM2.5 NAAQS in the bordering states of Massachusetts, New Hampshire and New York, which are all well below the annual standard (12.0 $\mu g/m^3$). In addition, the analysis includes a graph showing that the design-value trend at the four ambient monitoring locations in Vermont declined from 2005 to 2016.

This technical analysis is supported by additional indications that air quality is improving and emissions are falling in Vermont. Specifically, certified annual $PM_{2.5}$ monitor values (for monitors meeting minimum data completeness criteria) recorded since 2014 show that the highest value in 2015 was 9.1 $\mu g/m^3$ at a monitor in Rutland, and the highest value in 2016 was 6.8 $\mu g/m^3$ at the same monitor in Rutland.[11]

Second, Vermont's sources are well-controlled. Vermont's 2017 submission indicates that the state has many SIP-approved rules and programs that limit emissions of $PM_{2.5}$, including rules to control emissions of $SO_2$, $PM_{2.5,}$ VOCs and NOx[12]; Vermont's PSD program contained in VT APCR Subchapters I, IV, and V; Vermont's Regional Haze SIP; and Vermont's Title V program contained in Subchapter X of VT APCR. In addition, Vermont adopted limitations on sulfur in fuel (VT APCR § 5-221(1)) on September 28, 2011.

It should also be noted that Vermont is not in the CSAPR program because EPA analyses show that the state does not emit ozone-season NOx at a level that contributes significantly to

[11] 24-hour and annual $PM_{2.5}$ monitor values for individual monitoring sites throughout Vermont are available at www.epa.gov/outdoor-air-quality-data/monitor-values-report.

[12] $SO_2$, NOx and VOCs contribute to the formation of $PM_{2.5}$.

non-attainment or interferes with maintenance of the 1997 and 2006 $PM_{2.5}$ NAAQS in any other state.

For the reasons explained herein, EPA agrees with Vermont's conclusions and proposes to determine that Vermont will not significantly contribute to nonattainment or interfere with maintenance of the 2012 $PM_{2.5}$ NAAQS in any other state. Therefore, EPA is proposing to approve the October 2017 infrastructure SIP submission from Vermont addressing prongs 1 and 2 of CAA section 110(a)(2)(D)(i)(I) for the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 2: Section 110(a)(2)(D)(i)(II)–PSD (prong 3)

To prevent significant deterioration of air quality, this sub-element requires SIPs to include provisions that prohibit any source or other type of emissions activity in one state from interfering with measures that are required in any other state's SIP under Part C of the CAA. As explained in the 2013 Guidance, a state may meet this requirement with respect to in-state sources and pollutants that are subject to PSD permitting through a comprehensive PSD permitting program that applies to all regulated NSR pollutants and that satisfies the requirements of EPA's PSD implementation rules. As discussed above under element C, Vermont has such a PSD permitting program. For in-state sources not subject to PSD, this requirement can be satisfied through a fully-approved nonattainment new source review (NNSR) program with respect to any previous NAAQS. EPA's latest approval of some revisions to Vermont's NNSR regulations was on August 1, 2016 (81 FR 50342). Therefore, we are proposing to approve this sub-element for the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 3: Section 110(a)(2)(D)(i)(II)–Visibility Protection (prong 4)

With regard to applicable requirements for visibility protection of section 110(a)(2)(D)(i)(II), states are subject to visibility and regional-haze program requirements under part C of the CAA

(which includes sections 169A and 169B). The 2009 Guidance, 2011 Guidance, and 2013 Guidance recommend that these requirements can be satisfied by an approved SIP addressing reasonably attributable visibility impairment, if required, or an approved SIP addressing regional haze. A fully approved regional haze SIP meeting the requirements of 40 CFR 51.308 will ensure that emissions from sources under an air agency's jurisdiction are not interfering with measures required to be included in other air agencies' plans to protect visibility. Vermont's Regional Haze SIP was approved by EPA on May 22, 2012 (77 FR 30212). Accordingly, EPA proposes that Vermont has met the visibility protection requirements of 110(a)(2)(D)(i)(II) for the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 4: Section 110(a)(2)(D)(ii)–Interstate Pollution Abatement.

This sub-element requires that each SIP contain provisions requiring compliance with requirements of section 126 relating to interstate pollution abatement. Section 126(a) requires new or modified sources to notify neighboring states of potential impacts from the source. The statute does not specify the method by which the source should provide the notification. States with SIP-approved PSD programs must have a provision requiring such notification by new or modified sources.

On August 1, 2016 (81 FR 50342), EPA approved revisions to VT APCR § 5-501, which includes a provision that requires VT ANR to provide notice of a draft PSD permit to, among other entities, any state whose lands may be affected by emissions from the source. VT APCR § 5-501(7)(c). Vermont's public notice requirements are consistent with the Federal PSD program's public notice requirements for affected states under 40 CFR 51.166(q). Therefore, we propose to approve Vermont's compliance with the infrastructure SIP requirements of section 126(a) with respect to with respect to the 2012 $PM_{2.5}$ NAAQS. Vermont has no obligations under

any other provision of section 126, and no source or sources within the state are the subject of an active finding under section 126 of the CAA with respect to the 2012 PM2.5 NAAQS.

Sub-Element 5: Section 110(a)(2)(D)(ii)–International Pollution Abatement.

This sub-element also requires each SIP to contain provisions requiring compliance with the applicable requirements of section 115 relating to international pollution abatement. There are no final findings under section 115 of the CAA against Vermont with respect to the 2012 $PM_{2.5}$ NAAQS. Therefore, EPA is proposing that Vermont has met the applicable infrastructure SIP requirements of section 110(a)(2)(D)(ii) related to section 115 of the CAA for the 2012 $PM_{2.5}$ NAAQS.

**E. Section 110(a)(2)(E)–Adequate resources.**

Section 110(a)(2)(E)(i) requires each SIP to provide assurances that the state will have adequate personnel, funding, and legal authority under state law to carry out its SIP. In addition, section 110(a)(2)(E)(ii) requires each state to comply with the requirements under CAA section 128 about state boards. Finally, section 110(a)(2)(E)(iii) requires that, where a state relies upon local or regional governments or agencies for the implementation of its SIP provisions, the state retain responsibility for ensuring implementation of SIP obligations with respect to relevant NAAQS. Section 110(a)(2)(E)(iii), however, does not apply to this action because Vermont does not rely upon local or regional governments or agencies for the implementation of its SIP provisions.

Sub-Element 1: Adequate Personnel, Funding, and Legal Authority Under State Law to Carry Out its SIP, and Related Issues.

Vermont, through its infrastructure SIP submittals, has documented that its air agency has the requisite authority and resources to carry out its SIP obligations. Vermont cites 10 V.S.A. § 553,

which designates ANR as the air pollution control agency of the state, and 10 V.S.A § 554, which provides the Secretary of ANR with the power to "[a]dopt, amend and repeal rules, implementing the provisions" of 10 V.S.A. Chapter 23, Air Pollution Control, and to "[a]ppoint and employ personnel and consultants as may be necessary for the administration of" 10 V.S.A. Chapter 23. Section 554 also authorizes the Secretary of ANR to "[a]ccept, receive and administer grants or other funds or gifts from public and private agencies, including the federal government, for the purposes of carrying out any of the functions of" 10 V.S.A. Chapter 23. Additionally, 3 V.S.A. § 2822 provides the Secretary of ANR with the authority to assess air permit and registration fees, which fund state air programs. In addition to Federal funding and permit and registration fees, Vermont notes that the Vermont Air Quality and Climate Division (AQCD) receives state funding to implement its air programs.[13]

EPA proposes that Vermont has met the infrastructure SIP requirements of this portion of section 110(a)(2)(E) with respect to the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 2: State Board Requirements Under Section 128 of the CAA.

Section 110(a)(2)(E)(ii) requires each SIP to contain provisions that comply with the state board requirements of section 128 of the CAA. That provision contains two explicit requirements: (1) that any board or body which approves permits or enforcement orders under this chapter shall have at least a majority of members who represent the public interest and do not derive any significant portion of their income from persons subject to permits and enforcement orders under this chapter, and (2) that any potential conflicts of interest by members of such board or body or the head of an executive agency with similar powers be adequately disclosed.

[13] VT ANR's authority to carry out the provisions of the SIP identified in 40 CFR 51.230 is discussed in the sections of this document assessing elements A, C, F, and G, as applicable.

In Vermont, no board or body approves permits or enforcement orders; these are approved by the Secretary of Vermont ANR. Thus, with respect to this sub-element, Vermont is subject only to the requirements of paragraph (a)(2) of section 128 of the CAA (regarding conflicts of interest). On June 27, 2017, EPA approved Vermont's SIP revision addressing the conflict of interest requirements of section 128. *See* 82 FR 29005. For a detailed analysis explaining how Vermont meets these requirements, see EPA's notice of proposed rulemaking for that action. 82 FR 15671, 15678 (March 30, 2017).

EPA proposes that Vermont has met the applicable infrastructure SIP requirements for this sub-element for the 2012 $PM_{2.5}$ NAAQS.

**F. Section 110(a)(2)(F)–Stationary source monitoring system.**

States must establish a system to monitor emissions from stationary sources and submit periodic emissions reports. Each plan shall also require the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources. The state plan shall also require periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and correlation of such reports by each state agency with any emission limitations or standards. Lastly, the reports shall be available at reasonable times for public inspection.

Vermont's infrastructure submittal references existing state regulations previously approved by EPA that require sources to monitor emissions and submit reports. In particular, VT APCR § 5-405, Required Air Monitoring, (45 FR 10775, February 19, 1980), provides that ANR "may require the owner or operator of any air contaminant source to install, use and maintain such monitoring equipment and records, establish and maintain such records, and make such periodic emission reports as [ANR] shall prescribe." Moreover, section 5-402, Written Reports When

Requested (81 FR 50342; August 1, 2016), authorizes ANR to "require written reports from the person operating or responsible for any proposed or existing air contaminant source, which reports shall contain," among other things, information concerning the "nature and amount and time periods or durations of emissions and such other information as may be relevant to the air pollution potential of the source. These reports shall also include the results of such source testing as may be required under Section 5-404 herein." Section 5-404, Methods for Sampling and Testing of Sources (45 FR 10775 February 19, 1980) in turn authorizes ANR to "require the owner or operator of [a] source to conduct tests to determine the quantity of particulate and/or gaseous matter being emitted" and requires a source to allow access, should ANR have reason to believe that emission limits are being violated by the source, and allows ANR "to conduct tests of [its] own to determine compliance." In addition, operators of sources that emit more than five tons of any and all air contaminants per year are required to register the source with the Secretary of ANR and to submit emissions data annually, pursuant to § 5-802, Requirement for Registration, and § 5-803, Registration Procedure (60 FR 2524 January 10, 1995). Vermont also certifies that nothing in its SIP would preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. *See* 40 CFR 51.212(c).

Vermont's infrastructure SIP submittal for the 2012 $PM_{2.5}$ NAAQS provides for correlation by VT DEC of emissions reports by sources with applicable emission limitations or standards, as required by CAA § 110(a)(2)(F)(iii). Vermont receives emissions data through its annual registration program. Currently, VT DEC analyzes a portion of these data manually to correlate a facility's actual emissions with permit conditions, NAAQS, and, if applicable, hazardous air

contaminant action levels. VT DEC reports that it is in the process of setting up an integrated electronic database that will merge all air contaminant source information across permitting, compliance and registration programs, so that information concerning permit conditions, annual emissions data, and compliance data will be accessible in one location for a particular air contaminant source. The database will be capable of correlating certain emissions data with permit conditions and other applicable standards electronically, where feasible, to allow VT DEC to complete this correlation more efficiently and accurately.

Regarding the section 110(a)(2)(F) requirement that the SIP ensure that the public has availability to emission reports, Vermont certified in its October 31, 2017 submittal for the 2012 $PM_{2.5}$ NAAQS that the Vermont Public Records Act, 1 V.S.A. §§ 315-320, provides for the free and open examination of public records, including emissions reports. Furthermore, 10 V.S.A. § 563 specifically provides that the ANR "Secretary shall not withhold emissions data and emission monitoring data from public inspection or review" and "shall keep confidential any record or other information furnished to or obtained by the Secretary concerning an air contaminant source, *other than emissions data and emission monitoring data*, that qualifies as a trade secret pursuant to 1 V.S.A. § 317(c)(9)." (emphasis added). EPA approved section 563 into the Vermont SIP on June 27, 2017 (82 FR 29005).

Consequently, EPA proposes that Vermont has met the infrastructure SIP requirements of section 110(a)(2)(F) for the 2012 $PM_{2.5}$ NAAQS.

**G. Section 110(a)(2)(G)–Emergency powers.**

This section requires that a plan provide for state authority analogous to that provided to the EPA Administrator in section 303 of the CAA, and adequate contingency plans to implement such authority. Section 303 of the CAA provides authority to the EPA Administrator to seek a

court order to restrain any source from causing or contributing to emissions that present an "imminent and substantial endangerment to public health or welfare, or the environment." Section 303 further authorizes the Administrator to issue "such orders as may be necessary to protect public health or welfare or the environment" in the event that "it is not practicable to assure prompt protection … by commencement of such civil action."

On June 27, 2017, EPA approved a Vermont SIP revision addressing the requirement that the plan provide for state authority comparable to that in section 303 of the CAA. *See* 82 FR 29005. For a detailed analysis explaining how Vermont meets this requirement, see EPA's March 30, 2017 (82 FR 15671, 15679) notice of proposed rulemaking for that action. Therefore, we are proposing to approve the state's submittals with respect to this requirement of Section 110(a)(2)(G) for 2012 $PM_{2.5}$ NAAQS.

Section 110(a)(2)(G) also requires that Vermont have an approved contingency plan for any Air Quality Control Region (AQCR) within the state that is classified as Priority I, IA, or II for certain pollutants. *See* 40 CFR 51.150, 51.152(c). In general, contingency plans for Priority I, IA, and II areas must meet the applicable requirements of 40 CFR part 51, subpart H (40 CFR 51.150 through 51.153) (''Prevention of Air Pollution Emergency Episodes'') for the relevant NAAQS, if the NAAQS is covered by those regulations. In the case of $PM_{2.5}$, EPA has not issued regulations that provide the ambient levels to classify different priority levels for the 2012 standard (or any $PM_{2.5}$ NAAQS). EPA's 2009 Guidance recommends that states develop emergency episode plans for any area that has monitored and recorded 24-hour $PM_{2.5}$ levels greater than 140 $\mu g/m^3$ since 2006. EPA's review of Vermont's certified air quality data in AQS indicates that the highest 24-hour $PM_{2.5}$ level since 2006 was 43.5 $\mu g/m^3$, which occurred in

2015 at the ambient monitor in Rutland.[14] Thus, an emergency episode plan for $PM_{2.5}$ is not necessary. Although not expected, if $PM_{2.5}$ conditions were to change, Vermont does have general authority, as noted previously (*i.e.*, 10 V.S.A. § 560 and 10 V.S.A. § 8009), to order a source to cease operations if it is determined that emissions from the source pose an imminent danger to human health or safety or an immediate threat of substantial harm to the environment.

In addition, as stated in Vermont's infrastructure SIP submittal under the discussion of public notification (Element J), Vermont posts near real-time air quality data, air quality predictions and a record of historical data on the VT DEC website and distributes air quality alerts by email to many parties, including the media. Alerts include information about the health implications of elevated pollutant levels and list actions to reduce emissions and to reduce the public's exposure. In addition, daily forecasted fine particle levels are also made available on the internet through the EPA AirNow and EnviroFlash systems. Information regarding these two systems is available on EPA's website at www.airnow.gov. Notices are sent out to EnviroFlash participants when levels are forecast to exceed the current 24-hour $PM_{2.5}$ standard.

EPA proposes that Vermont has met the applicable infrastructure SIP requirements for section 110(a)(2)(G) with respect to contingency plans for the 2012 $PM_{2.5}$ NAAQS.

**H. Section 110(a)(2)(H)–Future SIP revisions.**

This section requires that a state's SIP provide for revision from time to time as may be necessary to take account of changes in the NAAQS or availability of improved methods for attaining the NAAQS and whenever the EPA finds that the SIP is substantially inadequate. To address this requirement, Vermont's infrastructure submittal references 10 V.S.A § 554, which

[14] 24-hour $PM_{2.5}$ monitor values for individual monitoring sites throughout Vermont are available at www.epa.gov/outdoor-air-quality-data/monitor-values-report.

provides the Secretary of Vermont ANR with the power to "[p]repare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution in this state" and to "[a]dopt, amend and repeal rules, implementing the provisions" of Vermont's air pollution control laws set forth in 10 V.S.A. chapter 23. EPA approved 10 V.S.A. § 554 on June 27, 2017 (82 FR 29005). EPA proposes that Vermont has met the infrastructure SIP requirements of CAA section 110(a)(2)(H) with respect to the 2012 $PM_{2.5}$ NAAQS.

**I. Section 110(a)(2)(I)-Nonattainment area plan or plan revisions under part D.**

The CAA requires that each plan or plan revision for an area designated as a nonattainment area meet the applicable requirements of part D of the CAA. Part D relates to nonattainment areas. EPA has determined that section 110(a)(2)(I) is not applicable to the infrastructure SIP process. Instead, EPA takes action on part D attainment plans through separate processes.

**J. Section 110(a)(2)(J)-Consultation with government officials; public notifications; prevention of significant deterioration; visibility protection.**

Section 110(a)(2)(J) of the CAA requires that each SIP "meet the applicable requirements of section 121 of this title (relating to consultation), section 127 of this title (relating to public notification), and part C of this subchapter (relating to PSD of air quality and visibility protection)." The evaluation of the submission from Vermont with respect to these requirements is described below.

Sub-Element 1: Consultation with Government Officials.

Pursuant to CAA section 121, a state must provide a satisfactory process for consultation with local governments and Federal Land Managers (FLMs) in carrying out its NAAQS implementation requirements.

Vermont's 10 V.S.A § 554 specifies that the Secretary of Vermont ANR shall have the power to "[a]dvise, consult, contract and cooperate with other agencies of the state, local governments, industries, other states, interstate or interlocal agencies, and the federal government, and with interested persons or groups." EPA approved 10 V.S.A. § 554 on June 27, 2017 (82 FR 29005). In addition, VT APCR § 5-501(7)(c) requires VT ANR to provide notice to local governments and federal land managers of a determination by ANR to issue a draft PSD permit for a major stationary source or major modification. On August 1, 2016 (81 FR 50342), EPA approved VT APCR § 5-501(7)(c) into Vermont's SIP. Therefore, EPA proposes that Vermont has met the infrastructure SIP requirements of this portion of section 110(a)(2)(J) with respect to the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 2: Public Notification.

Pursuant to CAA section 127, states must notify the public if NAAQS are exceeded in an area, advise the public of health hazards associated with exceedances, and enhance public awareness of measures that can be taken to prevent exceedances and of ways in which the public can participate in regulatory and other efforts to improve air quality.

Vermont's 10 V.S.A § 554 authorizes the Secretary of Vermont ANR to "[c]ollect and disseminate information and conduct educational and training programs relating to air contamination and air pollution." In addition, the VT DEC Air Quality and Climate Division website includes near real-time air quality data, and a record of historical data. Air quality forecasts are distributed daily via email to interested parties. Air quality alerts are sent by email to a large number of affected parties, including the media. Alerts include information about the health implications of elevated pollutant levels and list actions to reduce emissions and to reduce the public's exposure. Also, Air Quality Data Summaries of the year's air quality monitoring

results are issued annually and posted on the VT DEC Air Quality and Climate Division website. Vermont is also an active partner in EPA's AirNow and EnviroFlash air quality alert programs.

EPA proposes that Vermont has met the infrastructure SIP requirements of this portion of section 110(a)(2)(J) with respect to the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 3: PSD.

EPA has already discussed Vermont's PSD program in the context of infrastructure SIPs in the paragraphs addressing section 110(a)(2)(C) and 110(a)(2)(D)(i)(II) and determined that it satisfies the requirements of EPA's PSD implementation rules. Therefore, the SIP also satisfies the PSD sub-element of section 110(a)(2)(J) for the 2012 $PM_{2.5}$ NAAQS.

Sub-Element 4: Visibility Protection.

With regard to the applicable requirements for visibility protection, states are subject to visibility and regional haze program requirements under part C of the CAA (which includes sections 169A and 169B). In the event of the establishment of a new NAAQS, however, the visibility and regional haze program requirements under part C do not change. Thus, as noted in EPA's 2013 guidance, we find that there is no new visibility obligation "triggered" under section 110(a)(2)(J) when a new NAAQS becomes effective. In other words, the visibility protection requirements of section 110(a)(2)(J) are not germane to infrastructure SIPs for the 2012 $PM_{2.5}$ NAAQS.

Based on the above analysis, EPA proposes that Vermont has met the infrastructure SIP requirements of section 110(a)(2)(J) with respect to the 2012 $PM_{2.5}$ NAAQS.

**K. Section 110(a)(2)(K)–Air quality modeling/data.**

Section 110(a)(2)(K) of the Act requires that a SIP provide for the performance of such air quality modeling as the EPA Administrator may prescribe for the purpose of predicting the effect

on ambient air quality of any emissions of any air pollutant for which EPA has established a NAAQS, and the submission, upon request, of data related to such air quality modeling. EPA has published modeling guidelines at 40 CFR part 51, Appendix W, for predicting the effects of emissions of criteria pollutants on ambient air quality. EPA also recommends in the 2013 Guidance that, to meet section 110(a)(2)(K), a state submit or reference the statutory or regulatory provisions that provide the air agency with the authority to conduct such air quality modeling and to provide such modeling data to EPA upon request. *See* 2013 Guidance at 55.

In its submittal, Vermont cites to VT APCR § 5-406, Required Air Modeling, which authorizes "[t]he Air Pollution Control Officer [to] require the owner or operator of any proposed air contaminant source . . . to conduct . . . air quality modeling and to submit an air quality impact evaluation to demonstrate that operation of the proposed source . . . will not directly or indirectly result in a violation of any ambient air quality standard, interfere with the attainment of any ambient air quality standard, or violate any applicable prevention of significant deterioration increment . . . ." Vermont reviews the potential impact of such sources consistent with EPA's "Guidelines on Air Quality Models" at 40 CFR part 51, appendix W. *See* VT APCR § 5-406(2). Vermont also cites to VT APCR § 5-502, Major Stationary Sources and Major Modifications, which requires the submittal of an air quality impact evaluation or air quality modeling to ANR to demonstrate impacts of new and modified major sources, in accordance with VT APCR § 5-406. The modeling data are sent to EPA along with the draft major permit. As a result, the SIP provides for such air quality modeling as the Administrator has prescribed and for the submission, upon request, of data related to such modeling.

The state also collaborates with the Ozone Transport Commission (OTC) and the Mid-Atlantic Regional Air Management Association and EPA in order to perform large-scale urban

air shed modeling for ozone and PM, if necessary. EPA proposes that Vermont has met the infrastructure SIP requirements of section 110(a)(2)(K) with respect to the 2012 $PM_{2.5}$ NAAQS.

**L. Section 110(a)(2)(L)–Permitting fees.**

This section requires SIPs to mandate that each major stationary source pay permitting fees to cover the costs of reviewing, approving, implementing, and enforcing a permit.

Vermont implements and operates a Title V permit program. *See* Subchapter X of VT APCR, which was approved by EPA on November 29, 2001 (66 FR 59535). To gain this approval, Vermont demonstrated the ability to collect sufficient fees to run the program. Vermont also notes in its submittals that the costs of all CAA permitting, implementation, and enforcement for new or modified sources are covered by Title V fees, and that Vermont state law provides for the assessment of application fees from air emissions sources for permits for the construction or modification of air contaminant sources, and sets forth permit fees. *See* 10 V.S.A § 556, 3 V.S.A § 2822(j).

EPA proposes that Vermont has met the infrastructure SIP requirements of section 110(a)(2)(L) for the 2012 $PM_{2.5}$ NAAQS.

**M. Section 110(a)(2)(M)–Consultation/participation by affected local entities.**

To satisfy Element M, states must provide for consultation with, and participation by, local political subdivisions affected by the SIP. Vermont's infrastructure submittal references 10 V.S.A § 554, which was approved into the VT SIP on June 27, 2017 (82 FR 29005). This statute authorizes the Secretary of Vermont ANR to "[a]dvise, consult, contract and cooperate with other agencies of the state, local governments, industries, other states, interstate or interlocal agencies, and the federal government, and with interested persons or groups." In addition, VT APCR § 5-501(7) provides for notification to local officials and agencies about the opportunity

for participating in permitting determinations for the construction or modification of major sources. EPA proposes that Vermont has met the infrastructure SIP requirements of section 110(a)(2)(M) with respect to the 2012 $PM_{2.5}$ NAAQS.

## IV. Proposed Action

EPA is proposing to approve the elements of the infrastructure SIP submitted by Vermont on October 31, 2017 for the 2012 $PM_{2.5}$ NAAQS. Specifically, EPA's proposed action regarding each infrastructure SIP requirement is contained in Table 1 below.

Table 1: Proposed action on Vermont's infrastructure SIP submittal for the 2012 $PM_{2.5}$ NAAQS

| Element | 2012 $PM_{2.5}$ |
|---|---|
| (A): Emission limits and other control measures | A |
| (B): Ambient air quality monitoring and data system | A |
| (C)1: Enforcement of SIP measures | A |
| (C)2: PSD program for major sources and major modifications | A |
| (C)3: PSD program for minor sources and minor modifications | A |
| (D)1: Contribute to nonattainment/interfere with maintenance of NAAQS | A |
| (D)2: PSD | A |
| (D)3: Visibility Protection | A |
| (D)4: Interstate Pollution Abatement | A |
| (D)5: International Pollution Abatement | A |
| (E)1: Adequate resources | A |
| (E)2: State boards | A |
| (E)3: Necessary assurances with respect to local agencies | NA |
| (F): Stationary source monitoring system | A |
| (G): Emergency power | A |
| (H): Future SIP revisions | A |
| (I): Nonattainment area plan or plan revisions under part D | + |
| (J)1: Consultation with government officials | A |
| (J)2: Public notification | A |
| (J)3: PSD | A |
| (J)4: Visibility protection | + |
| (K): Air quality modeling and data | A |
| (L): Permitting fees | A |
| (M): Consultation and participation by affected local entities | A |

In the above table, the key is as follows:

| | |
|---|---|
| A | Approve |
| NA | Not applicable |
| + | Not germane to infrastructure SIPs |

EPA is soliciting public comments on the issues discussed in this proposal or on other relevant matters. These comments will be considered before EPA takes final action. Interested parties may participate in the Federal rulemaking procedure by submitting comments to this proposed rule by following the instructions listed in the **ADDRESSES** section of this Federal Register.

**V. Statutory and Executive Order Reviews.**

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act 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 Clean Air Act. Accordingly, this proposed 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 Orders12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- 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 Clean Air Act; 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).

In addition, the SIP is not approved to apply on any Indian reservation land 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, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: June 22, 2018

Alexandra Dunn,
Regional Administrator,
EPA Region 1.

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