



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2022-0790; FRL-9915-01-R3]

Air Plan Approval; District of Columbia; Removal of Stage II Gasoline Vapor Recovery Program Requirements

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 Department of Energy and Environment (DOEE) of the District of Columbia (the District). This revision removes requirements for gasoline vapor recovery systems (VRS) installed on gasoline dispensers, the purpose of which are to capture emissions from vehicle refueling operations, otherwise known as vacuum-assist Stage II vapor recovery. Specifically, this action would remove from the approved SIP prior-approved Stage II requirements applicable to new and existing gasoline dispensing facilities (GDFs). The District of Columbia SIP revision includes a demonstration that removal of Stage II requirements is consistent with the Clean Air Act (CAA) and meets all relevant EPA guidance.

DATES: Written comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R03-OAR-2022-0790 at www.regulations.gov, or via email to gordon.mike@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment

and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit www.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Adam Lewis, Planning & Implementation Branch (3AD30), Air & Radiation Division, U.S. Environmental Protection Agency, Region III, 1600 John F Kennedy Boulevard, Philadelphia, PA 19103. The telephone number is (215) 814-2026. Mr. Adam Lewis can also be reached via electronic mail at Lewis.Adam@epa.gov.

SUPPLEMENTARY INFORMATION:

- I. Background and Purpose
- II. Summary of the District of Columbia's Stage II Vapor Recovery Program and SIP Revision
- III. EPA's Evaluation of the District of Columbia's SIP Revision
- IV. Proposed Action
- V. Incorporation by Reference
- VI. Statutory and Executive Order Reviews

I. Background and Purpose

On May 18, 2022, the DOEE submitted a revision to its SIP. That SIP submittal consisted of the District's revised Stage II vapor recovery regulations at Title 20 of the District of Columbia Municipal Regulations (DCMR) Chapter 7 Section 705 Stage II Vapor Recovery. DOEE revised its regulations so new GDFs would no longer be required to install and operate Stage II VRS. Additionally, DOEE's revisions allow existing GDFs to decommission existing vacuum-assist Stage II VRS on or after January 1, 2022. The SIP submittal includes a demonstration that removal of Stage II VRS in the District will not interfere with any

requirements concerning attainment or reasonable progress of any national ambient air quality standard (NAAQS), or any other applicable requirement of the CAA.

Stage II vapor recovery is an emission control system that is installed on gasoline dispensing equipment at GDFs for the purpose of capturing fuel vapor that would otherwise be released from vehicle gas tanks into the atmosphere during vehicle refueling. Stage II VRS installed on dispensing equipment capture these refueling emissions at the dispenser and route the refueling vapors back to the GDF's underground storage tank, preventing volatile organic compounds (VOCs) in the vapors from escaping to the atmosphere. Beginning in 1998, newly manufactured gasoline-burning cars and trucks have been equipped with on-board refueling vapor recovery (ORVR) systems that utilize carbon canisters installed directly on the vehicle to capture refueling vapors in the vehicle to be later routed to the vehicle's engine for combustion during engine operation.

The 1990 CAA amendments initially required implementation of both Stage II VRS and ORVR systems. Section 182(b)(3) of the CAA required areas classified as moderate and above ozone nonattainment to implement Stage II vapor recovery programs, while CAA section 184(b)(2) required states in the Northeast Ozone Transport Region (OTR) to implement Stage II vapor recovery or comparable measures. CAA section 202(a)(6) required EPA to promulgate regulations for ORVR for light-duty cars and trucks (passenger vehicles); EPA adopted these requirements in a final action published in the **Federal Register** (April 6, 1994, 59 FR 16262), (hereafter referred to as the ORVR rule). Upon the effective date of that final rule, moderate ozone nonattainment areas were no longer subject to CAA section 182(b)(3) Stage II vapor recovery requirements. Under the ORVR rule, new passenger cars built in model year 1998 and later were required to be equipped with ORVR systems, followed by model year 2001 and later light-duty trucks. ORVR equipment has been installed on nearly all new gasoline-powered light-duty cars, light-duty trucks, and heavy-duty vehicles manufactured since 2006.¹

¹ EPA Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and

During the phase-in of ORVR controls, Stage II vapor recovery has provided VOC emission reductions in ozone nonattainment areas and in certain areas of the OTR. Congress recognized that ORVR systems and Stage II VRS would over time become largely redundant technologies acting to capture the same pollutants; Congress therefore provided authority in the 1990 CAA amendments for EPA to allow states to remove Stage II vapor recovery programs from their SIPs upon EPA making a finding that ORVR is in “widespread use.”² EPA issued a widespread use finding in a final rule published in the **Federal Register** (May 16, 2012, 77 FR 28772), in which EPA determined that ORVR was in widespread use on a nationwide basis. EPA estimated that by the end of 2016, more than 88 percent of gasoline refueling nationwide would occur with ORVR-equipped vehicles. As noted in EPA’s Stage II Removal Guidance, Stage II vapor recovery programs have become largely redundant control systems for ORVR-equipped vehicles and, as a result, Stage II VRS achieve ever-declining emissions benefits as more ORVR-equipped vehicles continue to enter the on-road motor vehicle fleet. In areas where certain types of vacuum-assist Stage II VRS are used, such as the District, the incompatibility between ORVR systems and certain configurations of Stage II vapor recovery systems results in the reduction of overall control system efficiency in capturing VOC refueling emissions, compared to what would otherwise be achieved by ORVR or Stage II VRS acting in the absence of the other. In its May 16, 2012 (77 FR 28772) widespread use rulemaking, EPA also exercised its authority under CAA section 202(a)(6) to waive certain Federal statutory requirements for Stage II VRS at GDFs, which among other things, exempted 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 (77 FR 28772) rulemaking also noted that any state currently implementing a Stage II vapor recovery program may submit SIP revisions that would allow for the phase-out of Stage II VRS.

Assessing Comparable Measures, (August 7, 2012), hereafter referred to as EPA’s Stage II Removal Guidance www3.epa.gov/ttn/naaqs/aqmguidance/collection/cp2/20120807_page_stage2_removal_guidance.pdf.

² See CAA Section 202(a)(6).

II. Summary of the District of Columbia's Stage II Vapor Recovery Program and SIP

Revision

The District of Columbia was classified as Serious nonattainment for the 1-hour 1979 ozone NAAQS in the **Federal Register** at 56 FR 56694 (November 6, 1991), this standard has since been revoked. The District was found to be in attainment of ground-level 2008 ozone NAAQS on July 16, 2019 and subsequently found to be in Moderate nonattainment for the 2015 ozone NAAQS on November 7, 2022 (40 CFR 81.309). Because gasoline vapors contain mainly VOCs and contribute to the formation of ground-level ozone, Section 182(b)(3) of the CAA Amendments of 1990 required states with moderate and higher ozone nonattainment areas to revise their SIPs to require “owners or operators of gasoline dispensing systems to install and operate...a system for gasoline vapor recovery of emissions from the fueling of motor vehicles.”³ As a result, in 1993 the District of Columbia adopted Stage II vapor recovery requirements at Title 20 DCMR Environment, Chapter 7 Air Quality – Volatile Organic Compounds and Hazardous Air Pollutants, Section 705 Stage II Vapor Recovery. These changes were subsequently incorporated into the District’s SIP (October 27, 1999, 64 FR 57777). In October 2021, due to the widespread use of ORVR and its incompatibility with the Stage II vacuum-assist VRS in use at GDFs in the District, DOEE proposed revisions to its vapor recovery regulations. These revisions proposed to allow existing GDFs within the District the option to decommission their Stage II VRS, and for new GDFs to forgo them entirely.⁴ DOEE subsequently finalized these revisions in April 2022.⁵

On May 18, 2022, DOEE submitted a SIP revision to EPA consisting of these state regulatory revisions adopted by DOEE, along with a demonstration of the emission impacts of

³ CAA Section 182(b)(3).

⁴ 68 DCR 11457, Proposed Rulemaking, Amend 20 DCMR (Environment), Ch. 7 (Air Quality – Volatile Organic Compounds and Hazardous Air Pollutants), Sec. 705 (Stage II Vapor Recovery), Removal of Stage II Vapor Recovery from Gasoline Dispensing Facilities in the District; issued October 29, 2021.

⁵ 69 DCR 3128, Final Rulemaking, Amend 20 DCMR (Environment), Ch. 7 (Air Quality – Volatile Organic Compounds and Hazardous Air Pollutants), Sec. 705 (Stage II Vapor Recovery), Removal of Stage II Vapor Recovery from Gasoline Dispensing Facilities in the District; issued April 8, 2022 and effective same day.

the changes to Stage II requirements on affected areas in the District. This SIP revision includes DOEE's revised rules that allow new GDFs that commence construction on or after January 1, 2022, to do so without installing and operating a Stage II VRS and allow existing GDFs to commence the decommissioning of vacuum-assist Stage II VRS on or after January 1, 2022. DOEE's revised rules incorporate by reference requirements and procedures for decommissioning Stage II VRS based on Chapter 14 of the Petroleum Equipment Institute's "Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites," 2009 edition, PEI/RP300-09. The revised rules also incorporate by reference requirements and procedures for the maintenance and periodic testing of Stage II VRS for GDFs that opt to continue operating them.

The October 28, 2021, SIP revision also includes a demonstration supporting the discontinuation of the Stage II vapor recovery program in the District. This demonstration, discussed in greater detail below, shows that by 2019 the overall emissions benefits associated with the Stage II vapor recovery program, operated in conjunction with ORVR, are overwhelmed by an emissions disbenefit caused by ORVR incompatibility with the vacuum-assist type Stage II VRS equipment in use at GDFs. DOEE's analysis followed the EPA's "Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plan and Assessing Comparable Measures" (EPA-457/B-12-001; August 7, 2012), hereafter referred to as EPA's Stage II Removal Guidance. The DOEE analysis demonstrates that within the District the increasing prevalence of ORVR-equipped vehicles and the continued operation of the Stage II vapor recovery program results in increased VOC emissions due to the incompatibility between the vacuum-assist type Stage II VRS equipment and ORVR. The DOEE further demonstrates that allowing the decommissioning of all Stage II VRS equipment on or after January 1, 2022, will result in additional emissions decreases, especially when combined with the increasing prevalence of ORVR-equipped vehicles.

III. EPA's Evaluation of the District of Columbia's SIP Revision

EPA has reviewed the District's revised 20 DCMR 705, Stage II Vapor Recovery, and accompanying SIP narrative, and has concluded that DOEE's October 28, 2021 SIP revision is consistent with EPA's widespread use rule (77 FR 28772, May 16, 2012) and with EPA's Stage II Removal Guidance.

In reviewing the proposed SIP revision, the EPA must ensure that: 1) in accordance with CAA section 110(l)'s non-interference requirement, DOEE has demonstrated that the proposed action would not interfere with attainment of the National Ambient Air Quality Standards or reasonable further progress towards attainment of any NAAQS; 2) in accordance with CAA section 184(b)(2)'s "comparable measures" requirement, that the proposed action would achieve comparable or greater emission reductions than the gasoline vapor recovery requirements contained in CAA section 182(b)(3); and 3) that the proposed action satisfies the anti-backsliding requirements of CAA section 193. As discussed below, the EPA finds that DOEE has demonstrated widespread use of ORVR systems throughout the motor vehicle fleet and that implementation of the rule in the proposed SIP revision would comply with CAA sections 110(l), 184(b)(2), and 193.

CAA section 110(l) specifies that the EPA cannot approve a SIP revision if it would interfere with attainment of NAAQS or reasonable further progress towards attainment, or any other applicable requirement of the CAA; this is commonly referred to as "anti-backsliding." DOEE's SIP revision submittal includes a CAA section 110(l) anti-backsliding demonstration (based on equations provided in the EPA's Stage II Removal Guidance)⁶ demonstrating there would be a negative increment value for the potential loss of emission reductions from removing Stage II vapor recovery systems in 2019. If the calculated increment value is zero or negative, this would indicate that removing Stage II systems would not increase refueling emissions. Thus, the SIP revision will not interfere with attainment of NAAQS, reasonable further progress

⁶ EPA Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, (August 7, 2012), pages 13-14.

towards attainment, or any other applicable requirement of the CAA.

Because the District is located in the northeast OTR, under CAA section 184(b)(2)'s “comparable measures” requirement, the State must show that its SIP revisions include control measures capable of achieving emission reductions comparable to those achievable through Stage II Systems under CAA section 182(b)(3). As stated in the EPA’s Stage II Removal Guidance, “the comparable measures requirement is satisfied if phasing out a Stage II control program in a particular area is estimated to have no, or a de minimis, incremental loss of area-wide emission control.” DOEE conducted a comparable measure analysis in accordance with the EPA’s Stage II Removal Guidance that shows that phasing out the Stage II program would result in zero or de minimis incremental loss of area wide emission control satisfying the comparable measures requirement of CAA section 184(b)(2).

DOEE’s analysis indicates there would be a negative increment value for the potential loss of emission reductions from removing Stage II vapor recovery systems starting in 2019 at a range of at least -0.0425 and at most -0.0348. The EPA’s Stage II Removal Guidance explains that a zero or negative increment value indicates that removing Stage II, “would not increase the refueling emissions inventory because the higher efficiency from ORVR and the incompatibility emissions offset the increment due to non-ORVR vehicles being refueled at Stage II GDFs.”⁷ Thus, compliance with CAA section 184(b)(2) is demonstrated and the revision to the SIP satisfies the comparable measures requirement. EPA has reviewed the DOEE analysis and agrees with its conclusions that within the District the overall emissions benefits associated with the Stage II vapor recovery program, operated in conjunction with widespread use of ORVR, are shown to be overwhelmed by an emissions disbenefit caused by ORVR incompatibility.

IV. Proposed Action

EPA is proposing to approve the District's October 28, 2021 SIP revision for districtwide

⁷ EPA Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures, (August 7, 2012), page 13.

removal of Stage II vapor recovery requirements, which removes requirements for gasoline vapor recovery systems installed on gasoline dispensers, the purpose of which are to capture emissions from vehicle refueling operations, otherwise known as vacuum-assist Stage II vapor recovery. Specifically, EPA is proposing to approve Title 20 of the District of Columbia Municipal Regulations (DCMR) Chapter 7 Section 705 Stage II Vapor Recovery, and incorporate it into the District's 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 because approval of this SIP revision will not interfere with attainment or maintenance of the ozone NAAQS. EPA is soliciting public comments on the issues discussed in this action or other relevant matters. These comments will be considered before taking final action.

V. Incorporation by Reference

In this document, EPA proposes to include in a final rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the District of Columbia's revisions to 20 DCMR 705, Removal of Stage II Vapor Recovery from Gasoline Dispensing Facilities in the District; (effective date April 8, 2022), as explained in Section II of this preamble. EPA has made, and will continue to make, these materials generally available through www.regulations.gov and at the EPA Region III Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VI. Statutory and Executive Order Reviews

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

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- 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 (Pub. L. 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); and
- 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;

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, February 16, 1994) directs Federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. EPA defines environmental justice (EJ) as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of

environmental laws, regulations, and policies.” EPA further defines the term fair treatment to mean that “no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies.”

The DOEE did not evaluate environmental justice considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. EPA did not perform an EJ analysis and did not consider EJ in this proposed rulemaking. Due to the nature of the proposed action being taken here, this proposed rulemaking is expected to have a neutral to positive impact on the air quality of the affected area. Consideration of EJ is not required as part of this action, and there is no information in the record inconsistent with the stated goal of E.O. 12898 of achieving environmental justice for people of color, low-income populations, and Indigenous peoples.

In addition, this proposed rulemaking, to remove the District’s Stage II vapor recovery requirements from the SIP does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the District, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

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

Diana Esher,
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