



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

#### [EPA-R01-OAR-2016-0296; A-1-FRL- 9961-18-Region 1]

#### **Air Plan Approval; ME; Decommissioning of Stage II Vapor Recovery Systems**

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

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve a State Implementation Plan (SIP) revision submitted by the State of Maine Department of Environmental Protection (Maine DEP). This SIP revision includes regulatory amendments that repeal Stage II vapor recovery requirements at gasoline dispensing facilities (GDFs) as of January 1, 2012, with the mandate that all Stage II equipment be decommissioned by January 1, 2013. Maine DEP's submission to EPA also included a demonstration that such removal is consistent with the Clean Air Act and relevant EPA guidance. This revision also includes regulatory amendments that update Maine's testing and certain equipment requirements for Stage I vapor recovery systems at GDFs. The intended effect of this action is to propose approval of Maine's revised gasoline vapor recovery regulations.

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

**ADDRESSES:** Submit your comments, identified by Docket ID Number EPA-R01-OAR-2016-0296 by one of the following methods:

1. **www.regulations.gov:** Follow the on-line instructions for submitting comments.
2. E-mail: [arnold.anne@epa.gov](mailto:arnold.anne@epa.gov)

3. Fax: (617) 918-0047.
4. Mail: "Docket Identification Number EPA-R01-OAR-2016-0296," Anne Arnold, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square - Suite 100, (Mail code OEP05-2), Boston, MA 02109 - 3912.
5. Hand Delivery or Courier. Deliver your comments to: Anne Arnold, Manager, Air Quality Planning Unit, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, 5 Post Office Square - Suite 100, (mail code OEP05-2), Boston, MA 02109 - 3912. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 am to 4:30 pm, excluding legal holidays.

*Instructions:* Direct your comments to Docket ID No. EPA-R01-OAR-2016-0296. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through [www.regulations.gov](http://www.regulations.gov), or e-mail, information that you consider to be CBI or otherwise protected. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov) your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to

technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

*Docket:* All documents in the electronic docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA New England Regional Office, 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 am to 4:30 pm, excluding legal holidays.

In addition, copies of the state submittal are also available for public inspection during normal business hours, by appointment at the State Air Agency: Bureau of Air Quality Control, Department of Environmental Protection, First Floor of the Tyson Building, Augusta Mental Health Institute Complex, Augusta, ME 04333-0017.

**FOR FURTHER INFORMATION CONTACT:** Eric Rackauskas, Air Quality Planning 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, telephone number (617) 918-1628, fax number (617) 918-0628, email [rackauskas.eric@epa.gov](mailto:rackauskas.eric@epa.gov).

**SUPPLEMENTARY INFORMATION:**

Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA.

Organization of this document. The following outline is provided to aid in locating information in this preamble.

- I. Background and Purpose.
- II. Summary of Maine's SIP Revision.
- III. EPA's Evaluation of Maine's SIP Revision.
- IV. Proposed Action.
- V. Incorporation by Reference.
- VI. Statutory and Executive Order Reviews.

### **I. Background and Purpose.**

On April 13, 2016, the Maine DEP submitted a revision to its State Implementation Plan (SIP). The SIP revision consists of Maine's revised Chapter 118, *Gasoline Dispensing Facilities Vapor Control*, which has been revised to require the decommissioning of Stage II vapor recovery systems and to update Stage I vapor recovery testing requirements. The SIP submittal also includes a demonstration that removal of Stage II vapor recovery systems in Maine is consistent with the Clean Air Act and relevant EPA guidance.

Stage II and onboard refueling vapor recovery (ORVR) systems are two types of emission control systems that capture fuel vapors from vehicle gas tanks during refueling. Stage II vapor recovery systems are installed at GDFs and capture the refueling fuel vapors at the gasoline pump. The system carries the vapors back to the underground storage tank at the GDF to prevent the vapors from escaping to the atmosphere. ORVR systems are carbon canisters installed directly on automobiles to capture the fuel vapors evacuated from the gasoline tank before they reach the nozzle. The fuel vapors captured in the carbon canisters are then combusted in the engine when the automobile is in operation.

Stage II vapor recovery systems and vehicle ORVR systems were initially both required by the 1990 Amendments to the Clean Air Act (CAA). Section 182(b)(3) of the CAA requires moderate and above ozone nonattainment areas to implement Stage II vapor recovery programs. Also, under CAA section 184(b)(2), states in the Ozone Transport Region (OTR) are required to implement Stage II or comparable measures. CAA section 202(a)(6) required EPA to promulgate regulations for ORVR for light-duty vehicles (passenger cars). EPA adopted these requirements in 1994, at which point moderate ozone nonattainment areas were no longer subject to the CAA section 182(b)(3) Stage II vapor recovery requirements. ORVR equipment has been phased in for new passenger vehicles beginning with model year 1998, and starting with model year 2001 for light-duty trucks and most heavy-duty gasoline powered vehicles. ORVR equipment has been installed on nearly all new gasoline-powered light-duty vehicles, light-duty trucks, and heavy-duty vehicles since 2006.<sup>1</sup>

During the phase-in of ORVR controls, Stage II has provided volatile organic compound (VOC) reductions in ozone nonattainment areas and certain attainment areas of the OTR. Congress recognized that ORVR systems and Stage II vapor recovery systems would eventually become largely redundant technologies, and provided authority to EPA to allow states to remove Stage II vapor recovery programs from their SIPs after EPA finds that ORVR is in “widespread use.” Effective May 16, 2012, the date the final rule was published in the **Federal Register** (see 77 FR 28772), EPA determined that ORVR systems are in widespread use nationwide for control of gasoline emissions during refueling of vehicles at GDFs. As of the end of 2016, EPA estimates that more than 88 percent of gasoline refueling nationwide occurs with ORVR-

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<sup>1</sup> EPA Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, Table A-1, August 7, 2012.

equipped vehicles.<sup>2</sup> Thus, Stage II vapor recovery programs have become largely redundant control systems and Stage II vapor recovery systems achieve an ever declining emissions benefit as more ORVR-equipped vehicles continue to enter the on-road motor vehicle fleet.<sup>3</sup> In its May 16, 2012 rulemaking, EPA also exercised its authority under CAA section 202(a)(6) to waive certain federal statutory requirements for Stage II vapor recovery systems at GDFs. This decision exempts all new ozone nonattainment areas classified serious or above from the requirement to adopt Stage II vapor recovery programs. Finally, EPA's May 16, 2012 rulemaking also noted that any state currently implementing Stage II vapor recovery programs may submit SIP revisions that would allow for the phase-out of Stage II vapor recovery systems.

Stage I vapor recovery systems are systems that capture vapors displaced from storage tanks at GDFs during gasoline tank truck deliveries. When gasoline is delivered into an aboveground or underground storage tank, vapors that were taking up space in the storage tank are displaced by the gasoline entering the storage tank. The Stage I vapor recovery systems route these displaced vapors into the delivery truck's tank. Some vapors are vented when the storage tank exceeds a specified pressure threshold, however the Stage I vapor recovery systems greatly reduce the possibility of these displaced vapors being released into the atmosphere.

Stage I vapor recovery systems have been in place since the 1970s. EPA has issued the following guidance regarding Stage I systems: "Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations" (November 1975, EPA Online Publication 450R75102), which is regarded as the control techniques guideline (CTG) for the control of VOC emissions from this source category; and the EPA document "Model Volatile Organic Compound Rules for

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<sup>2</sup> EPA Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, Table A-1, August 7, 2012.

<sup>3</sup> In areas where certain types of vacuum-assist Stage II vapor recovery systems are used, the differences in operational design characteristics between ORVR and some configurations of these Stage II vapor recovery systems

Reasonably Available Control Technology” (Staff Working Draft, June 1992) contains a model Stage I regulation.

## **II. Summary of Maine’s SIP Revision.**

Maine adopted its Stage II Vapor Recovery Program in 1995 in order to satisfy the requirements of sections 182(b)(3) and 184(b)(2) of the CAA. The Maine Stage II vapor recovery program requirements were codified in Maine’s Chapter 118, *Gasoline Dispensing Facilities Vapor Control*, and EPA approved the program into the Maine SIP on October 15, 1996 (61 FR 53636). Maine’s rule required gasoline dispensing facilities located in the counties of York, Cumberland, and Sagadahoc to install Stage II vapor recovery systems.

On April 13, 2016, Maine submitted a SIP revision consisting of its revised Chapter 118. This revised rule requires GDFs to decommission their Stage II vapor recovery systems as of January 1, 2013, and contains an appendix detailing the requirements and procedures for disabling the Stage II vapor recovery systems based on the Petroleum Equipment Institute’s *Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites*, PEI RP 300-09, Section 14, Decommissioning Stage II Vapor Recovery Piping, 2009 edition.

In addition, the revised regulation also includes requirements that any GDF whose monthly throughput ever exceeds a threshold of 100,000 gallons per calendar month be subject to the requirements of 40 CFR Part 63 Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities. Furthermore, any GDF that ever exceeds 100,000 gallons per calendar month threshold will

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result in the reduction of overall control system efficiency compared to what could have been achieved relative to the individual control efficiencies of either ORVR or Stage II emissions from the vehicle fuel tank.

remain subject to the NESHAP requirements even if the monthly throughput ever falls below this threshold.

Maine's revised Chapter 118 also includes updated Stage I testing procedures. The procedures now mirror the NESHAP testing requirements for Stage I vapor recovery systems. Any GDF with a monthly throughput over 100,000 gallons per month must perform an initial "P/V Cap Test" in accordance with California Air Resources Board's TP-201.1E. The test must be repeated at least every three years thereafter. In addition, any GDF with at least a 100,000 gallons per month throughput must perform a pressure decay test every three years in accordance with CARB's TP-201.3. Furthermore, all installation and function of Stage I vapor recovery systems must be re-verified upon any major system replacement or modification. Functional tests must be performed within 30 days upon request by the Maine DEP when inspections, records, or other evidence show noncompliance with the state regulation. These tests must be performed during normal business hours, with notification to the Maine DEP provided in writing at least 5 days prior to the test. All test results must be provided to the Maine DEP within 30 days.

The revised Chapter 118 also includes additional procedures for ensuring that the hoses in the Stage I vapor balance system are properly connected. The vapor hose must be connected to the cargo tank and delivery elbow before connecting to the facility storage tank; the cargo tank valve must be opened only after all vapor connections are made, and closed before any vapor connections are disconnected; and the vapor return hose must be disconnected from the facility storage tank before it is disconnected from the cargo tank.

The April 13, 2016 SIP submission also includes a narrative demonstration supporting the discontinuation of the Maine Stage II vapor recovery program. This demonstration, discussed in

greater detail below, consists of an analysis that the Stage II vapor recovery controls provide only *de minimis* emission reductions due to the prevalence of ORVR-equipped vehicles.

### **III. EPA's Evaluation of Maine's SIP Revision.**

EPA has reviewed Maine's revised Chapter 118, *Gasoline Dispensing Facilities Vapor Control*, and accompanying SIP narrative, and has concluded that Maine's April 13, 2016 SIP revision is consistent with EPA's widespread use rule (77 FR 28772, May 16, 2012) and with EPA's "Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures" (EPA-457/B-12-001; August 7, 2012), hereafter referred to as EPA's Guidance Document.

Maine's April 13, 2016 SIP revision includes a CAA section 110(l) anti-back sliding demonstration based on the relevant equations contained in EPA's Guidance Document. Maine's demonstration uses the EPA Guidance Document's estimate that, in 2012, 71.4% of gasoline refueling nationwide occurred with ORVR-equipped vehicles.<sup>4</sup> According to these calculations, the potential loss of refueling emission reductions resulting from the removal of Stage II vapor recovery systems in 2012 (the year leading up to Maine's January 1, 2013 decommissioning deadline) is between 6.2 and 9.2 percent, thus meeting the 10 percent *de minimis* recommendation in EPA's Guidance Document.<sup>5</sup>

In addition, Maine's April 13, 2016 SIP revision also includes calculations illustrating that the overall effect of removing the Stage II vapor recovery program would be an increase of between 45 and 68 tons of VOC in 2012. EPA's 2011 National Emissions Inventory database illustrates that Maine's anthropogenic VOC emissions for York, Cumberland, and Sagadahoc

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<sup>4</sup> EPA Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, Table A-1, August 7, 2012.

<sup>5</sup> This range of estimates for the potential loss of refueling emission reductions results from the range of estimates for the in-use control efficiency of Stage II vapor recovery systems. EPA's Guidance Document suggests these efficiency values range from 0.60 to 0.75. See pages 10-11 of EPA's Guidance Document.

Counties were about 48,484 tons (see <https://www.epa.gov/air-emissions-inventories/2011-national-emissions-inventory-nei-data>); therefore the 45 to 68 annual tons of VOC emissions increase calculated by Maine to have occurred in 2012 are only about 0.2 to 0.4 percent of the total anthropogenic VOC emissions in these three counties for that year. Also, these foregone emissions reductions continue to diminish rapidly over time as ORVR phase-in continues. That is, the estimated 45 to 68 tons of VOC in 2012 have decreased since that time on an annual basis. Therefore, EPA believes that the resulting temporary increases in VOC emissions that occurred by removing the Stage II program will not interfere with attainment or maintenance of the ozone NAAQS.

With respect to Stage I vapor recovery requirements, Maine's revised Chapter 118 is at least as stringent as the previously approved version of the rule, thus meeting the CAA section 110(l) anti-back sliding requirements. The revision includes updated instructions for ensuring the hoses in the vapor balance system were properly connected, and includes more comprehensive testing procedures than the previous SIP-approved rule. This revision will help to ensure that the Stage I vapor recovery equipment is working properly so that the expected emission reductions occur. These testing procedures mirror the guidelines for GDFs with a monthly throughput of 100,000 gallons or more identified in 40 CFR 63, Subpart CCCCCC.

#### **IV. Proposed Action.**

EPA is proposing to approve Maine's April 13, 2016 SIP revision. Specifically, EPA is proposing to approve Maine's revised Chapter 118, *Gasoline Dispensing Facilities Vapor Control*, and incorporate it into the Maine SIP. EPA is proposing to approve this SIP revision because it meets all applicable requirements of the Clean Air Act and relevant EPA guidance, and it will not interfere with attainment or maintenance of the ozone NAAQS.

EPA is soliciting public comments on the issues discussed in this notice or on other relevant matters. These comments will be considered before taking final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to the EPA New England Regional Office listed in the **ADDRESSES** section of this **Federal Register**.

#### **V. Incorporation by Reference**

In this rule, the 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, the EPA is proposing to incorporate by reference of the State of Maine's revised Chapter 118 described in section IV of this notice. The EPA has made, and will continue to make, these documents generally available electronically through <http://www.regulations.gov> and/or in hard copy at the appropriate EPA office.

#### **VI. 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 Order 12866 (58 FR 51735, October 4, 1993);
- 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.

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

Dated: March 16, 2017.

Deborah A. Szaro,  
Acting Regional Administrator,  
EPA New England.

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