

**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL**  
**DIVISION OF AIR QUALITY**

Statutory Authority: 7 Delaware Code, Sections 6001(c) and 6010 (7 Del.C. §§6001(c) & 6010)  
7 DE Admin. Code 1104

**FINAL**

**Secretary's Order No.: 2025-A-0004**

**RE:            Approving Final Regulations to Amend 7 DE Admin. Code 1104 -  
                 *Particulate Emissions from Fuel Burning Equipment***

**Date of Issuance: January 7, 2025**

**Effective Date of the Amendment: February 11, 2025**

**1104 Particulate Emissions from Fuel Burning Equipment**

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 proposed amendments ("Amendments") to 7 DE Admin. Code 1104 - *Particulate Emissions from Fuel Burning Equipment* ("Regulation"). The Department is proposing amendments to address the regulation of particulate emissions during startup, shutdown, and malfunction ("SSM") of fuel burning equipment. These Amendments are necessary to ensure compliance with the U.S. Environmental Protection Agency's (EPA) *2015 Startup, Shutdown, and Malfunction State Implementation Plan Call* ("2015 SSM SIP").

In accordance with the *Clean Air Act* ("CAA") the Department established 7 DE Admin. Code 1104 to establish particulate matter emission limits consistent with the National Ambient Air Quality Standards ("NAAQS") for fuel burning equipment with a heat input capacity that is equal to or greater than 1 million British Thermal Units (MMBTU) per hour. This regulation is applicable to larger sources, such as commercial and industrial generators, engines, boilers, and turbines. It also addresses emissions during startup, shutdown, and malfunction ("SSM") periods. "Startup" refers to the initiation of a source's operation, "shutdown" is the cessation of operation, and a "malfunction" is a sudden and unavoidable breakdown of process or control equipment.

During SSM periods, equipment does not operate at peak efficiency, resulting in excess emissions that can negatively affect public health, contribute to smog, and impact downwind communities. A part of the Regulation sets emission limits for SSM of the fuel burning equipment mentioned above.

The Department established emission limits for SSM of the fuel burning equipment and included provisions that require facilities that operate continuously, or in an extended steady state when SSM occurs, to obtain an operation permit pursuant to the provisions of 2.0 of 7 DE Admin. Code 1102, to limit emissions during these events. These permits are subject to environmental review and public scrutiny and must demonstrate that they will not violate NAAQS.

The Department's regulations are also part of Delaware's State Implementation Plan ("SIP") because they implement, maintain, and enforce the NAAQS. A SIP is a state-created, federally enforceable plan that outlines how the state will fulfill CAA requirements to enhance air quality. It includes regulations and supporting documentation that demonstrate the state's efforts to safeguard public health and the environment.

On June 30, 2011, the Sierra Club petitioned the EPA to address how excess emissions during SSM events were being handled in SIPs that had been approved by the EPA. In response, on June 12, 2015, the EPA issued a final rule known as the 2015 SSM SIP Call [80 FR 33840]. Under Section 110(k)(5) of the CAA, the EPA is authorized to issue a "SIP Call" to states requiring them to correct state plans that fail to meet federal standards. The 2015 SSM SIP Call included 36 state SIPs, including Delaware's SIP for 7 DE Admin. Code 1104. The EPA found Subsection 1.5 of Delaware's regulation to be deficient because it potentially allowed exemptions from the emission limits set forth in Section 2.0 during SSM events. The 2015 SSM SIP Call mandated that state's establish plans that require industrial facilities to follow air pollution rules during periods of SSM; specifically, how these emissions are treated in SIPs, with corrections due by November 22, 2016.

On November 22, 2016, the Department revised its regulations governing particulate emissions from fuel-burning equipment (7 DE Admin. Code 1104) and submitted a SIP revision to the EPA, in response to the 2015 SSM SIP Call. The SIP revisions included the removal of the problematic exemption in subsection 1.5, and removed subsection 2.0, eliminating the 0.3 lb/ MMBTU heat input, maximum two-hour average, and added a new subsection 2.2, implementing a

30-day rolling average emission limit, that would now apply at all times.

As part of the response to the 2015 SSM SIP CALL, the Department also adopted a separate "state-only" version of 7 DE Admin. Code 1104. The "state only" version, as cited in the *Delaware Registrar of Regulations*, maintained the language removed in the SIP revisions (subsection 1.5 and 2.1) and added the same new subsection 2.2 that was included in the SIP revision, implementing a 0.3 lb./MMBTU 30-day rolling average for SSM events. Delaware believed the conditions set forth in the "state only" version was necessary to administer good air quality management.

On October 23, 2023, the EPA issued a final rule (88 FR 72688), disapproving Delaware's SIP revision submission and determined that the revisions failed to fully resolve the deficiencies identified in the 2015 SSM SIP Call.

In response to the EPA's disapproval, the Department is proposing the amendments, herein, to rectify the deficiencies cited in the 2015 SSM SIP Call. The proposed amendments address Section 1.0 ("General Provisions") and Section 2.0 ("Emission Limits") of 7 DE Admin. Code 1104. To ensure compliance with EPA standards, the Department proposes to strike the regulatory language in subsection 1.5 and 2.2. The Amendments aims to remove language that could potentially allow exemptions to SSM events and eliminate the "0.3 lb/MMBTU, maximum 30-day rolling average" emission limit for SSM events, while ensuring that the "0.3 lb/MMBTU, maximum two-hour average" emission limit applies at all times.

The Department has conducted a review of the impact of the proposed Regulation and found that more stringent federal and state regulations, as well as state permit limits, are already applicable to the large majority of sources covered by this regulation. Furthermore, the Department finds that no new controls will be needed, or will additional resources be expended for the sources covered under the Regulation, as these sources already meet or exceed the standards outlined in the Regulation.

The Department published its proposed amendments in the August 1, 2024, *Delaware Register of Regulations*. The virtual public hearing regarding this matter was held on August 27, 2024. There were seven (7) members of the public in attendance at the Department's virtual public hearing. Pursuant to 29 *Del.C.* §10118(a), the Hearing Record ("Record") remained open for receipt of written comment for 15 days following the public hearing. The Record formally closed for comment in this matter on September 11, 2024, with no comments received by the Department.

Thereafter, Hearing Officer Theresa Smith prepared her report dated September 12, 2024 ("Report"), which expressly incorporated into the Record the proposed amendment, attached thereto as Appendix "A." Mrs. Smith's Report set forth the procedural history, summarized and established the record of information ("Record") relied on in the Report and provided findings of fact, reasons, and conclusions that recommend the approval of the proposed amendments pending before the Department.

The Department has the statutory basis and legal authority to act with regard to the formal promulgation of these proposed amendments, pursuant to 7 *Del.C.* §§ 6001(c) & 6010. All notification and noticing requirements concerning this matter were met by the Department and proper notice of the hearing was provided as required by law.

### **Reasons and Conclusions**

Currently pending before the Department are the proposed regulatory amendments to 7 DE Admin. Code 1104 - *Particulate Emissions from Fuel Burning Equipment*. Based on the record developed by the Department's staff in the Division of Air Quality, and established by the Hearing Officer's Report, I find that the proposed regulatory amendments are well-supported and will enable the Department to ensure compliance with the EPA 2015 SSM SIP Call. I also find that under Section 110(k)(5) of the CAA, the EPA will review the proposed amendments and if approved, these amendments will become part of Delaware's SIP for 7 DE Admin. Code 1104 and will be enforceable under Federal law (40 CFR Part 52, Subpart I - Delaware). Lastly, I find that the proposed amendments comply with all applicable federal and state laws and regulations. Further, the proposed amendments as published in the August 1, 2024, *Delaware Register of Regulations*, are reflective of the Department's authority under 7 *Del.C.* §§ 6001(c) & 6010, to ensure continued protection of public health and the environment by regulating emissions and reducing air pollution and air contaminants.

The following reasons and conclusions are hereby entered:

1. The Department has the statutory basis and legal authority to adopt and enforce these proposed regulatory amendments pursuant to 7 *Del.C.* §§ 6001(c) & 6010;
2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.* Chapter 60, to issue an Order adopting these proposed amendments as final;
3. The Department provided adequate public notice of the proposed amendments and all proceedings in a manner required by the law and regulations, and provided the public with an adequate opportunity to comment on the proposed amendments, including at the time of the virtual public hearing held on August 27, 2024, and during the 15 days subsequent to the hearing (through September 11, 2024), before making any final decision;
4. Promulgation of the proposed amendments to 7 DE Admin. Code 1104 - *Particulate Emissions from Fuel Burning Equipment*, will enable the Department to ensure compliance with the EPA 2015 SSM SIP Call;
5. The Department has reviewed the proposed amendments in light of the Regulatory Flexibility Act, consistent with 29 *Del.C.* §104, and believes the same to be lawful, feasible and desirable, that it will not establish reporting requirements or substantive additional costs for individuals or small businesses, and that the recommendations as proposed should be applicable to all Delaware individuals or small businesses equally;

6. The Department has reviewed this proposed regulatory promulgation in the light of 7 *Del.C.* §10003 and 29 *Del.C.* §10118(b)(3), and has determined that any impact of this regulation on the achievement of the State of Delaware's greenhouse gas emissions reduction targets will be de minimis;
7. The Department's Hearing Officer's Report, including its established record and the recommended proposed amendments as set forth in Appendix "A," are hereby adopted to provide additional reasons and findings for this Order;
8. The Department's proposed regulatory amendments, as published in the August 1, 2024, *Delaware Register of Regulations*, as set forth in Appendix "A" hereto, are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, they are approved as final regulatory amendments, which shall go into effect ten days after their publication in the next available issue of the *Delaware Register of Regulations*;
9. The Department has an adequate Record of its decision, and no further public hearing is appropriate or necessary;
10. The Department shall submit this Order approving the proposed amendments as final regulations 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; and
11. The Department shall serve and publish its Order on its internet site.

Shawn M. Garvin  
Secretary

### 1104 Particulate Emissions from Fuel Burning Equipment

01/11/2017

#### 1.0 General Provisions

- 1.1 The emission of particulate matter from fuel burning equipment shall be controlled to a limit that shall meet the ambient air quality requirements.
- 1.2 The provisions of this Regulation shall not apply where the heat input capacity of the equipment is less than 1,000,000 BTU per hour.
- 1.3 The provisions of this regulation shall not apply to equipment or operations whose emissions are controlled by 7 **DE Admin. Code** 1105 or 7 **DE Admin. Code** 1107 or 7 **DE Admin. Code** 1129.
- 1.4 For purposes of this Regulation, the heat input value shall be based upon the manufacturer's guaranteed maximum input or the Department's calculated input capacity.
- 1.5 ~~The provisions of subsection 2.1 of this Regulation shall not apply to the start-up and shutdown of equipment which operates continuously or in an extended steady state when emissions from such equipment during start-up and shutdown are governed by an operation permit issued pursuant to the provisions of Section 2.0 of 7 DE Admin. Code 1102.~~

**17 DE Reg. 536 (11/01/13)**

**20 DE Reg. 556 (01/01/17)**

01/11/2017

#### 2.0 Emission Limits

- 2.1 No person shall cause or allow the emission of particulate matter in excess of 0.3 pound per million BTU heat input, maximum two-hour average, from any fuel burning equipment.
- 2.2 ~~No person shall cause or allow the emission of particulate matter in excess of 0.3 pound per million BTU heat input, maximum 30-day rolling average, from any fuel burning equipment.~~

**12 DE Reg. 347 (09/01/08)**

**17 DE Reg. 536 (11/01/13)**

**20 DE Reg. 556 (01/01/17)**

**28 DE Reg. 581 (02/01/25) (Final)**