60-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2025-0205; FRL-11969-01-R3]

Air Plan Approval; Delaware; 2006 24-Hour Fine Particulate Matter Limited Maintenance Plan for the Philadelphia Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a limited maintenance plan (LMP) submitted by the Delaware Department of Natural Resources and Environmental Control (DNREC). This LMP is a revision to Delaware's state implementation plan (SIP) and addresses the New Castle County portion of the Philadelphia-Wilmington, PA-NJ-DE area (Philadelphia Area). The EPA is proposing to approve the New Castle County portion of the Philadelphia Area LMP because it provides 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 period. In addition, the EPA is initiating the process to find the LMP adequate for transportation conformity purposes. This action is being taken under the Clean Air Act (CAA).

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-2025-0205 at *www.regulations.gov*, or via email to *gordon.mike@epa.gov*. For comments submitted at *Regulations.gov*, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, 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, 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: Sarah McCabe, 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) 814-5786. Ms. McCabe can also be reached via electronic mail at *mccabe.sarah@epa.gov*.

SUPPLEMENTARY INFORMATION: On April 15, 2024, DNREC submitted a revision to the State's SIP. This revision is a LMP for the second 10-year maintenance period for the 2006 24-hour $PM_{2.5}$ NAAQS for the New Castle County portion of the Philadelphia-Wilmington, PA-NJ-DE area. The Philadelphia Area is comprised of New Castle County in Delaware; Burlington, Camden, and Gloucester Counties in New Jersey; and Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties in Pennsylvania. This action is expected to ensure that the State of Delaware meets CAA requirements.

I. Background

A. The PM2.5 NAAQS

Under section 109 of the CAA, the 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. The EPA sets the NAAQS for criteria pollutants at levels required to protect public health and

welfare.[1] The 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 diameters that are generally 10 micrometers or smaller (PM_{10}). $PM_{2.5}$ is one of the ambient pollutants for which the 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 (NO_X), sulfur dioxide (SO_2), volatile organic compounds (VOCs), and ammonia (NH_3).[2]

On July 18, 1997 (62 FR 38652), the 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 98^{th} 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), the EPA promulgated the 2006 $PM_{2.5}$ NAAQS. It 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 98^{th} percentile values of 24-hour

---

[1] For a given air pollutant, "primary" national ambient air quality standards are those determined by the EPA as requisite to protect the public health. "Secondary" standards are those determined by the 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).

[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.

concentrations.[4]

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

On February 7, 2024, the EPA revised the NAAQS for particulate matter to add new standards for $PM_{2.5}$. The EPA strengthened the level of the annual primary $PM_{2.5}$ standard from 12.0 µg/m^3 to 9.0 µg/m^3. The EPA retained the primary and secondary 24-hour $PM_{2.5}$ standards, secondary annual $PM_{2.5}$ standard, and primary and secondary PM_{10} standards. *See* 89 FR 16202 (March 6, 2024).

B. Designation of PM2.5 NAAQS Nonattainment Areas and Subsequent Actions

Following promulgation of a new or revised NAAQS, the 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), the EPA designated the Philadelphia Area as nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS.

Initially, the EPA did not assign classifications for $PM_{2.5}$ for the 2006 24-hour NAAQS (e.g. marginal, moderate, etc.). Subsequently, on January 4, 2013, the Court of Appeals for the District of Columbia remanded the EPA's implementation rule as a result of *Natural Resources Defense Council v. EPA*, 706 F.3d 428 (D.C. Cir. 2013), regarding the failure of the EPA to assign classifications for $PM_{2.5}$ for the 2006 24-hour NAAQS. The Court concluded that the EPA had improperly based the 2007 implementation rule for the 2006 24-hour $PM_{2.5}$ NAAQS solely upon the requirements of Title I, part D, subpart 1 of the CAA, and had failed to address the requirements of part D, subpart 4. In response to the court decision, the EPA subsequently assigned classifications to the applicable areas. On April 25, 2014, the EPA finalized a rule

[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 µg/m^3 at all relevant monitoring sites in the subject area, averaged over a 3-year period.

identifying the classification of all $PM_{2.5}$ areas currently designated nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS as ‘‘Moderate’’ (79 FR 31566, June 2, 2014).

On November 27, 2012, the State of Delaware submitted to the EPA a redesignation request and maintenance plan for the New Castle County portion of the Philadelphia Area. The EPA redesignated the New Castle County portion of the Philadelphia 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 effective September 4, 2014 (79 FR 45350, August 5, 2014). The first 10-year maintenance period for the New Castle County portion of the Philadelphia Area ended on September 4, 2024, and the Area’s second 10-year maintenance period, which is the subject of this proposed rulemaking, extends through September 4, 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.” Pursuant to section 175A(b), 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. On September 4, 1992, the 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”))[5] which explained that states may meet this requirement to “provide for the maintenance of the NAAQS” by using projected emissions inventories or air

[5] See Calcagni, John, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards, ‘‘Procedures for Processing Requests to Redesignate Areas to Attainment,’’ September 4, 1992 (Calcagni Memorandum). A copy of this memorandum can be found in the docket for this proposed rulemaking.

quality modeling showing continued maintenance until the end of the relevant maintenance period. The EPA clarified in subsequent guidance memoranda that rather than using air quality modeling or an emission inventory projection, 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.[6] Design values (DV) for the 2006 24-hour $PM_{2.5}$ NAAQS are calculated using the 3-year average of annual 98th percentile 24-hour average $PM_{2.5}$ mass concentration values recorded at each eligible monitoring site.

Most recently, in October 2022, the EPA released guidance extending this streamlined option for demonstrating maintenance under CAA section 175A to certain $PM_{2.5}$ areas, titled "Guidance on the Limited Maintenance Plan Option for Moderate $PM_{2.5}$ Nonattainment Areas and $PM_{2.5}$ Maintenance Areas" ($PM_{2.5}$ LMP Guidance).[7]

The EPA refers to this streamlined demonstration of maintenance as a limited maintenance plan or LMP. The EPA has interpreted CAA section 175A as permitting this option because section 175A does not define how areas may demonstrate maintenance, and in the 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

---

[6] 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 docket for this proposed rulemaking.

[7] 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 *https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1015UL4.pdf*. A copy of the guidance is in the docket for this proposed rulemaking.

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 (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 design values as calculated)[8] 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;[9] (2) the coefficient of variation (CV) of recent design values measured at that site; and (3) a statistical parameter t_c (critical t-value) 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.[10] 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.[11] Therefore, if an area's current ADV is less than the area's CDV, that area has less than a ten percent probability of exceeding the NAAQS in the future. The eligibility calculations for the CDV demonstration are shown in table 1 in this document.

Table 1: The Critical Design Value Calculation

---

[8] The 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. See $PM_{2.5}$ LMP Guidance at 7.

[9] 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}.

[10] $PM_{2.5}$ LMP Guidance at 7.

[11] 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.

Standard Deviation (σ)	$\sigma = \sqrt{\frac{\Sigma\,(x_i - ADV)^2}{n-1}}$
Coefficient of Variation (CV)	CV = σ / ADV
Critical Design Value (CDV)	CDV = NAAQS / (1+(t_c×CV))

Per the EPA's transportation conformity regulations, a LMP must also "demonstrate that it would be unreasonable to expect that such an area would experience enough motor vehicle emissions growth for a NAAQS violation to occur."[12] For further discussion of transportation conformity, see section III of this document.

II. Summary of SIP Revision and EPA Analysis

On April 15, 2024, the EPA received Delaware's second 10-year maintenance plan SIP submission for the 2006 24-hour $PM_{2.5}$ NAAQS for the New Castle County portion of the Philadelphia Area.

A. Qualifying for the Limited Maintenance Plan Option

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. The New Castle County portion of the Philadelphia Area includes five ambient air monitoring sites for the 24-hour $PM_{2.5}$ NAAQS: the Bellefonte I site (AQS 10-003-1003), the Lums Pond site (AQS 10-003-1007), the RT 9 site (AQS 10-003-1008), the Newark site (AQS 10-003-1012), and the MLK site (AQS 10-003-2004). Due to multiple technical and operational issues from 2014-2020, four out of the five $PM_{2.5}$ monitors were unable to meet the data completeness requirement[13] for multiple years (Bellefonte, RT 9, Newark, and Lums Pond). For the New Castle County portion of the Philadelphia Area, Delaware calculated the ADV by averaging the most recent five consecutive 3-year averages (design values) of monitoring data at

[12] See 40 CFR 93.109(e).
[13] In accordance with 40 CFR part 50, appendix N, each quarter of a three-year period must be > 75% complete for the entire three-year Design Value to be considered > 75% complete.

the time of submission, from 2014 to 2020.[14] Delaware is in the process of transitioning from manual to continuous monitors, which are expected to reduce monitor downtime due to technical/mechanical issues.[15] The MLK monitoring station meets the EPA's $PM_{2.5}$ design value completeness rules for 2014-2020 as the EPA allows the collocated Federal equivalent methods (FEM) to fill in when the primary monitor is down.[16] Collocated refers to two or more air samplers, analyzers, or other instruments that are operated simultaneously while located side by side, separated by a distance that is large enough to preclude the air sampled by any of the devices from being affected by any of the other devices, but small enough so that all devices obtain identical or uniform ambient air samples that are equally representative of the general area in which the group of devices is located. Additionally, FEM is a method of measuring the concentration of an air pollutant in the ambient air that has been designated as an equivalent method in accordance with 40 CFR part 53. A Federal reference method (FRM) is a method of sampling and analyzing the ambient air for an air pollutant that is specified as a reference method in an appendix to 40 CFR part 50, or a method that has been designated as a reference method in accordance with 40 CFR part 53. Data from these monitors are measured using the EPA approved methods including FEM and FRM.

Since each design value is calculated by averaging three years of the 98th percentile of 24-hour average, the average of the five consecutive 3-year design values includes data from a seven-year period (2014–2020)[17]. Table 2 in this document presents five 3-year design values for

---

[14] Delaware provided data for this LMP demonstration from the time period according to the timeline in CAA section 175A(b), i.e., 2022, 8 years after initial redesignation. The most recent DVs for the MLK site are 19 µg/m^3 (2019-2021), 17 µg/m^3 (2020-2022), 20 µg/m^3 (2021-2023), and 19 µg/m^3 (2022-2024). The ADV for the MLK site from 2019-2024 (18.75 µg/m^3) is consistent with the data provided in this demonstration and qualifies for an LMP as it falls below the calculated MLK CDV of 32.14 µg/m^3.

[15] See Division of Air Quality, Delaware Department of Natural Resources and Environmental Control, "2024 Delaware Ambient Air Monitoring Network Plan for Criteria Pollutants" May 2024. *documents.dnrec.delaware.gov/Air/monitoring/delaware-air-monitoring-network-plan.pdf.* A copy of this memorandum can be found in the docket for this proposed rulemaking.

[16] See Wayland, Richard A., Director, Air Quality Assessment Division, EPA Office of Air Quality Planning and Standards, ''Implementing Continuous $PM_{2.5}$ Federal Equivalent Methods (FEMs) and Approved Regional Methods (ARMs) in State or Local Air Monitoring Station (SLAMS) Networks,'' July 24, 2008. *www.epa.gov/sites/default/files/2015-09/documents/use_of_pm2_5_fems_and_arms_in_slams_network.pdf.*

[17] See footnote 14. The average of the most recent 3-year design values from 2019-2024 are 18 µg/m^3 (Bellefonte-

the 24-hour $PM_{2.5}$ NAAQS for the New Castle County portion of the Philadelphia Area that were available to Delaware while developing the LMP. Due to incomplete data, only the MLK monitoring site is used to calculate eligibility for the LMP. This is consistent with the $PM_{2.5}$ LMP Guidance, however, ADVs and CDVs were calculated for the monitors with incomplete data for reference. The ADV of the MLK site is 20 µg/m^3.

Table 2: New Castle County 24-hour $PM_{2.5}$ NAAQS Design Values [µg/m^3][a]

Design value period	Bellefonte I	Lums Pond	RT 9	Newark	MLK
2014-2016	22*	19*	23*	23	23
2015-2017	21*	18*	18*	22*	21
2016-2018	18*	16*	16*	18*	19
2017-2019	19	18	17	19*	20
2018-2020	17*	17	17	17*	19
Average of 3-year design values	19	18	18	20	20

[a] Taken from Delaware's 2006 24-hour $PM_{2.5}$ LMP SIP submission for the New Castle County portion of the Philadelphia Area
*Fails to meet $PM_{2.5}$ design value data completeness rules[18]

To calculate the CDV for each area, the EPA used the recent five years of design values and their variability with the equation presented in the $PM_{2.5}$ LMP Guidance, replicated in table 1 in this document.

Table 3 in this document shows the input and results of the LMP eligibility calculations.[19] The resulting CDV for the New Castle County portion of the Philadelphia Area is calculated to be 31.1 µg/m^3. The New Castle County portion of the Philadelphia Area's ADV (20 µg/m^3) falls below the site-specific CDV of 31.1 µg/m^3 and thus meets the first criterion for LMP

DVs do not meet completeness rules), 18 µg/m^3 (Lums Pond), 18 µg/m^3 (RT 9), 16.5 µg/m^3 (Newark- DVs do not meet completeness rules), and 18.75 µg/m^3 (MLK). These design value averages are equal to or lower than the 2014-2020 design value averages, thus indicating that the LMP approach is still appropriate.

[18] In accordance with 40 CFR part 50, appendix N, each quarter of a three-year period must be > 75% complete for the entire three-year Design Value to be considered > 75% complete.

[19] See "LMP Criteria Data Analysis" spreadsheet in the docket for this proposed rulemaking.

eligibility.[20] While this calculation is based solely on the MLK monitor, it is notable that the ADV and CDV calculations for each of the four monitors with incomplete data are also consistent with LMP eligibility.

Table 3: LMP Eligibility Calculations and Inputs of CDVs at New Castle County Monitors for the 24-hour $PM_{2.5}$ NAAQS[a]

Site	Monitor	Standard Deviation	CV	ADV (2014-2020) [µg/m^3]	CDV [µg/m^3]	Qualify for an LMP?
Bellefonte I*	10-003-1003	2.073644135	0.106888873	19	30.1	Yes.
MLK	10-003-2004	1.67332	0.082025	20	31.1	Yes.
RT 9*	10-003-1008	2.774887	0.152466	18	28.4	Yes.
Newark*	10-003-1012	2.588436	0.130729	20	29.2	Yes.
Lums Pond*	10-003-1007	1.1401754	0.0647827	18	31.8	Yes.

[a] Taken from "EPA_DE LMP Criteria Data Analysis (Site Specific)" spreadsheet found in the docket of this rulemaking.
NAAQS = 35 µg/m^3
t_c = 1.533
*Fails to meet $PM_{2.5}$- design value data completeness rules[21].

As discussed in section III in this document below, due to the air quality and VMT trends, the EPA is proposing to conclude that it would be unreasonable to expect that the area will experience growth in motor vehicle emissions sufficient to cause a violation of the 2006 24-hour PM2.5 NAAQS over the second maintenance period. As discussed in further sections of this document, the EPA proposes to find that Delaware's LMP for the New Castle County portion of the Philadelphia Area includes all the necessary components, so we are proposing to approve the second LMP as a revision to the Delaware SIP.

B. Attainment Emissions Inventories

States that qualify for an LMP must still meet the other elements of a maintenance plan, as articulated in the Calcagni Memorandum. This includes an attainment year emissions inventory consistent with the EPA's most recent guidance on emission inventories for

[20] The ADV for the MLK site from 2019-2024 (18.75 µg/m^3) aligns with the data provided in this demonstration and qualifies for an LMP as it falls below the calculated MLK CDV of 32.14 µg/m^3. Additionally, the 2019-2024 ADVs and CDVs for the monitors that do not meet data completeness rules are consistent with LMP eligibility.
[21] In accordance with 40 CFR part 50, appendix N, each quarter of a three-year period must be > 75% complete for the entire three-year Design Value to be considered > 75% complete.

nonattainment areas.[22] Delaware has developed emission inventories that meet the criterion of 172(c)(3) every three years since 1990. For the second 10-year maintenance plan for the New Castle County portion of the Philadelphia Area, Delaware provided an emissions inventory consistent with the EPA's most recent guidance from the latest comprehensive, accurate inventory of actual emissions from all sources of NO_X, $PM_{2.5}$, and SO_2 in the calendar year 2017, which was the latest inventory at the time of development of the LMP. Delaware postponed proposal of their second maintenance plan, originally scheduled for September 2, 2022, due to the EPA's development of the $PM_{2.5}$ LMP guidance. On October 27, 2022, the EPA released the $PM_{2.5}$ LMP guidance, so Delaware updated their original LMP draft to align with the guidance. Meanwhile, the 2020 National Emissions Inventory (NEI) was released on July 31, 2023. Delaware proposed the LMP for approval at the state level on January 23, 2024, and finalized their approval on March 12, 2024. On April 15, 2024, Delaware submitted the LMP to the EPA. This timeline indicates that for the majority of the development of the LMP, Delaware was using the most recently available emissions data, the 2017 NEI, originally released in April 2020, with an updated final release in January 2021.

Table 4 in this document includes the following four categories from the 2008 and 2017 inventories for direct $PM_{2.5}$ and its precursors (NO_X and SO_2): point sources, nonpoint (area) sources, on-road mobile sources, and nonroad mobile sources.

Table 4: New Castle County 2008 and 2017 Annual Emissions Inventory (tpy) Comparison for $PM_{2.5}$[a], NO_X, and SO_2[b]

Source	**2008 Annual (tpy)**			**2017 Annual (tpy)**			**Percent Decrease/Increase**		
Sector	**NO_X**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**$PM_{2.5}$**	**SO_2**
Point	5,657	1,109	10,576	2,582	566	551	-54%	-49%	-95%
Nonpoint	1,287	1,191	402	1,443	1,500	41	12%	26%	-90%
Nonroad	4,317	312	1,067	3,074	162	44	-29%	-48%	-96%
Onroad	9,311	282	94	5,136	150	23	-45%	-47%	-76%
All Sectors	20,572	2,894	12,139	12,235	2,378	659	-41%	-18%	-95%

[a] Total primary $PM_{2.5}$
[b] Taken from "DE LMP Errata 7-2-25" spreadsheet, found in the docket for this proposed rulemaking.

[22] The guidance document titled "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" can be found at *www.epa.gov/sites/default/files/2017-07/documents/ei_guidance_may_2017_final_rev.pdf.*

The redesignation request and first 10-year maintenance plan for the New Castle County portion of the Philadelphia Area included a 2008 emissions inventory. The emissions of direct $PM_{2.5}$ and its precursors in the New Castle County portion of Philadelphia Area have decreased substantially between the 2008 and 2017 inventory (18% decrease in $PM_{2.5}$, 41% decrease in NO_X, and a 95% decrease in SO_2).

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. Delaware operates, in accordance with the requirements of 40 CFR part 58, five $PM_{2.5}$ monitors within the Philadelphia Area.[23] On June 30, 2023, DNREC submitted its 2023 Annual Monitoring Plan, which the EPA approved on November 17, 2023. Additionally, on June 25, 2024, DNCREC submitted its 2024 Annual Monitoring Plan, which the EPA approved on November 27, 2024. Delaware's annual monitoring network plans and the EPA's approval letters are included in the docket associated with this action.

D. Verification of Continued Attainment

Delaware, through DNREC, has the legal authority to enforce and implement the requirements of the New Castle County portion of the Philadelphia 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. As discussed previously in section II.C., $PM_{2.5}$ is

[23] Delaware is in the process of transitioning from manual to continuous monitors, which are expected to reduce monitor downtime due to technical/mechanical issues. See Delaware Ambient Air Monitoring Network Plan at note 15.

currently monitored by DNREC within the New Castle County portion of the Philadelphia Area. In section 2.7 of Delaware's submitted limited maintenance plan, DNREC committed to continue to conduct ambient $PM_{2.5}$ air quality monitoring in the New Castle County portion of the Philadelphia Area throughout the term of the second 10-year maintenance period. Delaware will also track the progress of the maintenance demonstration by periodically updating the emissions inventory as required by the Air Emissions Reporting Requirements Rule (AERR), or as required by Federal regulation during the maintenance plan period. Tracking will include annual and periodic evaluations for any significant emission increases above the 2008 attainment year levels.

E. Contingency Provisions

CAA section 175A(d) states that a maintenance plan must include contingency provisions, as necessary, to ensure prompt correction of any violation of the relevant NAAQS which may occur after redesignation of the area to attainment. As explained in the Calcagni Memorandum, these contingency provisions are an enforceable part of the federally approved SIP. The maintenance plan should clearly identify the events that would ''trigger'' the adoption and implementation of a contingency provision, the contingency provision(s) that would be adopted and implemented, and the schedule indicating the timeframe by which the state would adopt and implement the provision(s). The Calcagni Memorandum states that the EPA will determine the adequacy of a contingency plan on a case-by-case basis. At a minimum, the plan must require that the state implement all measures contained in the CAA part D nonattainment plan for the area prior to redesignation.

In Delaware's $PM_{2.5}$ LMP submission, DNREC included maintenance plan contingency provisions to ensure the area will continue to meet the 2006 $PM_{2.5}$ NAAQS. The submission describes a process and a timeline to identify, evaluate, and select the appropriate contingency measure(s) from a list of measures in the event of a violation of the $PM_{2.5}$ NAAQS. Delaware commits to two levels of contingency response that may be implemented to reduce emissions, a

‘‘warning level response’’ and an ‘‘action level response.’’ A warning level response is prompted whenever the 98th percentile 24-hour $PM_{2.5}$ concentration of 35.5 μg/m^3 or greater occurs in a single calendar year within New Castle County and/or the New Castle County, Delaware maintenance area total $PM_{2.5}$, NO_X and SO_2 emissions increase more than 10% above the levels in the 2008 attainment year emissions inventory. An action level response is triggered whenever a three-year average of the 98th percentile (DV) 24-hour $PM_{2.5}$ concentration of 35.5 μg/m^3 or greater occurs within New Castle County.

Should a warning level response be triggered, measures that can be implemented in a short time will be selected in order to be in place within 30 months from the close of the calendar year that prompted the warning level. Should an action level response be triggered, implementation of necessary control measures will take place as expeditiously as possible, but in no event later than 30 months after the certification of a NAAQS violation. Within three months of certification, Delaware will identify and quantify the emissions reductions expected to result in the future from existing and future state and federal regulatory measures. Within six months of certification, Delaware will use the best available air quality modeling to evaluate the air quality improvement expected to result in New Castle County from the measures and emissions reductions identified below. Within nine months, Delaware will draft any needed permit conditions or SIP regulations, and within 12 months, Delaware will complete the rulemaking or permit revision process and submit to the EPA.

Delaware’s potential contingency measures include the following: (1) working with local metropolitan planning organizations (MPOs) to implement transportation control measures, (2) vehicle inspection and maintenance measures enhancements, (3) alternative fuel and additional diesel retrofit programs for fleet vehicle operations, (4) require NOx or SO_2 emission offsets for new and modified major sources, (5) increase the ratio of emission offsets required for new sources, (6) require NOx or SO_2 controls on new minor sources, and (7) require increased recovery efficiency at sulfur recovery plants.

III. Transportation Conformity

Transportation conformity is required by section 176(c) of the CAA. 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 NAAQS or any required interim emission reductions or other milestones in any area. *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 on-road motor vehicle emissions during the maintenance period that a violation of the relevant NAAQS would occur. *See* 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.

The $PM_{2.5}$ LMP Guidance notes that an LMP may be particularly appropriate for a second maintenance plan, as the area will have demonstrated attainment of the $PM_{2.5}$ NAAQS for at least 8 years. To demonstrate that it would be unreasonable to expect that the area would experience enough motor vehicle growth for a NAAQS violation to occur, the guidance states that an LMP submission for an area's second maintenance plan should address the area's $PM_{2.5}$ air quality trends and the historical and projected vehicle miles traveled (VMT). To determine whether it would be unreasonable to expect that the area would experience sufficient motor vehicle emissions growth in the remaining maintenance period for a violation of the NAAQS to occur as required by 40 CFR 93.109(e), Delaware submitted both air quality data and VMT trend data for the New Castle County portion of the Philadelphia Area. As shown in table 2 of this document, design values for the New Castle County portion of the Philadelphia Area have remained well below the NAAQS since the 2014-2016 monitoring period. Additionally, as

shown in table 4 of this document, the on-road mobile emissions, when comparing 2008 to 2017, decreased significantly for NOx and $PM_{2.5}$ (45% and 47%).

Delaware's Division of Air Quality also assessed historical and future projected VMT to determine VMT growth trends. The VMT projections considered by Delaware were based on transportation models provided by the Delaware Department of Transportation (DelDOT). DelDOT used MOVES3[24] (Motor Vehicle Emission Simulator) runs using the most recent 10 years of Highway Performance Monitoring System (HPMS) data for New Castle County. Delaware's Division of Air Quality used the annual growth rate from 2013-2019 (pre-COVID) to extrapolate the VMT for the 10-year period addressed by the LMP (2025-2035). The extrapolated VMT projects an 18.59 percent increase in VMT over the 10-year LMP period.[25] Delaware's Division of Air Quality performed a motor vehicle analysis to determine whether increased emissions from on-road mobile sources could, over the 10-year period, increase PM concentrations in the area and threaten the assumption of maintenance that underlies the LMP. If the mobile design value (M) is less than or equal to the margin of safety (MOS), it demonstrates that an increase in vehicle miles travelled, or other mobile emissions is unlikely to negatively impact air quality. Based on Delaware's Division of Air Quality's results, the value of M (8.2 $\mu g/m^3$) is less than the MOS (13.4 $\mu g/m^3$), which therefore qualifies for the LMP.

The EPA is proposing to conclude that the VMT growth rate of 18.59 percent between the 10-year LMP period (2025-2035) would not cause an exceedance of the CDV of 30.3ug/m^3 in table 3 of this document. Given the results of the motor vehicle analysis and the downward trend of $PM_{2.5}$ concentrations as shown in table 4 in this document, the state has adequately demonstrated that it would be unreasonable to expect that this area will experience growth in motor vehicle emissions sufficient to cause a violation of the 2006 24-hour $PM_{2.5}$ NAAQS, and

[24] EPA's MOVES3 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity is located in the EPA's guidance portal at *www.epa.gov/state-and-local-transportation/policy-and-technical-guidance-state-and-local-transportation*.
[25] Taken from "DE LMP Errata 7-2-25" found in the docket for this proposed rulemaking.

therefore, the New Castle County portion of the Philadelphia-Wilmington, PA-NJ-DE area would qualify for the LMP option.[26]

For areas with an approved or adequate LMP, 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, the EPA is notifying the public that the Agency is initiating the adequacy process for the New Castle County portion of the Philadelphia-Wilmington, PA-NJ-DE area LMP. See 40 CFR 93.118(e)(4) for the criteria the EPA considers, and 40 CFR 93.118(f)(2) for the process the EPA follows. Since LMPs do not include motor vehicle emissions budgets, in the case of an LMP, the 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 Delaware LMP should be submitted to the docket established for this rulemaking. It is important to note that the New Castle County portion of the Philadelphia Area has approved motor vehicle emission budgets for NOx and direct $PM_{2.5}$ for the year 2025 from the first maintenance plan that must continue to be met in any transportation conformity determination made through the year 2025.[27] In addition, project-level conformity requirements as well as the other transportation conformity criteria continue to apply with respect to the 2006 $PM_{2.5}$ NAAQS for conformity determinations that occur through the maintenance period, *i.e.*, through 2034.[28] The EPA 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*

[26] See table 3 in "DE LMP Errata 7-2-25" found in the docket for this proposed rulemaking.
[27] *See* 79 FR 45350, August 5, 2014.
[28] *See* 40 CFR 93.102(b)(4) and Transportation Conformity Guidance for Areas Reaching the End of the Maintenance Period (October 2014, EPA-420-B-14-093).

Register and by posting the finding on the 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 $PM_{2.5}$ LMP Guidance, the 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 Action

The EPA is proposing to approve the second 10-year limited maintenance plan for the New Castle County Portion of the Philadelphia-Wilmington, PA-NJ-DE 2006 24-hour $PM_{2.5}$ maintenance area submitted by DNREC on April 15, 2024. The EPA has reviewed the air quality data for this area and the Agency has determined that: (1) the area continues to show attainment of the $PM_{2.5}$ NAAQS; and (2) the area qualifies for an LMP, as described in this action, and has met the CAA's requirement for a second 10-year maintenance plan. The EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action. If finalized, the EPA's approval of this LMP will satisfy the CAA section 175A requirements for the second 10-year maintenance period.

The EPA is also initiating the process to determine if the LMP is adequate for

transportation conformity purposes. As discussed in section III of this document, the EPA may complete that process either in its final action on the LMP 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 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, the 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 13563 (76 FR 3821, January 21, 2011);
- Executive Order 14192 (90 FR 9065, February 6, 2025) does not apply because SIP actions are exempted from review under Executive Order 12866.;
- 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, this proposed rulemaking, regarding the second 10-year $PM_{2.5}$ limited maintenance plan for the New Castle County portion of the Philadelphia-Wilmington, PA-NJ-DE 2006 24-hour $PM_{2.5}$ maintenance 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 the 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.

Amy Van Blarcom-Lackey
Regional Administrator,
Region III.

[FR Doc. 2025-20418 Filed: 11/19/2025 8:45 am; Publication Date: 11/20/2025]