



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-0003

RE: Approving Final Revision to Delaware's State Implementation Plan ("SIP"): *Basic Inspection & Maintenance Performance Standard Certification for New Castle County*

Date of Issuance: February 14, 2024

Effective Date of the Amendment: March 11, 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 *Basic Inspection & Maintenance Performance Standard Certification for New Castle County*. Delaware is required by Section 110 of the federal *Clean Air Act* ("CAA") to submit to the U.S. Environmental Protection Agency ("EPA") a SIP that provides for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standard ("NAAQS") established by the EPA. More specifically, Delaware is required to certify that it has met the basic Inspection and Maintenance ("I/M") performance standard for the New Castle County nonattainment area for the ozone NAAQS, through the submission of the SIP.

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.

In 2015, EPA promulgated a revised NAAQS for ground-level ozone at a level of 70 parts per billion (ppb). The revised NAAQS for ground-level ozone is expected to provide better protections of public health and environment. Ground-level ozone, formed in the atmosphere by photochemical reactions among volatile organic compounds (VOC), oxides of nitrogen (NO_x), and carbon monoxide (CO) in the presence of sunlight, is a serious air pollutant that harms human health and the environment. On-road vehicle emissions contribute to ground-level ozone pollution by emitting carbon monoxide, ozone-forming hydrocarbons, nitrogen oxides, and air toxics. Promulgation of a revised NAAQS triggers a requirement for the EPA to designate areas as nonattainment, attainment, or unclassifiable, and to classify the nonattainment areas based upon the severity of nonattainment at the time of designation.

On June 4, 2018, under the 2015 8-hour Ozone NAAQS, the EPA designated 51 areas of the country as non-attainment which included the Philadelphia-Wilmington-Atlantic City (PA-NJ-MD-DE) Area ("Philadelphia NAA"). The Philadelphia NAA is comprised of 16 counties, with New Castle County being one of its regions. Collectively, the 2018-2020 design value for the area measured 0.074 parts per million (ppm) which is equal to 74 ppb and does not meet the revised NAAQS for ground-level ozone. The EPA classified the Philadelphia NAA as "marginal" nonattainment and required the Philadelphia NAA to meet the NAAQS attainment level by August 3, 2021.

On October 7, 2022, it was determined by the EPA that the Philadelphia NAA failed to meet attainment standards established in the NAAQS by August 3, 2021. Subsequently, EPA issued Final Rule 87 FR 60897, reclassifying the Philadelphia NAA as "moderate" non-attainment. Under this rule, states with established I/M programs are required to perform and submit a Performance Standard Modeling ("PSM") analysis. They must also implement any essential program adjustments as part of their moderate area SIP submissions. This ensures that I/M programs meet or exceed the basic I/M performance standard level for the 2015 ozone NAAQS.

The Department conducted analysis to demonstrate the New Castle County's I/M program meets the regulations defined in 40 CFR Part 51, subpart S. Delaware's New Castle County I/M program is regulated under 7 DE Admin. Code 1131 - *Low Enhanced Inspection and Maintenance Program*. The New Castle County I/M program adheres to "low-enhanced" I/M performance standard which includes more stringent requirements than the "basic" I/M performance standard.

The Department utilized EPA's Motor Vehicle Emission Simulator (MOVES3.1.0) for the performance standard certification modeling analysis. The Department conducted two analyses, comparing Delaware's I/M program against EPA's basic I/M standards. The first scenario was representative of New Castle County's Low-Enhanced I/M program for the attainment year 2023 and the second scenario was representative of EPA's basic inspection and maintenance program defined in 40 CFR 50.352(e).

Utilizing the RunSpec, a system used to define elements prior to inputting the data into MOVES3.1.0, the Department created separate databases for each scenario. The input database incorporates county-specific parameters related to on-road fleet such as vehicle miles traveled, age distribution of 13 EPA vehicle types, fuel types, and the I/M program data. Additionally, the Department followed Section 3.1 of EPA's *Performance Standard Modeling for New and Existing Vehicle I/M Programs Using the MOVES Mobile Source Emissions Model*, for selecting the appropriate parameters to create the data.

To meet the EPA basic I/M performance standard, the grams per mile emission rate for volatile organic compounds (VOC) and nitrogen oxides (NOx) must be equal to or less than the emissions rate calculated for the relevant standard. According to the analysis conducted for the New Castle County Low-Enhanced I/M program in the attainment year 2023, the VOC and NOx emission rate measured 0.2085 grams per mile. In comparison, the EPA's basic I/M program recorded a slightly higher emission rate of 0.2148 grams per mile. The Department determined that the emission rate of VOCs and NOx under the New Castle County's Low-Enhanced I/M program is less than the emission rate of EPA's basic I/M program and therefore Delaware's I/M program achieves the performance standard set forth by the EPA.

In accordance with EPA Final Rule 87 FR 60897, the Philadelphia NAA is required to implement any essential program adjustments. As mentioned above and supported by the analysis provided, Delaware's New Castle County's Low-Enhanced I/M program exceeds the basic I/M performance standard level for the 2015 ozone NAAQS. As a result, no further revisions are required as part of their moderate area SIP submission. The analysis conducted ensures, through the proposed PSM certification, that Delaware's New Castle County will continue to meet all applicable I/M requirements and operate at or above the applicable performance standard level for the corresponding ozone 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 November 28, 2023 public hearing to be held in this matter, in the November 1, 2023 *Delaware Register of Regulations*. Subsequent to the publication of the General Notice, the Department proposed additional revisions to the SIP, in response to EPA's pre-hearing review. The Department is proposing non-substantive amendments to the SIP modifications, that include grammatical revisions, removal of most references and background regarding Sussex and Kent Counties, as they are not part of the Philadelphia NAA, and other clarifications throughout the SIP document.

The proposed *revised* SIP modifications were thoroughly vetted during at the hearing held on November 28, 2023, and the revisions were deemed non-substantive, and no further action was required by the Department. The Record remained open for comment subsequent to the aforementioned public hearing through December 13, 2023. 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 January 14, 2023 ("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, thus enabling the Department to certify through a PSM that Delaware's New Castle County's I/M program meets EPA basic I/M performance standards, defined in 40 CFR Part 51, subpart S, for the ozone NAAQS. Additionally, the approval of the SIP will enable the Department to provide EPA with revisions to Delaware's SIP - *Basic Inspection & Maintenance Performance Standard Certification for New Castle County*, as attached to the Report as Appendix "A."

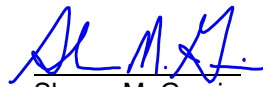
Reasons and Conclusions

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 - *Basic Inspection & Maintenance Performance Standard Certification for New Castle County*, meet the attainment plan requirements associated with the 2015 8-hour ozone NAAQS, as set forth in 40 CFR Part 51 Subpart S. I further find that the Department's experts in the Division of Air Quality fully developed the Record to support adoption of the proposed *revised* SIP modifications 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 the proposed *revised* 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 *revised* SIP modification, and held the Record open for receipt of public comment subsequent to the date of the hearing (through December 13, 2023), 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 *revised* SIP modifications as set forth in Appendix "A," is hereby adopted to provide additional reasons and findings for this Order;
5. Promulgation of the proposed *revised* SIP modification will enable the Department to certify through a PSM that Delaware's New Castle County's I/M program meets EPA basic I/M performance standards, defined in 40 CFR Part 51, subpart S, for the ozone NAAQS and provide EPA with revisions to Delaware's SIP - *Basic Inspection & Maintenance Performance Standard Certification for New Castle County*;
6. The Department's proposed SIP revision, as published in the November 1, 2023 *Delaware Register of Regulations*, and subsequently *revised*, 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