



STATE OF DELAWARE  
**DEPARTMENT OF NATURAL RESOURCES AND  
ENVIRONMENTAL CONTROL**

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SECRETARY

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**Secretary's Order No.: 2024-A-0011**

**RE:            Approving Final Revision to Delaware's State Implementation Plan: *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter National Ambient Air Quality Standard***

**Date of Issuance: March 12, 2024**

**Effective Date of the Amendment: March 12, 2024**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC"), pursuant to 7 *Del.C.* §§6006 and 6010, and all other relevant statutory authority, the following findings of fact based on the record, reasons and conclusions are entered as an Order of the Secretary in the above-referenced promulgation.

**Background, Procedural History and Findings of Fact**

This Order relates to the Department's proposed revision to Delaware's State Implementation Plan ("SIP") addressing the *Second Limited Maintenance Plan ("LMP") Under the 2006 24-hour Fine Particulate Matter ("PM<sub>2.5</sub>") National Ambient Air Quality Standard ("NAAQS")*. Delaware is required by Section 110 of the federal *Clean Air Act ("CAA")* to submit to U.S. Environmental Protection Agency ("EPA") a SIP that provides for the implementation, maintenance, and enforcement of the NAAQS established by the EPA.

A SIP is a complex, fluid document containing regulations, source-specific requirements, and non-regulatory items such as plans and inventories. Delaware periodically submits revisions to the SIP as required by the CAA to address air quality nonattainment and maintenance issues. The CAA requires that any proposed SIP revision be made available for public comment and presented at a public hearing prior to submitting to EPA for adoption.

The EPA establishes the PM<sub>2.5</sub> NAAQS to safeguard human health, welfare, and the environment against criteria pollutants. Particulate Matter consists of solid particles and liquid droplets found in the atmosphere. Fine particles, known as PM<sub>2.5</sub>, possess the ability to infiltrate deep into the lungs and degrade environmental health by reducing visibility. The maintenance plan aims to maintain air quality below the NAAQS and includes provisions for contingency measures in the event of PM<sub>2.5</sub> NAAQS exceedance.

On December 14, 2009, EPA designated the Philadelphia-Wilmington, PA-NJ-DE ("Philadelphia NAA") as nonattainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS. Subsequently, years later in 2014, the Philadelphia NAA was classified as "Moderate" non-attainment. The Philadelphia Area includes New Castle County in Delaware; Burlington, Camden, and Gloucester Counties in New Jersey; and Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties in Pennsylvania.

The EPA requires states with nonattainment areas that are redesignated to attainment to establish a maintenance plan outlining procedures in the event an area experiences an exceedance of the 2006 24-hour PM<sub>2.5</sub> NAAQS threshold of 35 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ). Moreover, the plan must include control measures to uphold maintenance and contingency provisions to assure that the State will promptly correct any violation of the standard occurring after the area's redesignation as attainment. Additionally, the plan must implement these measures to maintain attainment for 10 years.

In 2012, Delaware submitted the first 10-year maintenance plan and redesignation request, through 2025, in adherence to Section 175A of the CAA. This plan formally requested that EPA redesignate the moderate nonattainment area to attainment for the 2006 24-hr PM<sub>2.5</sub> NAAQS. As a result, the EPA approved Delaware's 10-year Maintenance Plan on August 5, 2014, and effective September 4, 2014, the area was redesignated as attainment for the PM<sub>2.5</sub> NAAQS under the final rule (79 FR 45350).

As outlined in Section 175A of the CAA and 42 U.S.C. §7505(b) states must submit revisions to the first 10-year maintenance plan eight years after the EPA approved the area's original redesignation (September 4, 2014). The second maintenance plan constitutes a SIP revision and must provide for maintenance of the relevant NAAQS in the area for an additional 10 years following the first 10-year period, including contingency measures to ensure prompt correction of any violation of the NAAQS. Additionally, Section 175A of the CAA further states that the plan shall contain additional measures, if any, deemed necessary to ensure such maintenance. Mobile vehicle emission budgets for transportation conformity purposes are also established within the second maintenance plan.

While Section 175A of the CAA mandates Delaware to submit a second maintenance plan by September 4, 2022, the EPA's Region III Office of Air Program Planning deferred the submission of the revised SIP, in order to create specific Limited Maintenance Program guidance for PM<sub>2.5</sub>.

On October 27, 2022, the EPA released *Guidance on the Limited Maintenance Plan Option for Moderate PM<sub>2.5</sub> Nonattainment Areas and PM<sub>2.5</sub> Maintenance Areas (PM<sub>2.5</sub> LMP Guidance)*. The EPA developed this guidance for areas that have been meeting the PM<sub>2.5</sub> NAAQS for five years or longer, have a 'moderate' designation, have already been redesignated to attainment, and are in the process submitting a second maintenance plan under the CAA Section 175A. The PM<sub>2.5</sub> LMP Guidance applies the EPA's 2001 *Limited Maintenance Plan Option for Moderate PM<sub>10</sub> Nonattainment Areas Guidance (PM<sub>10</sub> LMP Guidance)*. The PM<sub>10</sub> LMP Guidance gave States with low design values and limited growth in on-road motor vehicle PM<sub>10</sub> emissions, the option of submitting a Limited Maintenance Plan.

This guidance allows Delaware to adhere to an LMP under two conditions: (1) if the annual average design values ("ADV") of PM<sub>2.5</sub> are below the identified threshold level or below the critical design value ("CDV") for New Castle County and 2) future growth in the area does not exceed the motor vehicle regional emissions analysis test requirements. An LMP requires states to submit a plan based on an analysis of current and historical air quality data.

The Department conducted analysis of Delaware's PM<sub>2.5</sub> 24-hr NAAQS 3-year interval average within the past five years, specifically monitoring New Castle County from 2014-2020. The analysis determined the ADV for PM<sub>2.5</sub> in New Castle County measured 19.00 µg/m<sup>3</sup>. This design value is less than the CDV, which amounts to 30.3 µg/m<sup>3</sup> for Delaware. Therefore, New Castle County meets the first criterion of having low design values and qualifies to submit an LMP.

Furthermore, the Department demonstrated that the Motor Vehicle Analysis is less than the CDV for Delaware (30.3 µg/m<sup>3</sup>). Utilizing the 2017 Emissions Inventory data and the projected increase in vehicle miles traveled (VMT) over the 10-year maintenance period between 2025-2035 (0.065) and the New Castle County's ADV of 19.00 µg/m<sup>3</sup>, the Department calculated the motor vehicle analysis for New Castle County is 19.43 µg/m<sup>3</sup>. This analysis concludes Delaware meets the second criterion necessary for submitting an LMP.

In accordance with EPA's PM<sub>2.5</sub> LMP Guidance, additional guidance received from EPA's Region 3 Office of Air Program Planning, and the requirements of Section 175A of the CAA, the Department is proposing revisions to the SIP, to satisfy the requirements of the second 10-year *Particulate Matter Limited Maintenance Plan*. The second PM<sub>2.5</sub> LMP ensures that Delaware will continue to maintain the NAAQS through 2035 and addresses the following elements:

- Emission Inventory - 2008 Attainment Year Inventory to identify the level of emissions sufficient to achieve the NAAQS and 2017 emissions inventory to show emissions reductions.
- Monitoring Network - description of PM<sub>2.5</sub> monitoring network.
- Control Measures – controls needed to attain the NAAQS.
- Contingency Plan – specific control measures that could be implemented if the area fails to meet the 2006 24-hr PM<sub>2.5</sub> NAAQS.
- Maintenance Demonstration - demonstrates that the area has continued to meet the NAAQS.

The Department has the statutory basis and legal authority to act with regard to the proposed SIP revision pursuant to 7 *Del.C.* Chapter 60. The Department published the General Notice of this proposed SIP revision, and of the January 23, 2024, public hearing to be held in this matter, in the January 1, 2024, *Delaware Register of Regulations*. The Record remained open for comment following the public hearing through February 7, 2024. No public comment was received by the Department during any phase of this hearing matter. All proper notification and noticing requirements concerning this matter were met by the Department. Proper notice of the hearing was provided as required by law.

The Department's presiding hearing officer, Theresa Smith, prepared a Hearing Officer's Report dated February 8, 2024 ("Report"). The Report documents the proper completion of the required SIP revision process, establishes the Record, and recommends the approval of the proposed SIP revision into Delaware's SIP document. The Department will meet the attainment plan requirements associated with the PM<sub>2.5</sub> NAAQS, as set forth in Section 175A of the CAA and 42 U.S.C. §7505(b) and provide EPA with revisions to Delaware's SIP - *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter National Ambient Air Quality Standard*, as attached to the Report as Appendix "A."

## Reasons and Conclusions

Based on the Record developed by the Department's experts and established by the Hearing Officer's Report, I find that the Department's proposed revision to Delaware's SIP - *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter National Ambient Air Quality Standard*, meets the attainment plan requirements associated with the PM<sub>2.5</sub> NAAQS, as set forth in Section 175A of the CAA and 42 U.S.C. §7505(b). I further find that the Department's experts in the Division of Air Quality fully developed the Record to support adoption of the proposed SIP revisions as final. Therefore, the recommendations of the Hearing Officer are hereby adopted, and I direct that the same be promulgated as final.

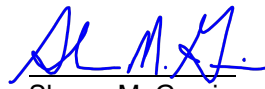
The following reasons and conclusions are hereby entered:

1. The Department has the statutory basis and legal authority to act with regard to this proposed SIP revision, pursuant to 7 *Del.C.* Ch. 60;
2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.* Ch. 60, to issue an Order adopting this proposed SIP revision as final;
3. The Department provided adequate public notice of this proposed SIP modifications, and all proceedings associated with the same, in a manner required by the law and regulations. The Department provided the public with an adequate opportunity to comment on the proposed SIP revisions, and held the Record open for receipt of public comment subsequent to the date of the hearing (through February 7, 2024), consistent with Delaware law, in order to consider the same before making any final decision;
4. The Department's Hearing Officer's Report, including its established Record and the recommended proposed SIP revisions as set forth in Appendix "A," is hereby adopted to provide additional reasons and findings for this Order;
5. Promulgation of the proposed SIP revisions will enable the Department to meet the attainment plan requirements associated with the PM<sub>2.5</sub> NAAQS, as set forth in Section 175A of the CAA and 42 U.S.C. §7505(b) and provide EPA with revisions to Delaware's SIP - *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter National Ambient Air Quality Standard*;

6. The Department's proposed SIP revision, as published in the January 1, 2024 *Delaware Register of Regulations* is set forth in Appendix "A" as noted above, and is adequately supported, is not arbitrary or capricious, and is consistent with the applicable laws and regulations. Consequently, it is approved as a final revision to Delaware's SIP document, which shall become effective immediately upon the signing of this Order;

7. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and

8. The Department shall submit this Order approving as final revisions to Delaware's SIP document to the *Delaware Register of Regulations* for publication in its next available issue and provide such other notice as the law and regulation require and the Department determines is appropriate.



Shawn M. Garvin  
Secretary