



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R10-OAR-2023-0341, FRL-11175-01-R10]

Air Plan Approval; Washington; Southwest Clean Air Agency; Emission Standards and Controls for Sources Emitting Gasoline Vapors

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) proposes to approve a revision to the Washington State Implementation Plan (SIP) for the Southwest Clean Air Agency (SWCAA) jurisdiction as it relates to the ozone National Ambient Air Quality Standard. This proposed revision updates SWCAA's requirements in the SIP for Stage I and Stage II vapor recovery systems at gasoline dispensing facilities including: decommissioning existing Stage II systems incompatible with onboard refueling vapor recovery systems on or before January 1, 2023; allowing removal from service of Stage II vapor recovery equipment compatible with onboard refueling vapor recovery on or after January 1, 2023; and removing the requirement for Stage II vapor recovery at new installations. The proposed revisions to the SIP also include, among other changes, revised requirements for installation of enhanced conventional nozzles, installation of low permeation hoses, and annual testing based on facility throughput. SWCAA's submittal, in coordination with the Washington Department of Ecology, includes a demonstration that such removal of Stage II requirements is consistent with the Clean Air Act and EPA guidance.

DATES: 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-R10-OAR-2023-0341 at <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. 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, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Jeff Hunt, EPA Region 10, 1200 Sixth Avenue – Suite 155, Seattle, WA 98101, at (206) 553-0256, or hunt.jeff@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document whenever “we,” “us,” or “our” is used, it is intended to refer to the EPA.

I. Background

Ozone is a gas composed of three oxygen atoms. Ground-level ozone is generally not emitted directly from a vehicle’s exhaust or an industrial smokestack but is created by a chemical reaction between nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight and high ambient temperatures. VOC and NO_x emissions often are referred to as “precursors” to ozone formation. Thus, ozone is known primarily as a summertime air pollutant. Motor vehicle exhaust and industrial emissions, gasoline vapors, chemical solvents and natural sources can emit or contain NO_x and/or VOC. Urban areas tend to have high concentrations of ground-level ozone, but areas without significant industrial activity and with relatively low vehicular traffic are also subject to increased ozone levels because wind carries ozone and its precursors hundreds of miles from their sources. In 1979, under section 109 of the Clean Air Act (CAA or the Act), the EPA established the primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone at 0.12 parts per million (ppm) averaged over a 1-hour period (44 FR 8202, February 8, 1979). In 1997, we revised the primary and secondary NAAQS for ozone

to set the acceptable level of ozone in the ambient air at 0.08 ppm, averaged over an 8-hour period (62 FR 38856, July 18, 1997). In 2008, we further revised the primary and secondary ozone NAAQS to 0.075 ppm, averaged over an 8-hour period (73 FR 16436, March 27, 2008). In 2015, we again revised the primary and secondary ozone NAAQS to 0.070 ppm, averaged over an 8-hour period (73 FR 16436, March 27, 2008). For additional information on ozone, visit <https://www.epa.gov/ozone-pollution>.

Stage II vapor recovery is an air pollution control technology for automobiles and other on-road mobile sources. When an automobile or other vehicle is brought into a gas station to be refueled, the empty portion of the gas tank on the vehicle contains gasoline vapors, which are VOCs. When liquid gasoline is pumped into the partially empty gas tank in the vehicle the vapors are displaced out of the tank as the tank fills with liquid gasoline. Where air pollution control technology is not used, these vapors are emitted into the air. In the atmosphere, these VOCs can, in the presence of sunlight, react with NO_x and VOCs from other sources to form ozone. The Stage II system consists of special nozzles and coaxial hoses at each gas pump that capture vapor from the vehicle's fuel tank and route them to underground or above ground storage tanks during the refueling process. Stage II vapor recovery systems are specifically installed at gasoline dispensing facilities and capture the refueling fuel vapors at the gasoline pump nozzle. The system directs the displaced vapors back to the underground storage tank at the gasoline dispensing facility to prevent the vapors from escaping to the atmosphere.

Onboard refueling vapor recovery (ORVR) is another emission control system that can capture fuel vapors from vehicle gas tanks during refueling. ORVR systems are carbon canisters installed directly on automobiles to capture the fuel vapors displaced from the gasoline tank before they are released to the atmosphere. The fuel vapors captured in the carbon canisters are then combusted in the engine when the automobile is started and operated after refueling.

Stage II vapor recovery systems and vehicle ORVR systems were initially both required by the 1990 Amendments to the CAA, with Stage II requirements applying to certain

nonattainment areas. Under CAA section 182(b)(3) ozone nonattainment areas classified as moderate and above were required to adopt Stage II requirements. CAA section 202(a)(6), requires an onboard system of capturing vehicle refueling emissions, commonly referred to as an ORVR system. In 1994, the EPA promulgated ORVR standards (59 FR 16262, April 6, 1994). Section 202(a)(6) of the CAA required that the EPA's ORVR standards apply to light-duty vehicles manufactured beginning in the fourth model year after the model year in which the standards were promulgated, and that ORVR systems provide a minimum evaporative emission capture efficiency of 95 percent.¹ ORVR equipment has been phased in for new light duty vehicles (passenger vehicles) beginning with model year 1998 and starting with model year 2001 for light-duty trucks and most heavy-duty gasoline powered vehicles. Since 2006, ORVR has been a required emissions control on nearly all new gasoline-powered highway vehicles having less than 14,000 pounds gross vehicle weight rating. CAA section 202(a)(6) provides discretionary authority to the Administrator, by rule, to revise or waive the application of the Stage II requirements for areas classified as Serious, Severe, or Extreme for ozone, as appropriate, after such time as the Administrator determines that onboard emissions control systems are in widespread use throughout the motor vehicle fleet.

On May 16, 2012, the EPA issued a national rulemaking making the finding that ORVR systems are in "widespread use" and determined that emission reductions from ORVR alone are essentially equal to and will soon surpass the emission reductions achieved by Stage II alone (see 77 FR 28772 at 28772). In the May 16, 2012 action, we noted that each year, non-ORVR-equipped vehicles continue to be replaced with ORVR-equipped vehicles and Stage II and ORVR systems capture the same VOC emissions and thus, are redundant. *Id.* The EPA also determined that ORVR systems are in widespread use and waived the Stage II requirement for gasoline dispensing facilities if doing so did not interfere with attaining or maintaining the ozone

¹ Unlike Stage II, which is a requirement only in certain ozone nonattainment areas, ORVR requirements apply to vehicles everywhere.

standards. *Id.* at 28776–28779. The EPA 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 including a CAA section 110(l) analysis showing that its removal did not interfere with attaining or maintaining the ozone standards. *Id.*

The Portland/Vancouver area was designated an interstate ozone nonattainment area in 1978. On November 15, 1990, the CAA Amendments of 1990 were enacted. (Pub. L. 101–549, 104 Stat. 2399, codified at 42 U.S.C. 7401–7671q). Under section 181(a)(1) of the 1990 CAA, the area was further classified as a “Marginal” ozone nonattainment area. This interstate nonattainment area consisted of the southern portion of Clark County, Washington, and portions of Multnomah, Clackamas, and Washington Counties in Oregon. In 1997, the EPA redesignated the Portland/Vancouver area to attainment (62 FR 27204, May 19, 1997). The Portland/Vancouver area was designated as “unclassifiable/attainment” due to the data showing the area was below the new NAAQS for subsequent updates, including the 1997 8-hour ozone NAAQS (69 FR 23857, April 30, 2004), the 2008 8-hour ozone NAAQS (77 FR 30088, May 21, 2012), and the 2015 8-hour ozone NAAQS (82 FR 54232, November 16, 2017).

The Portland/Vancouver area was not subject to Stage II requirements under the 1990 Clean Air Act Amendments as it was classified as Marginal nonattainment for the 1-hour NAAQS for ozone, rather than Moderate or above. However, SWCAA in coordination with the Washington Department of Ecology submitted SWAPCA 491 “Emission Standards and Controls for Sources Emitting Gasoline Vapors” (state effective November 21, 1996, subsequently renamed to SWCAA 491) which contained Stage II requirements as a SIP-strengthening measure approved concurrently with redesignation of the Portland/Vancouver area to attainment (see proposed rulemaking, 62 FR 10501, March 7, 1997, at page 10507). On August 11, 2015 (80 FR 48033), the EPA approved SWCAA’s maintenance plan update for the Vancouver portion of the Portland/Vancouver area that specifically anticipated and modeled widespread use of ORVR and the full decommissioning of Stage II in the modeling demonstration of continued attainment

through 2015. The SWCAA maintenance plan update and the modeling demonstration are included in the docket for this action.

II. SWCAA's SIP Revision

On June 22, 2023, SWCAA, in coordination with the Washington Department of Ecology as the Governor's designee for revisions to the SIP, submitted the current version of SWCAA 491 "Emission Standards and Controls for Sources Emitting Gasoline Vapors" (state effective February 7, 2020) for EPA approval. Since the EPA's last approval of SWCAA 491, SWCAA revised the regulations four times. Effective June 24, 2000, SWCAA updated the regulations to revise applicability of the Stage II vapor recovery program, which is now replaced by the applicability provisions of the current SWCAA 491. Other changes to SWCAA 491, effective June 24, 2000, are generally SIP-strengthening in nature including the addition of gasoline marine vessel loading and unloading vapor control requirements, which are now contained in the current version of SWCAA 491. The exact revisions in 2000 are in redline/strikeout format included in the docket for this action under WSR 00-11-149. Effective March 18, 2001 (WSR 01-05-067), SWCAA made minor changes to SWCAA 491 to reflect the name change from "Southwest Pollution Control Authority" to "Southwest Clean Air Agency." Effective June 18, 2017 (WSR 17-11-080), SWCAA consolidated all agency fees into a single location and updated the cross reference in SWCAA 491-030 accordingly. We note that the 2000, 2001, and 2017 revisions to SWCAA 491 were not previously submitted as updates to the SIP. However, to the extent these revisions are retained in the current version of SWCAA 491 submitted for approval, we are proposing to determine that these relatively minor changes since our last update to the SIP in 1997 are approvable.

The most substantive changes to SWCAA 491 since the EPA's last approval are detailed in WSR 20-03-031, state effective February 7, 2020. Among other changes, this revision to SWCAA 491 included the following: added a requirement to install enhanced conventional (ECO) nozzles; added a requirement that low permeation hoses be installed on higher volume

gasoline dispensing facilities without balance type Stage II vapor recovery equipment by no later than January 1, 2023; added a requirement for annual testing of Stage I vapor recovery systems²; added a requirement that new or upgraded gasoline storage tanks be equipped with Stage I enhanced vapor recovery equipment; removed a requirement that gasoline dispensing facilities install Stage II vapor recovery equipment; allowed removal from service of Stage II vapor recovery equipment compatible with ORVR on or after January 1, 2023; allowed removal from service of Stage II vapor recovery equipment incompatible with ORVR on or after January 3, 2020; required removal from service of Stage II vapor recovery equipment incompatible with ORVR no later than January 1, 2023; and revised the applicability threshold for low flow nozzles to align SWCAA rules with Federal rules. In the SIP submittal, SWCAA provided a demonstration that VOC emission reductions from enhanced conventional nozzles and low permeation hoses will outweigh the annual emissions impact of removing Stage II requirements. Therefore, SWCAA requested removal of Stage II vapor recovery system requirements in the SIP for SWCAA's jurisdiction.

III. The EPA's Evaluation of the Revision

The EPA's primary consideration for determining the approvability of SWCAA's revisions to remove Stage II vapor control requirements and provide for decommissioning of Stage II equipment within SWCAA's jurisdiction is whether these revisions comply with section 110(l) of the Act. Section 110(l) requires that a revision to the SIP not interfere with any applicable requirement concerning attainment and reasonable further progress (RFP), or any other applicable requirement of the Act. The EPA can approve a SIP revision that removes or modifies control measures in the SIP once the state or local agency makes a "noninterference" demonstration that such removal or modification will not interfere with attainment of the NAAQS, RFP, or any other CAA requirement.

² Stage I vapor recovery is a system in which gasoline vapors are forced from the storage tank into a vapor-tight gasoline tank truck or vapor collection and control system through direct displacement by the gasoline loaded into the storage tank.

The EPA reviewed SWCAA’s submittal with the revised SWCAA 491 regulatory text as well as the accompanying analysis of emissions impacts. We propose to determine that SWCAA’s June 22, 2023, SIP revision addresses the EPA’s Widespread Use for Onboard Refueling Vapor Recovery and Stage II Waiver (77 FR 28772) and is consistent with the 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).³ In accordance with the EPA 2012 Guidance on Removing Stage II, SWCAA submitted a demonstration that the Stage II decommissioning will not interfere with attainment or maintenance of the ozone NAAQS. This demonstration was based on an analysis of precursor VOC emissions from removal of Stage II controls at GDFs, as well as emission reduction benefits from other changes to the regulations such as requirements for enhanced conventional nozzles and low permeation hoses. SWCAA estimated emissions impacts using the guidance methodologies from the EPA 2012 Guidance showing an overall benefit to air quality and a reduction of VOC emissions upon full implementation of the rule requirements in 2023. SWCAA estimated the impact on emissions from decommissioning Stage II in its jurisdiction by using EPA approved equations from the same 2012 guidance, to assess compliance with CAA 110(l). A detailed spreadsheet with the equation calculations and supporting inputs is included in the docket for this action.

The demonstration indicates that the emissions benefit of retaining Stage II requirements is rapidly diminishing with vehicle fleet turnover and ORVR penetration. As discussed in the EPA 2012 Guidance, the EPA has developed equations to assist states in evaluating the emissions consequences of phasing out existing Stage II programs. These equations may be used to calculate an “increment,” which identifies the area-wide emission control gained from Stage II installations as ORVR technology phases in. For example, using the equations in the EPA 2012

³ The guidance document is available at:
https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20120807_page_stage2_removal_guidance.pdf.

Guidance, SWCAA calculated the increment declining from 4.0% in 2020 to 1.1% in 2023 for Clark County, the most populous county in SWCAA's jurisdiction. Projecting these increments to full implementation of the rule in 2023, the removal of Stage II vapor recovery systems would result in minimal increases in VOC emissions of 18.31 tons per year (tpy) for SWCAA's entire jurisdiction. Additionally, SWCAA calculated the emission reduction benefits of enhanced conventional nozzles and low permeation hoses. These emission reduction benefits are estimated to be 33.84 tpy, outweighing the emissions increase from decommissioning Stage II requirements. Overall, the 2020 regulatory changes are projected to result in a net reduction of 15.99 tpy VOC with full implementation of the rule. In addition, the EPA expects that market saturation of ORVR-equipped vehicles will remain static or increase in the years after 2023, meaning the air quality benefits of these changes will continue into the future.

Lastly, the removal of Stage II is consistent with the current maintenance plan update for the Vancouver portion of the Portland/Vancouver ozone area (80 FR 48033, August 11, 2015). As previously discussed, this maintenance plan update was approved by the EPA in 2015. The associated modeling, included in the docket for this action, anticipated the decommissioning of Stage II in the projection of continued ozone attainment for the 1997 8-hour ozone NAAQS.⁴ For the 2008 and 2015 ozone NAAQS, all counties within SWCAA's jurisdiction are designated attainment/unclassifiable. We believe that removal of Stage II vapor recovery systems would have a negligible impact on ozone levels which are offset by the emission reduction benefits of other requirements in the revised SWCAA 491. Thus, we proposed to determine that approval of the SIP revision would not interfere with any applicable requirement concerning attainment and maintenance of any ozone standard and is compliant with CAA section 110(l).

IV. Proposed Action

We are proposing to find that SWCAA's demonstration for removal of Stage II

⁴ Consistent with EPA guidance, SWCAA evaluated compliance with the 1997 8-hour ozone NAAQS because the former 1-hour ozone NAAQS was replaced by the 1997 8-hour standard. See 62 FR 38856 (July 18, 1997) and 75 FR 24542 (May 5, 2010).

equipment meets section 110(l) of the Act. Therefore, we are proposing to approve and incorporate by reference SWCAA 491 “Emission Standards and Controls for Sources Emitting Gasoline Vapors” state effective February 7, 2020. This version of the regulation removes from the Washington SIP the requirement for Stage II vapor recovery systems in SWCAA’s jurisdiction and adds additional VOC controls such as the installation of enhanced conventional nozzles and low permeation hoses, as well as other historic changes since the EPA’s last approval as discussed in section II of this preamble.

V. Incorporation by Reference

In this document, the EPA is proposing to include in a final 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 SWCAA 491 discussed in section IV of this preamble. The EPA has made, and will continue to make, these documents generally available through <https://www.regulations.gov> and at the EPA Region 10 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 Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Clean Air 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 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 14094 (88 FR 21879, April 11, 2023);
- 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 subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- 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.

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).

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 Southwest Clean Air Agency 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 action. Due to the nature of the action being taken here, this action 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.

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: August 1, 2023.

Casey Sixkiller,
Regional Administrator, Region 10.