6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2015-0522; FRL-9948-51-Region 5]

Air Plan Approval; Ohio; Removal of Stage II Gasoline Vapor Recovery 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 Ohio Environmental Protection Agency (Ohio EPA) on July 15, 2015 and February 29, 2016, concerning the state's Stage II vapor recovery (Stage II) program for the Cleveland, Cincinnati, and Dayton ozone areas in Ohio. The revision removes Stage II requirements for the three areas as a component of the Ohio ozone SIP. The submittal also includes a demonstration as required by the Clean Air Act (CAA) that addresses emissions impacts associated with the removal of the program.

DATES: 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 No. EPA-R05-OAR-2015-0522 at http://www.regulations.gov, or via email to persoon.carolyn@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 http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Francisco J. Acevedo, Mobile Source Program Manager, Control Strategies Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-6061, acevedo.francisco@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, we mean EPA. This supplementary information section is arranged as follows:

I. Background.

Stage II and onboard refueling vapor recovery systems (ORVR) are two types of emission control systems that capture fuel vapors from vehicle gas tanks during refueling. Stage II systems are specifically installed at gasoline dispensing facilities (GDF) and capture the refueling fuel vapors at the gasoline pump nozzle. 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 and vehicle ORVR were initially both required by the

1990 Amendments to the CAA under sections 182(b)(3) and 202(a)(6), respectively. In some areas Stage II has been in place for over 25 years, but Stage II was not widely implemented by the states until the early to mid-1990s as a result of the CAA requirements for moderate, serious, severe, and extreme ozone nonattainment areas, and for states in the Northeast Ozone Transport Region (OTR) under CAA section 184(b)(2).

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 section 182(b)(3) Stage II requirement. However, some moderate areas retained Stage II requirements to provide a control method to comply with rate-of-progress emission reduction targets. ORVR equipment has been phased in for new passenger vehicles beginning with model year 1998, and starting in 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.

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 and Stage II would eventually

become largely redundant technologies, and provided authority to EPA to allow states to remove Stage II from their SIPs after EPA finds that ORVR is in widespread use.

Effective May 16, 2012 (77 FR 28772), EPA determined that ORVR is in widespread nationwide use for control of gasoline emissions during refueling of vehicles at GDFs. Currently, more than 75 percent of gasoline refueling nationwide occurs with ORVR-equipped vehicles, so Stage II programs have become largely redundant control systems and Stage II systems achieve an ever declining emissions benefit as more ORVR-equipped vehicles continue to enter the on-road motor vehicle fleet[1].

EPA also exercised its authority under CAA section 202(a)(6) to waive certain Federal statutory requirements for Stage II gasoline vapor recovery at GDFs. This decision exempts all new ozone nonattainment areas classified serious or above from the requirement to adopt Stage II control programs. Similarly, any state currently implementing Stage II programs may submit SIP revisions that, once approved by EPA, would allow for the phase out of Stage II control systems. To assist states in the development of SIP revisions to remove Stage II

[1] In areas where certain types of vacuum-assist Stage II systems are used, the differences in operational design characteristics between ORVR and some configurations of these Stage II systems 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.

requirements from their SIPs, EPA released its "Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures" (EPA-457/B-12-001) on August 7, 2012.

II. What Changes Have Been Made to the Ohio Stage II Vapor Recovery Program?

The Ohio EPA originally submitted a SIP revision to EPA on June 7, 1993, to satisfy the requirement of section 182(b)(3) of the CAA. The revision applied to the Cleveland (Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage and Summit counties), Cincinnati (Butler, Clermont, Hamilton and Warren counties), and Dayton (Clark, Greene, Miami and Montgomery counties) ozone nonattainment areas in Ohio. EPA partially approved Ohio's Stage II program on October 20, 1994 (59 FR 52911), including the program's legal authority and administrative requirements found in the Ohio Administrative Code (OAC) rules 3745-21-09 (DDD)(1)-(4).

As a result of EPA's May 16, 2012 determination that ORVR is in widespread nationwide use for control of gasoline emissions during refueling of vehicles at GDFs, Ohio EPA initiated a rulemaking process to revise its SIP to remove Stage II requirements for all facilities in the Cleveland, Cincinnati and Dayton areas. As part of that rulemaking process, an Ohio-specific analysis following EPA's recommended methodology was

also completed. The analysis concluded that, starting in calendar year 2017, ORVR would be in widespread use in Ohio and that there would be no remaining emissions reduction benefit from Stage II requirements beyond the benefits from ORVR.

On July 15, 2015, and February 29, 2016, the Ohio EPA submitted a SIP revision requesting EPA approval of amendments to OAC 3745-21-09 (DDD) that removes Stage II requirements from the Ohio ozone SIP and allows GDFs currently implementing Stage II in the Cleveland, Cincinnati and Dayton areas to decommission their systems by 2017. To support the removal of the Stage II requirements, the revision included amended copies of OAC 3745-21-09 (DDD), as adopted on April 29, 2013, and January 17, 2014; a summary of Ohio-specific calculations based on EPA guidance used to calculate program benefits and demonstrate widespread use of ORVR in Ohio; and a section 110(l) demonstration that includes documentation that addresses the period, 2013-2017, when Stage II requirements were waived in Ohio but widespread use of ORVR has not yet occurred.

III. What Is EPA's Analysis of the State's Submittal?

EPA's primary consideration for determining the approvability of Ohio's request is whether this requested action complies with section 110(l) of the CAA[2].

[2] CAA section 193 is not relevant because Ohio's Stage II rule was not included in the SIP before the 1990 CAA amendments.

Section 110(l) requires that a revision to the SIP not interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of the Act. EPA evaluates each section 110(l) noninterference demonstration on a case-by-case basis considering the circumstances of each SIP revision. EPA interprets 110(l) as applying to all national ambient air quality standards (NAAQS) that are in effect, including those that have been promulgated but for which EPA has not yet made designations. The degree of the analysis focused on any particular NAAQS in a nontinterference demonstration varies depending on the nature of the emissions associated with the proposed SIP revision.

In its July 15, 2015, and February 29, 2016, SIP revision, the Ohio EPA used EPA's guidance to conduct a series of calculations to determine the potential impact of removing the Stage II program on air quality.[3] Ohio EPA's analysis focused on

[3] EPA, Guidance on Removing Stage II Gasoline Vapor Control Program from State Implementation Plans and Assessing Comparable Measure, EPA-457/B-12-001 (August 7, 2012), available at: http://www.epa.gov/groundlevelozone/pdfs/20120807guidance.pdf. This guidance document notes that "the potential emission control losses from removing Stage II vapor recovery systems (VRS) are transitional and relatively small. ORVR-equipped vehicles will continue to phase in to the fleet over the coming years and will exceed 80 percent for all highway gasoline vehicles and 85 percent of all gasoline dispensed during 2015. As the number of these ORVE-equipped vehicles increase, the control of attributed to Stage II VRS will decrease even

VOC emissions because, as mentioned previously, Stage II requirements affect VOC emissions and because VOCs are a precursor for ground-level ozone formation.[4]

Ohio EPA has calculated that beginning in 2017, ORVR will be in widespread use in all three program areas and the absence of the Ohio Stage II program starting in 2017 would not result in a net VOC emissions increase compared to the continued utilization of this emissions control technology. The emission reduction losses resulting from removing Stage II before 2017

---

further, and the potential foregone Stage II VOC emission reductions are generally expected to be no more than one percent of the VOC inventory in the area."

[4] Cleveland is currently designated nonattainment for the 2012 Annual fine particulate matter ($PM_{2.5}$) NAAQS. While VOC is one of the precursors for $PM_{2.5}$ formation, a study (Journal of Environmental Engineering – Qualifying the sources of ozone, fine particulate matter, and regional haze in the Southeastern United States, June 24, 2009, available at: http://www.journals.elsevier.com/journal-ofenvironmental-management) indicates that in portions the Midwest (including portions of Ohio) where Stage II has been implemented, emissions of PM2.5 and the precursor sulfur dioxide (SO_2) are more significant to ambient $PM_{2.5}$ concentrations than nitrogen oxides (NOx) and VOC. Specifically, $PM_{2.5}$ sensitivities to anthropogenic VOC emissions are near zero for the entire region, including the Cincinnati region. This study also indicated that the impact of SO_2 emission, especially from electric generating units, was most significant in the Cincinnati area due to SO_2 emissions in the entire mid-west region (Wisconsin, Illinois, Indiana, Michigan, and Ohio). In fact, emissions from the mid-west had the largest effect in the Cleveland and Dayton areas. The technical analysis has met EPA's guidance and demonstrates anthropogenic VOCs are insignificant to the formation of $PM_{2.5}$ in these areas. Currently, the Cleveland area is also designated nonattainment for sulfur dioxide (Lake Co.) and lead (Cuyahoga Co.) and those pollutants are not affected by the removal of Stage II requirements.

are transitional and relatively small since ORVR-equipped vehicles will continue to phase into the fleet over the coming years. Ohio EPA's calculation indicates a maximum potential loss of 1.858 tons per summer day (tpsd) in Cleveland, 0.914 tpsd in Cincinnati, and 0.655 tpsd in Dayton from 2013 through 2016. In 2013, the year with the highest level of emission increases, these summer day emissions increases are only 0.21 percent to 0.26 percent of the typical summer day VOC emissions rate in the three areas. These emissions increases are insignificant with respect to the total summer day VOC emission rates of all sectors in these areas. Also it is important to note that the minimal emissions increase significantly decreases over the next two years (2014 and 2015) and becomes an emissions decrease in 2017 and all years thereafter.

To help offset the initial emissions increases during the Stage II phase out period, Ohio EPA is requiring the installation of low permeation hoses at GDFs. Ohio EPA has calculated that low permeation hoses will provide 42.9 tons of VOC emission reductions each year during the ozone seasons (21.4 tons for Cleveland area, 13.6 tons for Cincinnati area, and 7.9 for Dayton area) starting in 2013. Table 1 shows the increase of emissions associated with the phase out of State II systems at facilities in all program areas in Ohio starting in 2013, as well as offset emissions associated with the requirement of low

permeation hoses at GDFs.

Table 1 – VOC Emissions During Ozone Season (tons per day)

Cleveland Area					
	2013	2014	2015	2016	2017
Stage II Phase-out	0.910	0.580	0.300	0.068	-0.116
Low Permeation Hoses	-0.14	-0.14	-0.14	-0.14	-0.14
Daily Total	**0.77**	**0.44**	**0.16**	**-0.072**	**-0.26**
Typical Summer Day	367.17	367.17	367.17	367.17	367.17
% of Summer Day	0.21%	0.12%	0.043%	-0.019%	-0.26%
Cincinnati Area					
	2013	2014	2015	2016	2017
Stage II Phase-out	0.440	0.284	0.151	0.039	-0.053
Low Permeation Hoses	-0.089	-0.089	-0.089	-0.089	-0.089
Daily Total	**0.35**	**0.20**	**0.062**	**-0.050**	**-0.14**
Typical Summer Day	147.05	147.05	147.05	147.05	147.05
% of Summer Day	0.24%	0.13%	0.042%	-0.034%	-0.096%
Dayton Area					
	2013	2014	2015	2016	2017
Stage II Phase-out	0.310	0.201	0.110	0.034	-0.027
Low Permeation Hoses	-0.052	-0.052	-0.052	-0.052	-0.052
Daily Total	**0.26**	**0.15**	**0.058**	**-0.018**	**-0.079**
Typical Summer Day	99.66	99.66	99.66	99.66	99.66
% of Summer Day	0.26%	0.15%	0.058%	-0.018%	-0.079%

As illustrated in Table 1, and documented in Ohio's SIP revision, for each year prior to the widespread use of ORVR in Ohio (2017) starting in 2013, the VOC emissions increase associated with the removal of Stage II systems is eventually offset by the VOC emission reductions attributed to ORVR being in widespread use in Ohio and the requirement of low permeation hoses at GDFs.

EPA believes that the removal of the Ohio Stage II program does not interfere with Ohio's ability to demonstrate compliance with the 8-hour ozone NAAQS in all three areas. This is based

on the use of permanent, enforceable, contemporaneous, surplus emissions reductions achieved through the requirement of low permeation hoses at GDFs, and the fact that the small emissions increase is both temporary and insignificant with respect to the total summer day emission rates for sectors in these areas.

EPA also examined whether the removal of Stage II program requirements in all three areas will interfere with attainment of other air quality standards. All the counties in the Dayton area are designated attainment for all standards, including sulfur dioxide and nitrogen dioxide. Cincinnati is designated attainment for all standards other than ozone and sulfur dioxide. The Cleveland area is designated attainment for all standards other than ozone, lead (Cuyahoga Co.), sulfur dioxide (Lake Co.) and particulate matter (Cuyahoga and Lorain Counties). Based on Ohio EPA's 110(l) analysis, EPA has no reason to believe that the removal of the Stage II program in Ohio will cause the areas to become nonattainment for any of these pollutants. In addition, EPA believes that removing the Stage II program requirements in Ohio will not interfere with the areas' ability to meet any other CAA requirement.

Based on the above discussion and the state's section 110(l) demonstration, EPA believes that removal of the Stage II program would not interfere with attainment or maintenance of any of the NAAQS in the Cleveland, Cincinnati, and Dayton areas

and would not interfere with any other applicable requirement of the CAA, and thus, are approvable under CAA section 110(l).

IV. What Action Is EPA Proposing to Take?

EPA is proposing to approve the revision to the Ohio ozone SIP submitted by Ohio EPA on July 15, 2015, and February 26, 2016, because we find that the revision meets all applicable requirements and it would not interfere with reasonable further progress or attainment of any of the NAAQS.

V. Incorporation by Reference.

In this rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference Ohio rule 3745-21-09 "Control of emissions of volatile organic compounds from stationary sources and perchloroethylene from dry cleaning facilities.", effective January 17, 2014. EPA has made, and will continue to make, these documents generally available through www.regulations.gov and/or at the EPA Region 5 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 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 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

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, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Volatile organic compounds.

Dated: June 27, 2016.

Robert Kaplan,
Acting Regional Administrator, Region 5.

[FR Doc. 2016-15617 Filed: 6/29/2016 8:45 am; Publication Date: 6/30/2016]