ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2023-0381; EPA-R03-OAR-2023-0380; FRL-9822-01-R3]

Air Plan Approval; West Virginia; 2006 24-Hour Fine Particulate Matter Limited Maintenance Plans for the Charleston Area and the West Virginia Portion of the Steubenville-Weirton Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve, under the Clean Air Act (CAA), two limited maintenance plans (LMPs) submitted by the West Virginia Department of Environmental Protection (WVDEP), on behalf of the State of West Virginia. The LMPs are revisions to West Virginia's state implementation plan (SIP) and address the Charleston, West Virginia area (Charleston Area) and the West Virginia portion of the Steubenville-Weirton, Ohio-West Virginia area (West Virginia portion of the Steubenville-Weirton Area). EPA is proposing to approve the Charleston Area LMP and the West Virginia portion of the Steubenville-Weirton Area LMP because they provide for the maintenance of the 2006 24-hour fine particulate matter ($PM_{2.5}$) national ambient air quality standard (NAAQS) through the end of the second 10-year maintenance periods. In addition, EPA is initiating the process to find the LMPs adequate for transportation conformity purposes.

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-2023-0381 (Charleston Area) or EPA-R03-OAR-2023-0380 (West Virginia portion of the Steubenville-Weirton Area) at *www.regulations.gov*, or via email to *goold.megan@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: Ellen Schmitt, Planning & Implementation Branch (3AD30), Air & Radiation Division, U.S. Environmental Protection Agency, Region III, 1600 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103. The telephone number is (215) 814-5787. Ms. Schmitt can also be reached via electronic mail at *schmitt.ellen@epa.gov*.

SUPPLEMENTARY INFORMATION: On March 29, 2022, WVDEP submitted to EPA two revisions to the State's SIP. Both revisions are second 10-year maintenance LMPs for the 2006 24-hour $PM_{2.5}$ NAAQS; one revision focuses on the Charleston Area and the other on the West Virginia portion of the Steubenville-Weirton Area. The Charleston Area includes Kanawha County and Putnam County in West Virginia. The Steubenville-Weirton (Ohio-West Virginia) Area is comprised of Brooke County and Hancock County in West Virginia and Jefferson County in Ohio. *See* 40 CFR 81.336 (Ohio) and 40 CFR 81.349 (West Virginia). This action is expected to ensure that the State of West Virginia meets CAA requirements. There is no information on the record indicating that this action is expected to have disproportionately high or adverse human health or environmental effects on a particular group of people.

Table of Contents

I. Background

A. The $PM_{2.5}$ NAAQS

Under section 109 of the CAA, EPA has established NAAQS for certain pervasive air pollutants (referred to as "criteria pollutants") and conducts periodic reviews of the NAAQS to determine whether they should be revised or whether new NAAQS should be established. EPA sets the NAAQS for criteria pollutants at levels required to protect public health and welfare.[1] EPA's particulate matter standards address particles with diameters that are generally two and half micrometers or smaller (fine particulate matter or $PM_{2.5}$) and particles with

[1] For a given air pollutant, "primary" national ambient air quality standards are those determined by EPA as requisite to protect the public health. "Secondary" standards are those determined by EPA as requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. CAA section 109(b).

diameters that are generally 10 micrometers or smaller (PM_{10}). $PM_{2.5}$ is one of the ambient pollutants for which EPA has established health-based standards.

Fine particulate matter contributes to effects that are harmful to human health and the environment, including premature mortality, aggravation of respiratory and cardiovascular disease, decreased lung function, visibility impairment, and damage to vegetation and ecosystems. Individuals particularly sensitive to $PM_{2.5}$ exposure include older adults, people with heart and lung disease, and children. *See* 78 FR 3086 at 3088 (January 15, 2013). $PM_{2.5}$ can be emitted directly into the atmosphere as a solid or liquid particle (primary $PM_{2.5}$ or direct $PM_{2.5}$) or can be formed in the atmosphere (secondary $PM_{2.5}$) as a result of various chemical reactions among precursor pollutants such as nitrogen oxides (NOx), sulfur dioxide (SO_2), volatile organic compounds (VOCs), and ammonia (NH_3).[2]

On July 18, 1997 (62 FR 38652), EPA revised the NAAQS for particulate matter to add new standards for $PM_{2.5}$. The Agency established primary and secondary annual and 24-hour standards for $PM_{2.5}$. The annual standard was set at 15.0 micrograms per cubic meter ($\mu g/m^3$) based on a 3-year average of annual mean $PM_{2.5}$ concentrations, and the 24-hour (daily) standard was set at 65 $\mu g/m^3$ based on the 3-year average of the annual 98th percentile values of 24-hour $PM_{2.5}$ concentrations at each population-oriented monitor within an area.[3]

On October 17, 2006 (71 FR 61144), EPA retained the annual average NAAQS at 15.0 $\mu g/m^3$ but lowered the level of the 24-hour $PM_{2.5}$ NAAQS to 35 $\mu g/m^3$ based on a 3-year average of the annual 98th percentile values of 24-hour concentrations.[4]

On December 14, 2012, EPA promulgated the 2012 $PM_{2.5}$ NAAQS, including lowering the annual standard to 12.0 $\mu g/m^3$ based on a 3-year average of annual mean $PM_{2.5}$

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[2] EPA, Air Quality Criteria for Particulate Matter, No. EPA/600/P-99/002aF and EPA/600/P-99/002bF, October 2004.

[3] The primary and secondary standards were set at the same level for both the 24-hour and the annual $PM_{2.5}$ standards.

[4] Under EPA regulations at 40 CFR part 50, the primary and secondary 2006 24-hour $PM_{2.5}$ NAAQS are attained when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, is less than or equal to 35 $\mu g/m^3$ at all relevant monitoring sites in the subject area, averaged over a 3-year period.

concentrations. EPA maintained the 24-hour standard of 35 μg/m^3 based on a 3-year average of the 98th percentile of 24-hour concentrations. *See* 78 FR 3086 (January 15, 2013).

B. Designation of $PM_{2.5}$ NAAQS Nonattainment Areas and Subsequent Actions

Following promulgation of a new or revised NAAQS, EPA is required by CAA section 107(d) to designate areas throughout the nation as attaining or not attaining the NAAQS. On November 13, 2009 (74 FR 58688), EPA designated both the Charleston (West Virginia) Area and the Steubenville-Weirton (Ohio-West Virginia) Area as nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS. *See* 74 FR 58775 (November 13, 2009) and 40 CFR 81.349 (Charleston, West Virginia) and, also see 40 CFR 81.336 (Steubenville-Weirton, Ohio) and 40 CFR 81.349 (Steubenville-Weirton, West Virginia).[5]

On November 18, 2011 (76 FR 714503), EPA determined under the Agency's Clean Data Policy[6] that the Charleston nonattainment area had clean data for the 2006 24-hour $PM_{2.5}$ NAAQS based upon quality-assured and certified ambient air monitoring data. The Agency made a similar clean data determination regarding the 2006 24-hour $PM_{2.5}$ NAAQS for the entire Steubenville-Weirton area on May 14, 2012 (77 FR 28264). Based on these clean data determinations, the requirements for the Charleston Area and Steubenville-Weirton Area to submit attainment demonstrations and associated reasonably available control measures (RACM), reasonable further progress (RFP) plans, contingency measures, and other SIP requirements related to the attainment of the 2006 24-hour $PM_{2.5}$ NAAQS were suspended as long as the areas continued to attain the 2006 24-hour $PM_{2.5}$ NAAQS.

On December 6, 2012, the State of West Virginia submitted to EPA a redesignation request and maintenance plan for the Charleston Area. EPA redesignated the Charleston Area from nonattainment to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS and approved the maintenance plan for the first 10-year maintenance period on March 31, 2014 (79 FR 17884).[7]

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[5] On January 15, 2015 (80 FR 2206), EPA designated counties in these areas as "unclassifiable/attainment" for the 2012 primary annual $PM_{2.5}$ NAAQS.
[6] *See e.g.,* 70 FR 71612 (November 29, 2005) and 72 FR 20586 (April 25, 2007).
[7] Effective on April 30, 2014.

The first 10-year maintenance period for the Charleston Area will end on April 30, 2024, and the Area's second 10-year maintenance plan, which is subject of this proposed rulemaking, extends through April 30, 2034.

On June 8, 2012, the State of West Virginia submitted to EPA a redesignation request and maintenance plan for the West Virginia portion of the Steubenville-Weirton Area from nonattainment to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS. On March 18, 2014 (79 FR 15019), EPA redesignated to attainment the West Virginia portion of the 2006 24-hour Steubenville-Weirton Area and approved the maintenance plan for the first 10-year maintenance period.[8] The first 10-year maintenance period for the West Virginia portion of the Steubenville-Weirton Area will end on April 17, 2024, and the Area's second 10-year maintenance plan, which is the subject of this proposed rulemaking, extends through April 17, 2034.

C. Limited Maintenance Plans

Section 107(d)(3)(E) of the CAA sets out the requirements for redesignating a nonattainment area to attainment. One of the criteria for redesignation is to have an approved maintenance plan under section 175A of the Act. Section 175A requires that nonattainment areas seeking redesignation to attainment submit "a revision of the applicable state implementation plan to provide for the maintenance of the [NAAQS] for such air pollutant in the area concerned for at least 10 years after the redesignation."[9] On September 4, 1992, EPA issued guidance on the content of a maintenance plan (Memorandum from John Calcagni, Director, Air Quality Management Division, entitled "Procedures for Processing Requests to Redesignate Areas to Attainment," (hereinafter referred to as the "Calcagni Memorandum"))[10] which explained that states may meet this requirement to "provide for the maintenance of the NAAQS" by using projected emissions inventories or air quality modeling showing continued maintenance

[8] Effective on April 17, 2014.
[9] Eight years into the first maintenance period, the applicable state or local agency must submit a second maintenance plan demonstrating that the area will continue to attain for the following 10-year period.
[10] The Calcagni Memorandum can be found at *www.epa.gov/sites/default/files/2016-03/documents/calcagni_memo_-_procedures_for_processing_requests_to_redesignate_areas_to_attainment_090492.pdf*.

until the end of the relevant maintenance period.[11] EPA clarified in subsequent guidance memoranda that certain areas could meet the CAA section 175A requirement to provide for maintenance by demonstrating that the area's design value was well below the NAAQS and that the historical stability of the area's air quality levels showed that the area was unlikely to violate the NAAQS in the future.[12]

Most recently, in October 2022, EPA released guidance extending this streamlined option for demonstrating maintenance under CAA section 175A to certain $PM_{2.5}$ areas, titled "Guidance on Limited Maintenance Plan Option for Moderate $PM_{2.5}$ Nonattainment Areas and $PM_{2.5}$ Maintenance Areas" ($PM_{2.5}$ LMP Guidance).[13]

EPA refers to this streamlined demonstration of maintenance as a limited maintenance plan or LMP. EPA has interpreted CAA section 175A as permitting this option because section 175A does not define how areas may demonstrate maintenance, and in EPA's experience with implementing the various NAAQS, areas that qualify for an LMP and have approved LMPs, have rarely, if ever, experienced subsequent violations of the NAAQS. As noted in the $PM_{2.5}$ LMP Guidance, states seeking an LMP must still submit the other maintenance plan elements outlined in the Calcagni Memorandum, including an attainment emissions inventory, provisions for the continued operation of the ambient air quality monitoring network, verification of continued attainment, and a contingency plan in the event of a future violation of the NAAQS.

The $PM_{2.5}$ LMP Guidance describes a process for states to demonstrate that an area qualifies for an LMP by showing that, based on recent measured air quality, the area is unlikely to violate the NAAQS in the future. The $PM_{2.5}$ LMP Guidance relies on the critical design value

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[11] See Calcagni Memorandum at 9-11.

[12] See "Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas" from Sally L. Shaver, Office of Air Quality Planning and Standards (OAQPS), dated November 16, 1994; "Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas" from Joseph Paisie, OAQPS, dated October 6, 1995; and "Limited Maintenance Plan Option for Moderate PM_{10} Nonattainment Areas" from Lydia Wegman, OAQPS, dated August 9, 2001(hereinafter referred to as the "Wegman Memorandum"). Copies of these guidance memoranda can be found in the dockets for this proposed rulemaking.

[13] The guidance document titled "Guidance on the Limited Maintenance Plan Option for Moderate $PM_{2.5}$ Nonattainment Areas and $PM_{2.5}$ Maintenance Areas" can be found at *www.epa.gov/system/files/documents/2023-03/PM%202.5%20Limited%20Maintenance%20Plan%20Guidance.pdf*.

(CDV) concept. This guidance describes a process for a $PM_{2.5}$ area to qualify for an LMP by showing that the area's average design value (ADV) for each site in the area (based upon the most recent five years of monitoring data)[14] is at or below the CDV. The CDV is an indicator of the likelihood of future violations of the NAAQS in an area given the area's current ADV and its historical variability. The $PM_{2.5}$ LMP Guidance provides a means for calculating the CDV for an area (or monitoring site). The CDV calculation for a monitoring site involves parameters including: (1) the level of the relevant NAAQS;[15] (2) the coefficient of variation of recent design values measured at that site; and (3) a statistical parameter corresponding to a 10 percent probability of exceedance, such that sites with historically high variability in design values result in a lower (or more stringent) CDV. The CDV is the highest average design value an area could have before it may experience a future exceedance of the NAAQS with a certain probability—in the case of the $PM_{2.5}$ LMP Guidance, a probability of one in ten.[16] Therefore, if an area's current ADV is less than the area's CDV, that area has less than ten percent probability of exceeding the NAAQS in the future.

Per EPA's transportation conformity regulations, areas with LMPs must also "demonstrate that it would be unreasonable to expect that such an area would experience enough motor vehicle emissions growth for a violation of the NAAQS to occur."[17]

II. Review of SIP Submissions

On March 29, 2022, EPA received two second 10-year maintenance plan SIP submissions for the 2006 24-hour $PM_{2.5}$ NAAQS from West Virginia. One SIP revision was for the Charleston Area and the other was for the West Virginia portion of the Steubenville-Weirton

[14] EPA recommends that the ADV be calculated using at least five years of design values, each representing a three-year period, because this approach would rely on a more robust dataset. However, we acknowledge that an alternative interpretation may be acceptable, where these variables could be calculated using three years of design values, collectively representing five years of air quality data.
[15] As noted in Attachment A of the Wegman Memorandum, the CDV calculation was designed to apply for any NAAQS pollutant and is not specific to PM_{10}.
[16] The $PM_{2.5}$ Guidance directs states to calculate a site-specific CDV for the monitoring site in an area with the highest design value, and also for all other active monitoring sites in the area with complete data.
[17] See 40 CFR 93.109(e).

Area.

A. *Qualifying for the Limited Maintenance Plan Option*

For both its Charleston Area LMP and the West Virginia portion of the Steubenville-Weirton Area LMP, West Virginia calculated a 5-year weighted design value using the five most recent years of certified data available to the State at the time (2016-2020).[18] For comparison to the 5-year weighted design value, West Virginia used a threshold equal to 85 percent of the 2006 24-hour $PM_{2.5}$ NAAQS, or 30.17 $\mu g/m^3$.[19]

After West Virginia submitted its LMP SIP submissions to EPA, the Agency subsequently provided the updated $PM_{2.5}$ LMP Guidance for $PM_{2.5}$ NAAQS areas planning to submit limited maintenance plans. As discussed in section I.C. of this document, one way for an area to qualify for an LMP is to show that the area's ADV (based upon the most recent five years of monitoring data) is at or below the CDV. Therefore, given the timing of the State's submission and the timing of the issuance of EPA's updated guidance, EPA is in this case employing this methodology outlined in its updated guidance to demonstrate that both the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area are eligible for an LMP and that the plans therefore provide for maintenance of the NAAQS, even though those calculations were not included as part of the State's submissions.

To calculate the ADV for each area, EPA averaged the most recent five consecutive design values for the 2006 24-hour $PM_{2.5}$ standard, selecting the highest design value from all active monitoring sites from the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area. The Charleston Area includes two ambient air monitoring sites for

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[18] At the time West Virginia was preparing its SIP submittals, EPA had yet to provide the LMP guidance for the $PM_{2.5}$ NAAQS which clarified the Agency's interpretation of how to calculate a 5-year ADV. West Virginia's 5-year weighted design value includes the 3-year design values for 2016-2018, 2017-2019, and 2018-2020. The State refers to this as a "weighted" 5-year average design value since data from years 2017 and 2018 are given more weight (i.e. are included more often).

[19] Using 85 percent of the NAAQS is a threshold taken from earlier LMP guidance documents that were specific to other NAAQS. See "Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas" from Sally L. Shaver, Office of Air Quality Planning and Standards (OAQPS), dated November 16, 1994; and "Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas" from Joseph Paisie, OAQPS, dated October 6, 1995.

the 24-hour $PM_{2.5}$ NAAQS: the Charleston NCore site (AQS 54-039-0020) and the South Charleston site (AQS 54-039-1005). In the West Virginia portion of the Steubenville-Weirton Area, the 24-hour $PM_{2.5}$ NAAQS is monitored at three ambient air monitoring sites within Brooke and Hancock counties: the Follansbee site (AQS 54-009-0005), the Weirton - Marland Heights site (AQS 54-009-0011), and the Weirton Summit Circle site (AQS 54-029-0009).

Since each design value is calculated by averaging three years of valid daily means, the average of the last five 3-year design values includes data from the most recent seven years (2016-2022). Table 1 in this document presents the most recent (2018-2022) 3-year design values for the 24-hour $PM_{2.5}$ NAAQS for the Charleston Area, with an ADV of 15.6 µg/m^3.[20] Table 2 in this document shows the 24-hour $PM_{2.5}$ NAAQS design values for 2018-2022 for the West Virginia portion of the Steubenville-Weirton Area and presents an ADV of 19.6 µg/m^3.

Table 1. Charleston Area 24-Hour $PM_{2.5}$ NAAQS Design Values (µg/m^3)[a]

Monitor	2018 design value (2016-2018)	2019 design value (2017-2019)	2020 design value (2018-2020)	2021 design value (2019-2021)	2022 design value (2020-2022)	Average of most recent 3-year design values
Charleston NCore	16	15	15	16	16	15.6
South Charleston	16	15	14	15	15	15

[a] Data provided by EPA's Air Quality System (AQS).

Table 2. West Virginia Portion of the Steubenville-Weirton Area 24-Hour $PM_{2.5}$ NAAQS Design Values (µg/m^3)[a]

Monitor	2018 design value (2016-2018)	2019 design value (2017-2019)	2020 design value (2018-2020)	2021 design value (2019-2021)	2022 design value (2020-2022)	Average of most recent 3-year design values
Follansbee	19	19	18	19	19	18.8
Weirton - Marland Heights	21	20	19	20	18	19.6
Weirton - Summit Circle	19	19	18	19	18	18.6

[a] Data provided by EPA's Air Quality System (AQS).

To calculate the CDV for each area, we used the recent five years of design values and their variability with the equation presented in the $PM_{2.5}$ LMP guidance. Table 3 in this

[20] An area's ADV is determined by the monitor with the highest average of the five most recent 3-year design values.

document shows the input and results of the LMP eligibility calculations. The resulting site-specific CDV for the Charleston Area is calculated to be 33.2 µg/m^3. Therefore, the Charleston Area's ADV (15.6 µg/m^3) falls below the site-specific CDV of 33.2 µg/m^3 and thus meets the first criterion for LMP eligibility.[21] The resulting site-specific CDV for the West Virginia portion of the Steubenville-Weirton Area is calculated to be 32.1 µg/m^3. The West Virginia portion of the Steubenville-Weirton Area ADV (19.6 µg/m^3) falls below the site-specific CDV of 32.1 µg/m^3 and thus meets the first criterion for LMP eligibility.[22]

Table 3. LMP Eligibility Calculation Equations and Input

2006 24-hour $PM_{2.5}$ NAAQS	35 µg/m^3
Critical t-value (t_c)	1.533
Charleston Area ADV	15.6 µg/m^3
Steubenville-Weirton Area (West Virginia portion) ADV	19.6 µg/m^3
Standard deviation of Charleston Area design values (2018-2022)	0.548 µg/m^3
Standard deviation of West Virginia portion of the Steubenville-Weirton Area design values (2018-2022)	1.140 µg/m^3
Coefficient of Variation (CV)	CV = (standard deviation of sample/ADV)
Charleston Area CV	0.035
West Virginia portion of the Steubenville-Weirton Area CV	0.0582
Critical Design Value (CDV)	CDV = NAAQS/(1 + (t_c x CV)
Charleston Area CDV	33.2 µg/m^3
West Virginia portion of the Steubenville-Weirton Area CDV	32.1 µg/m^3

The $PM_{2.5}$ LMP Guidance notes that an air agency submitting an LMP is not required to submit a future year emissions inventory, but it is still required to submit the other elements of a maintenance plan—an attainment year emissions inventory, provisions for continued operation of the monitoring network, verification of continued attainment, and a contingency plan. The maintenance demonstration is satisfied by the calculations Table 3 in this document above. As discussed in further sections of this document, EPA finds that West Virginia's LMPs for the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area include all the necessary components, so we are proposing to approve these two second LMPs as a revision to

[21] See "CDV Calculations" spreadsheet in the docket for this proposed rulemaking.
[22] Id.

the West Virginia SIP. The Ohio portion of the Steubenville-Weirton Area is not addressed in this proposed rulemaking.[23]

B. Attainment Emissions Inventories

As noted previously, states that qualify for an LMP must still meet the other elements of a maintenance plan, as articulated in the Calcagni Memo. This includes an attainment year emissions inventory. For the second 10-year maintenance plans for the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area, West Virginia provided emissions inventories from the 2017 National Emissions Inventory (NEI), version 2, which was the most comprehensive emissions inventory year containing data that was quality assured by EPA at the time West Virginia was preparing the LMP SIP submissions.[24] The 2017 NEI was also representative of the 2016-2022 time period which served as the 5-year period used to demonstrate that the areas were eligible for an LMP.[25] Tables 4 and 5 in this document include the following five categories from the 2017 inventory for direct $PM_{2.5}$ and its precursors (SO_2, NOx, VOCs, and NH_3): point sources, nonpoint (area) sources, on-road mobile sources, nonroad mobile sources, and fire events.[26]

Table 4. Charleston Area[a] 2017 Attainment Year Emissions Inventory (tpy)[b]

Sector	$PM_{2.5}$[c]	SO_2	NOx	VOC	NH_3
Point Sources	116	5,756	7,855	1,367	73
Nonpoint (Area) Sources	2,330	77	3,350	33,705	314
On-road Mobile Sources	100	18	3,010	1,605	88
Nonroad Mobile Sources	84	2	536	1,024	1
Event-Fire[d]	325	33	67	859	60

[a] Includes emissions from both Kanawha County and Putnam County.
[b] Taken from West Virginia's 2006 24-hour $PM_{2.5}$ LMP SIP submission for the Charleston Area.

[23] EPA finalized approval of the Ohio portion of the Steubenville-Weirton Area's second 10-year 2006 24-hour $PM_{2.5}$ LMP on January 22, 2024 (89 FR 3889).
[24] The redesignation request and first 10-year maintenance plan for both the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area included a 2008 emissions inventory.
[25] Each area's design value was calculated by averaging three years of valid daily means, the average of the last five 3-year design values includes data from the most recent seven years (2016-2022).
[26] A more detailed version of the inventory can be found in West Virginia's 2006 24-hour $PM_{2.5}$ LMP SIP submissions for the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area, located in the respective dockets. See *www.regulations.gov*, Docket No. EPA-R03-OAR-2023-0381 (Charleston Area) or EPA-R03-OAR-2023-0380 (West Virginia portion of the Steubenville-Weirton Area).

[c] Total primary $PM_{2.5}$.
[d] Includes emissions from agricultural burning, prescribed fires, wildfires, and other types of fires.

Table 5. West Virginia Portion of the Steubenville-Weirton Area[a] 2017 Attainment Year Emissions Inventory (tpy)[b]

Sector	$PM_{2.5}$[c]	SO_2	NOx	VOC	NH_3
Point Sources	144	345	808	369	10
Nonpoint (Area) Sources	402	19	551	4,921	72
On-road Mobile Sources	13	2	423	304	11
Nonroad Mobile Sources	7	0.25	107	105	0.19
Event-Fire[d]	33	3	6	90	6

[a] Includes emissions from both Brooke County and Hancock County.
[b] Taken from West Virginia's 2006 24-hour $PM_{2.5}$ LMP SIP submissions for the West Virginia portion of the Steubenville-Weirton Area.
[c] Total primary $PM_{2.5}$.
[d] Includes emissions from agricultural burning, prescribed fires, wildfires, and other types of fires.

The redesignation request and first 10-year maintenance plan for the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area each included a 2008 emissions inventory. The emissions of direct $PM_{2.5}$ and its precursors in the Charleston Area have decreased substantially between the 2008 and 2017 inventory (60 percent).

C. Air Quality Monitoring Network

Once an area is redesignated, the applicable state or local agency must continue to operate an appropriate air monitoring network in accordance with 40 CFR part 58 to verify the attainment status of the area over the maintenance period. West Virginia operates, in accordance with the requirements of 40 CFR part 58, two $PM_{2.5}$ monitors within the Charleston Area and three $PM_{2.5}$ monitors within the West Virginia portion of the Steubenville-Weirton Area. On June 30, 2022, WVDEP submitted its' 2022 Annual Monitoring Network Plan, which EPA approved on December 14, 2022.[27] West Virginia's annual monitoring network plan and EPA's approval letter are included in the dockets associated with this action.

D. Verification of Continued Attainment

[27] EPA's letter approving WVDEP's 2022 AMNP included deferred approval of WVDEP's request to exclude continuous $PM_{2.5}$ sampler data from a monitor collated at the Charleston NCore site. EPA's decision regarding that sampler data does not impact the State's ability to monitor $PM_{2.5}$ in accordance with 40 CFR part 58 as there is another monitor at the site that has been used as the primary monitor.

West Virginia, through WVDEP, has the legal authority to enforce and implement the requirements of the Charleston Area LMP and the West Virginia portion of the Steubenville-Weirton Area LMP. This includes the authority to adopt, implement, and enforce any subsequent emissions control contingency measures determined to be necessary to correct future $PM_{2.5}$ attainment problems.

In demonstrating maintenance, continued attainment of the NAAQS can be verified through operation of an appropriate air quality monitoring network. The Calcagni Memorandum states that the maintenance plan should contain provisions for continued operation of air quality monitors that will provide such verification.[28] As discussed previously in the preamble of this document, $PM_{2.5}$ is currently monitored by WVDEP within the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area. In section V.2 of West Virginia's submitted maintenance plans, WVDEP committed to continue to conduct ambient $PM_{2.5}$ air quality monitoring in the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area throughout the term of the second 10-year maintenance period. West Virginia will do this to verify continued attainment with the 2006 24-hour $PM_{2.5}$ NAAQS, to identify when contingency provisions are triggered, and to protect any applicable Prevention of Significant Deterioration (PSD) increments.

E. Contingency Provisions

Section 175A(d) of the CAA requires that the maintenance plan contain contingency provisions to assure that the state will promptly correct any violation of the relevant $PM_{2.5}$ NAAQS that may occur after the redesignation of the area to attainment. Such provisions must include a requirement that the state will implement all measures with respect to the control of the air pollutant concerned that were contained in the nonattainment SIP prior to redesignation. EPA's redesignation guidance notes that the state need not have fully adopted contingency measures that will take effect without further action by the state. As such, the

[28] See Calcagni Memorandum at 11.

contingency plan should ensure that the state has the capacity to adopt the contingency measures expediently if the need were triggered. Therefore, the primary elements of West Virginia's contingency plans involve tracking and triggering mechanisms to determine when contingency measures would be necessary and a process for implementing appropriate control measures.

In the Charleston Area LMP, WVDEP proposes to retain the existing contingency provisions and associated measures from the first 10-year maintenance plan approved by EPA on March 31, 2014 (79 FR 17884). WVDEP also proposes to retain the existing contingency plan and associated contingency measures from the State's portion of the Steubenville-Weirton Area's first 10-year maintenance plan approved by EPA on March 18, 2014 (79 FR 15019). West Virginia's two LMP SIP submissions outline the procedures for the adoption and implementation of contingency measures, which include a warning level response and an action level response, to further reduce emissions should a violation occur.

West Virginia's contingency measures for the Charleston Area and the Steubenville-Weirton Area include an initial warning level response that is triggered for the 2006 24-hour $PM_{2.5}$ NAAQS when the 98th percentile 24-hour $PM_{2.5}$ concentration for a single calendar year exceeds 35 µg/m^3. In the case of triggering a warning level, a study will be conducted to determine if the emissions trends show increasing concentrations of $PM_{2.5}$, and whether this trend, if any, is likely to continue. If it is determined through the study that action is necessary to reverse emissions increases, West Virginia will follow the same procedures for control selection and implementation as for an action level response, and implementation of necessary controls will take place as expeditiously as possible, but no later than 12 months from the end of the most recent calendar year.

An action level response will be prompted by either a two-year average of the 98th percentile equaling 35 µg/m^3 or greater within the maintenance area or a violation of the standard within the area (i.e., a three-year average of the 98th percentile of 35 µg/m^3 or greater). If an action level response is triggered, West Virginia will adopt and implement appropriate control

measures within 18 months from the end of the year in which monitored air quality triggering a response occurs. West Virginia will also consider whether additional regulations that are not a part of the maintenance plan can be implemented in a timely manner to respond to the trigger.

In both the Charleston Area maintenance plan and the Steubenville-Weirton Area maintenance plan, West Virginia commits to adopt and expeditiously implement the necessary contingency measures as corrective actions. West Virginia's potential contingency measures include the following: (1) diesel reduction emission strategies, (2) alternative fuels and diesel retrofit programs for fleet vehicle operations, (3) tighter $PM_{2.5}$, SO_2, and NOx emissions offsets for new and modified major sources, (4) concrete manufacturing controls, and (5) additional NOx reductions.

III. Transportation Conformity

Transportation conformity for the purposes of the SIP means that transportation activities will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones. *See* CAA 176(c)(1)(A) and (B). While qualification for the LMP option does not exempt an area from the need to determine transportation conformity, in an area with an adequate or approved LMP, transportation conformity may be demonstrated without a regional emissions analysis for the relevant NAAQS and pollutant (40 CFR 93.109(e)). An LMP must demonstrate that it is unreasonable to expect that the qualifying areas would experience so much growth in motor vehicle emissions that a violation of the relevant NAAQS would occur (40 CFR 93.109(e)). Hence, because no such impact is expected, areas with LMPs are not required to do a regional emissions analysis as part of a transportation conformity determination. See 40 CFR 93.109(e). Therefore, an LMP does not include a motor vehicle emissions budget.

In the first 10-year maintenance plans for the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area, which have been approved into the West Virginia SIP, the State demonstrated that regional highway emissions of $PM_{2.5}$ and precursor NOx emissions

were insignificant contributors to the nonattainment of the areas.[29] Therefore, as per 40 CFR 93.109(f), the first 10-year maintenance plans for these areas did not include motor vehicle emissions budgets and the metropolitan planning organizations for the areas were not required to satisfy a regional emissions analysis as part of transportation conformity determinations for direct $PM_{2.5}$ or any $PM_{2.5}$ precursor.

WVDEP has now submitted LMPs for the second 10-year maintenance period for these $PM_{2.5}$ maintenance areas. As mentioned previously, EPA clarified in the 2022 $PM_{2.5}$ LMP Guidance, which was released after West Virginia submitted its SIP revisions, that an area submitting the second 10-year maintenance plan may be eligible for the LMP option as long as monitored air quality data and VMT trends support the LMP option. Consequently, if EPA approves the LMPs for these areas or finds them to be adequate, the metropolitan planning organizations for the Charleston Area and for the West Virginia portion of the Steubenville-Weirton Area will not be required to perform regional emissions analyses for direct $PM_{2.5}$ emissions or any $PM_{2.5}$ precursor when they determine conformity for these areas.

To determine if motor vehicle emissions growth in the remaining maintenance period will not reasonably be expected to cause a violation of the NAAQS, EPA analyzed air quality and VMT trends. As shown in Table 1 and Table 2 of this document, design values for both the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area have remained well below the NAAQS since 2016. Additionally, vehicle emissions of NH_3, NOx, $PM_{2.5}$, SO_2, and VOCs have steadily decreased in both the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area between 2002 and 2020. See Tables 6 and 7, and the trends analysis in the docket for this action.

Table 6. Charleston Area Onroad Mobile Source Emissions (tpy)

	2002	2005	2008	2011	2014	2017	2020
NH_3	314	318	146	111	106	88	73
NOx	10184	7684	8924	6143	6064	3010	2523
$PM_{2.5}$-PRI[a]	194	149	297	216	217	100	80

[29] 79 FR 17884 (March 31, 2014) and 79 FR 15019 (March 18, 2014).

SO_2	437	182	41	28	26	18	8
VOC	6157	4681	3721	2631	2348	1605	827

[a] $PM_{2.5}$ primary emissions, including condensibles and filterables.

Table 7. Steubenville-Weirton Onroad Mobile Source Emissions (tpy)

	2002	2005	2008	2011	2014	2017	2020
NH_3	42	43	19	14	12	11	8
NOx	1053	810	960	609	546	423	191
$PM_{2.5}$-PRI[a]	18	14	32	22	18	13	7
SO_2	53	19	5	4	3	2	1
VOC	862	667	498	421	377	304	139

[a] $PM_{2.5}$ primary emissions, including condensibles and filterables.

EPA also assessed historical and future projected VMT (as provided by state/local transportation organizations) to determine VMT growth trends. For Brooke County and Hancock County in the Steubenville-Weirton Area, VMT is projected to decrease by approximately 2.5 percent between 2020 and 2040. For Kanawha and Putnam counties in the Charleston Area, VMT is projected to decrease by 4.5 percent in that same period.

Because of these air quality and VMT trends, EPA proposes to find that the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area meet the qualification criteria set forth in the $PM_{2.5}$ LMP Guidance and that it would be unreasonable to expect that either area will experience growth in motor vehicle emissions sufficient to cause a violation of the 2006 24-hour $PM_{2.5}$ NAAQS over the second maintenance period.

Transportation plan and transportation improvement program (TIP) conformity determinations that meet applicable requirements continue to be required in these areas (see Table 1 in 40 CFR 93.109). Additionally, project-level conformity determinations must continue to be completed according to all applicable requirements for federally supported highway and transit projects, including the hot-spot requirements for projects in $PM_{2.5}$ nonattainment and maintenance areas.

In addition to these proposed actions, EPA is notifying the public that the Agency is initiating the adequacy process for the Charleston and Steubenville-Weirton LMPs. See 40 CFR 93.118(e)(4) for the criteria EPA considers, and 40 CFR 93.118(f)(2) for the process EPA

follows. Since LMPs do not include motor vehicle emissions budgets, in the case of an LMP, EPA's adequacy review is to assess whether the demonstration required by 40 CFR 93.109(e) is met. Any comments on the adequacy of the submitted West Virginia LMPs should be submitted to the dockets established for this rulemaking. If EPA approves the second 10-year LMPs or finds them adequate, the Charleston and Steubenville-Weirton areas will not be required to perform regional emissions analyses but must meet project-level conformity analyses requirements as well as the other transportation conformity criteria. We will complete the adequacy determination process either in the final action on this proposal or by notifying the State in writing, publishing a notice in the *Federal Register* and by posting the finding on EPA's adequacy web page. See 40 CFR 93.118(f).

IV. General Conformity

The general conformity regulations of November 30, 1993 (58 FR 63214), as amended, apply within nonattainment areas and redesignated attainment areas operating under maintenance plans (*i.e.,* maintenance areas). General conformity requires conformity to the purpose of a SIP, which means that Federal activities not related to transportation plans, programs, and projects (*i.e.*, general Federal activities) will not cause or contribute to any new violation of any standard in any area, increase the frequency or severity of any existing violation of any standard in any area, or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area (CAA section 176(c)(1)(A)and(1)(B)). As noted in the October 2022 $PM_{2.5}$ LMP Guidance (EPA-420-B-22-044), EPA's general conformity regulations do not distinguish between maintenance areas with an approved "full maintenance plan" and those with an approved LMP. Thus, maintenance areas with an approved LMP are subject to the same general conformity requirements under 40 CFR part 93 subpart B, as those covered by a "full maintenance plan." Nothing less than full compliance with the general conformity program is required within an LMP.

V. Proposed Actions

EPA is proposing to approve the second 10-year $PM_{2.5}$ limited maintenance plan for the Charleston (West Virginia) Area and the West Virginia portion of the Steubenville-Weirton (Ohio-West Virginia) Area. EPA has reviewed the air quality data for these areas and the Agency has determined that: (1) both areas continue to show attainment of the $PM_{2.5}$ NAAQS; and (2) all the LMP requirements, as described in this action, have been met.[30] EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action. If finalized, EPA's approval of these LMPs will satisfy the section 175A CAA requirements for $PM_{2.5}$ for the second 10-year maintenance period for the Charleston Area and the West Virginia portion of the Steubenville-Weirton Area. EPA is also initiating the process to determine if the LMPs are adequate for transportation conformity purposes. As discussed in Section III of this document, EPA may complete that process either in its final action on these LMPs or through a separate process provided for in the transportation conformity regulations. See 40 CFR 93.118(f).

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

[30] EPA finalized approval of the Ohio portion of the Steubenville-Weirton Area's second 10-year 2006 24-hour $PM_{2.5}$ LMP on January 22, 2024 (89 FR 3889).

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 (E.J.) 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."

WVDEP did not evaluate environmental justice considerations as part of either of its SIP submittals; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. EPA did not perform E.J. analyses and did not consider E.J. 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.

In addition, this proposed rulemaking, regarding the second 10-year limited maintenance plans for the Charleston Area and West Virginia portion of the Steubenville-Weirton Area, 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 State, 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, Particulate matter, Reporting and recordkeeping requirements.

Adam Ortiz,
Regional Administrator,
Region III.

[FR Doc. 2024-06474 Filed: 3/26/2024 8:45 am; Publication Date: 3/27/2024]