

HEARING OFFICER'S REPORT

TO: The Honorable Shawn M. Garvin
Cabinet Secretary, Dept. of Natural Resources and Environmental Control

FROM: Theresa Smith, Regulatory Specialist, Office of the Secretary,
Dept. of Natural Resources and Environmental Control

RE: Proposed Revision to the Delaware State Implementation Plan: *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter (PM_{2.5}) National Ambient Air Quality Standard*

DATE: February 8, 2023

I. BACKGROUND AND PROCEDURAL HISTORY:

A virtual public hearing was held on Tuesday January 23, 2024, at 6:00 p.m. via the State of Delaware Zoom platform by the Department of Natural Resources and Environmental Control (“DNREC,” “Department”) to receive comment on the proposed revisions to the Delaware State Implementation Plan (“SIP”) for the *Second Limited Maintenance Plan (“LMP”) Under the 2006 24-hour Fine Particulate Matter (“PM_{2.5}”) National Ambient Air Quality Standard (“NAAQS”)* that will enable the Department to ensure good PM_{2.5} air quality will be maintained through the year 2035. A SIP is a complex, fluid document containing regulations, source-specific requirements, and non-regulatory items such as plans and inventories.

Under Section 175A of the Clean Air Act (“CAA”), the U.S. Environmental Protection Agency (“EPA”) requires states implement a maintenance plan, through the submission of a SIP, if an area experiences an exceedance of the 2006 24-hr PM_{2.5} NAAQS of 35 micrograms (one-millionth of a gram) per cubic meter air (“µg/m³”). The EPA established the NAAQS for criteria pollutants shown to threaten human health, welfare, and the environment. Particulate Matter is a mixture of solid particles and liquid droplets found in the air. Fine particles, PM_{2.5}, can penetrate deep into the lungs as well as degrade environmental health by reducing visibility. The PM_{2.5} Maintenance plans ensures the air quality levels are below the NAAQS and provides for contingency

measures, should the levels exceed the NAAQS.

On December 14, 2009, EPA designated the Philadelphia-Wilmington, PA-NJ-DE (“Philadelphia NAA”) as nonattainment for the 2006 24-hour PM_{2.5} NAAQS. Subsequently, years later in 2014, the Philadelphia NAA was classified as “Moderate” nonattainment. During the time of assessing the classification of the Philadelphia NAA, the State of Delaware submitted their first 10-year maintenance plan under the 2006 24-hr PM_{2.5} NAAQS that extends through the year 2025.

In accordance with Section 175A of the CAA, the plan included control measures to ensure maintenance and contingency provisions to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area. As a part of the 10-year plan, Delaware also formally requested that EPA redesignate the moderate area to attainment for the 2006 24-hr PM_{2.5} NAAQS.

On August 5, 2014, EPA approved the Delaware’s 10-year Maintenance Plan and effective September 4, 2014, the area was redesignated as attainment for the PM_{2.5} NAAQS under final rule (79 FR 45350).

As mentioned above the maintenance plan extends through the year 2025 however, in accordance with Section 175A of the CAA, states must submit revisions to the first 10 – year maintenance plan 8 years after the EPA approved the original redesignation of the area (September 4, 2014.) The second maintenance plan constitutes a SIP revision and must provide for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation, including contingency measures to ensure prompt correction of any violation of the NAAQS. Section 175A of the CAA further states that the plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance. Mobile vehicle emission budgets for transportation conformity purposes are also established within the maintenance plans.

The EPA postponed the submission of the second maintenance plan, originally scheduled for September 4, 2022, in order to create specific LMP guidance for PM_{2.5} under their direction.

On October 27, 2022, EPA released *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)*. The PM_{2.5} LMP Guidance applies the EPA's 2001 *Limited Maintenance Plan Option for Moderate PM₁₀ Nonattainment Areas Guidance* (PM₁₀ LMP Guidance.) The EPA developed this guidance for areas that have been meeting the PM_{2.5} NAAQS for 5 years or more, have a 'moderate' designation, and have already been redesignated to attainment and are submitting a second maintenance plan under the CAA section 175A. Additionally, air quality concentrations in the area would need to be relatively stable during the first 10-year maintenance period, which indicates that emissions growth is unlikely. This guidance allows Delaware to follow a LMP if (1) the annual average design values ("ADV") 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. Unlike a typical maintenance plan, a LMP does not require states to submit a future year emissions inventory, and the plan is based on an analysis of current and historical air quality data, rather than modeling or emissions projections.

The Department conducted analysis of Delaware's PM_{2.5} 24-hr NAAQS 3-year interval average from the past 5 years, monitoring for New Castle County from 2014-2020. The analysis calculated the PM_{2.5} has an ADV of 19.00 µg/m³ for New Castle County. This PM_{2.5} design value is less than the CDV totaling 30.3 µg/m³ for Delaware. Therefore, New Castle County meets the first criteria of having low design values to qualify to submit a LMP.

Additionally, the Department demonstrated that the Motor Vehicle Analysis is less than the CDV for Delaware (30.3 µg/m³.) By using 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 $\mu\text{g}/\text{m}^3$, the Department calculated the motor vehicle analysis for New Castle County is 19.43 $\mu\text{g}/\text{m}^3$. This analysis concludes Delaware meets the second criteria to submit an LMP.

In accordance with EPA's PM_{2.5} LMP Guidance, applicable provisions of the CAA, 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 the second 10-year *Particulate Matter Limited Maintenance Plan* that 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_{2.5} 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_{2.5} NAAQS; and Maintenance Demonstration - demonstrates that the area has continued to meet the NAAQS. The proposed second LMP ensures that Delaware will continue to maintain the NAAQS through 2035.

The Department has the statutory basis and legal authority to act with regard to the proposed SIP revision described herein, pursuant to 7 *Del.C.* Chapter 60. The Department published a General Notice of the proposed SIP revision, and of the January 23, 2024, public hearing held in this matter, in the January 1, 2024, *Delaware Register of Regulations*. There were fifteen (15) members of the public in attendance, with no public comment provided during the virtual hearing.

Pursuant to Delaware law, the hearing record ("Record") remained open for fifteen (15) days after the public hearing for receipt of public comment. The Record formally closed regarding public comment on February 7, 2024, with no written comment received by the Department in this matter. As set forth above, 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.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The Record consists of the following documents: (1) a verbatim transcript of the virtual public hearing held on January 23, 2024; and (2) ten (10) exhibits introduced by the responsible Department staff at the time of the public hearing and marked by this Hearing Officer accordingly as “Department Exhibits 1-10”. The Department’s responsible staff member for the drafting and overall promulgation of these proposed SIP Amendments, Kelsey Pangman, Environmental Scientist II, Division of Air Quality, developed the Record with the relevant documents in the Department’s files.

The proposed SIP revision was initially published in the *Delaware Register of Regulations* and were thoroughly vetted by the Department at the virtual public hearing on January 23, 2024.

Pursuant to Delaware law, the record remained open subsequent to the date of the public hearing for the purpose of allowing public comment to be received regarding this matter. The hearing record closed for comment in this matter on February 7, 2024, with no public comment having been received by the Department during any phase of this hearing matter.

Accordingly, the Department’s proposed SIP revisions to the *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter (PM_{2.5}) National Ambient Air Quality Standard* is attached hereto as Appendix “A” and is expressly incorporated herein by reference. All proper notification and noticing requirements concerning this proposed promulgation were met by the Department in this matter.

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

Based on the record developed, I find and conclude that the Department has provided appropriate reasoning regarding the need for the proposed SIP revision to the *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter (PM_{2.5}) National Ambient Air Quality Standard*. Accordingly, I recommend promulgation of the same in the customary manner provided by law.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has the statutory basis and legal authority to act with regard to the aforementioned 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 the proposed SIP revision as final;
3. The Department provided adequate public notice of the proposed SIP revision, 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. Promulgation of the proposed SIP revision will enable the Department to ensure Delaware will maintain the PM_{2.5} NAAQS through the year 2035 and provide EPA with revisions to Delaware's SIP - *Second Limited Maintenance Plan Under the 2006 24-hour Fine Particulate Matter (PM_{2.5}) National Ambient Air Quality Standard*;
5. The Department's proposed SIP revision, as set forth in Appendix "A" are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, the Department's proposed SIP revisions should be approved as a final revision to Delaware's SIP document, which shall become effective immediately upon the signing of the Secretary's Order dedicated to this proposed SIP revision as set forth above;
6. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and

7. The Department shall submit the proposed SIP revision as a final SIP revision 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.



Theresa L. Smith
Public Hearing Officer

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Attachments/Appendices:

Appendix A: Proposed SIP revision