

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR QUALITY

Statutory Authority: 7 Delaware Code, Chapter 60, (7 **Del.C.** Ch. 60)

7 **DE Admin. Code** 1105

FINAL

Secretary's Order No.: 2016-A-0047

Date of Issuance: November 21, 2016

Effective Date of the Amendment: January 11, 2017

1105 Particulate Emissions from Industrial Process Operations

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, 6010, the following findings of fact based on the record, reasons and conclusions are entered as an Order of the Secretary in the above-referenced regulatory proceeding.

Background, Procedural History and Findings of Fact

This Order relates to the proposed Revisions to the Delaware State Implementation Plan ("SIP") to address the Start-up, Shutdown, and Malfunction ("SSM") SIP Call of the United States Environmental Protection Agency ("USEPA", "EPA") of June 12, 2015 (see 80 FR 33840). As a result of a petition to EPA by the Sierra Club, the EPA has identified thirty-six (36) states with inadequate SIPs as they relate to SSM activities. EPA has specifically identified seven (7) existing Delaware rules in the SIP Call. The seven Delaware regulations cited by EPA were 7 **DE Admin. Code** 1104, 1105, 1108, 1109, 1114, 1124, and 1142. As a result, Delaware is proposing revisions to four of these regulations, as follows, to wit: 7 **DE Admin. Code** 1104, 1105, 1124 and 1142.

While the three remaining regulations noted above (7 **DE Admin. Code** 1108, 1109, and 1114) are also part of the aforementioned SIP Call, the Department is not proposing revisions to the same at this time. 7 **DE Admin. Code** 1109 and 1114 are at this present time being removed from the SIP. With regard to 7 **DE Admin. Code** 1108, the Department had already removed the offending SSM language when that regulation was last revised in 2013. As such, the Department is formally addressing all three of these remaining regulations, but not proposing any amendments to the same as part of this present action.

It should be noted that the Department received comments prior to the public hearing of October 25, 2016 from both the Sierra Club and the EPA on the aforementioned proposed regulatory Amendments and SIP revisions. As noted within the Department's Technical Response Memorandum ("TRM") prepared in this matter by the Division of Air Quality ("DAQ"), Delaware does not agree that its SIP is deficient. Despite this disagreement, the Department has proposed these Amendments to both its regulations and SIP as referenced above, to avoid the imposition of potential federal Clean Air Act ("CAA") sanctions. Delaware has designed the proposed revisions to (1) remove the Director's discretion provisions from the SIP that EPA believes fail to comply with the CAA, (2) comport with EPA guidance and the regulatory structure the EPA has established in other actions, and (3) maintain the elements removed from the SIP as State-only requirements, because Delaware believes the conditions are necessary to administer good air quality management policy. Further, Delaware believes that, from an environmental perspective, the proposed revisions reflect no change at all, because the proposal retains the disputed provisions as State-enforceable-only provisions. Lastly, Delaware opines that, from EPA's perspective, the removal of the offending provisions from the SIP should be considered as SIP strengthening, thus approvable and non-controversial.

The Department has the statutory basis and legal authority to act with regard to the proposed regulatory Amendments and SIP revisions as referenced above, pursuant to 7 **Del.C.** Chapter 60. The aforementioned proposed Amendments and SIP revisions were initially published in the October 1, 2016 edition of the Delaware *Register of Regulations*, and were presented and thoroughly vetted by the Department at the public hearing held on October 25, 2016. Members of the public attended that hearing, however, no comment was received by the Department at that time. Consistent with 29 **Del.C.** §10118(a), the public hearing record remained open for public comment through November 9, 2016, however, none was received during the post-hearing phase of this promulgation. All proper notification and noticing requirements concerning the aforementioned regulatory Amendments and proposed SIP revisions were met by the Department in this matter.

The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated November 21, 2016 ("Report"). The Report documents the proper completion of the required regulatory amendment process, establishes the record, and recommends the adoption of the proposed regulatory Amendments and SIP revisions as attached to the Report as Appendix "B".

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 proposed Amendments to the following existing Delaware regulations: (1) **7 DE Admin. Code 1104**, "*Particulate Emissions from Fuel Burning Equipment*"; (2) **7 DE Admin. Code 1105**, "*Particulate Emissions from Industrial Process Operations*"; (3) **7 DE Admin. Code 1124**, "*Control of Volatile Organic Compound Emissions*"; (4) **7 DE Admin. Code 1142**, "*Specific Emission Control Requirements*", as well as the proposed revisions to the Delaware SIP, are well-supported. Therefore, the recommendations of the Hearing Officer are hereby adopted, and I direct that the same be promulgated as final.

I find that the Department's experts in the Division of Air Quality fully developed the record to support adoption of both the aforementioned regulatory Amendments and SIP revisions. The promulgation of the regulatory Amendments and proposed SIP revisions referenced above will enable the Department to (1) remove the Director's discretion provisions from the SIP that EPA believes fail to comply with the CAA; (2) comport with EPA guidance and the regulatory structure the EPA has established in other actions; (3) maintain the elements removed from the SIP as State-only requirements because Delaware believes the conditions are necessary to administer good air quality management policy, as referenced above; and (4) avoid the imposition of CAA sanctions.

In conclusion, the following reasons and conclusions are entered:

1. The Department has the statutory basis and legal authority to act with regard to the proposed amendments to **7 DE Admin. Code 1104**, "*Particulate Emissions from Fuel Burning Equipment*"; **7 DE Admin. Code 1105**, "*Particulate Emissions from Industrial Process Operations*"; **7 DE Admin. Code §1124**, "*Control of Volatile Organic Compound Emissions*"; and **7 DE Admin. Code 1142**, "*Specific Emission Control Requirements*", as well as the proposed revisions to the Delaware SIP, 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 these proposed regulatory amendments and SIP revisions as final;

3. The Department provided adequate public notice of the proposed regulatory amendments and SIP revisions, and all proceedings in a manner required by the law and regulations, provided the public with an adequate opportunity to comment on the proposed regulatory amendments and SIP revisions, including at the time of the public hearing held on October 25, 2016, and held the record open through close of business on November 9, 2016, consistent with **29 Del.C. §10118(a)**, in order to consider public comment on these proposed regulatory amendments before making any final decision;

4. The Department's Hearing Officer's Report, including its established record and the aforementioned recommended regulatory Amendments and proposed SIP revisions as set forth in Appendix "B", are hereby adopted to provide additional reasons and findings for this Order;

5. Promulgation of the aforementioned regulatory Amendments and proposed SIP revisions will enable the Department to (1) remove the Director's discretion provisions from the SIP that EPA believes fail to comply with the CAA; (2) comport with EPA guidance and the regulatory structure the EPA has established in other actions; (3) maintain the elements removed from the SIP as State-only requirements because Delaware believes the conditions are necessary to administer good air quality management policy, as referenced above; and (4) avoid the imposition of CAA sanctions;

6. The Department has reviewed these proposed regulatory amendments in the light of the Regulatory Flexibility Act, consistent with **29 Del.C. Ch. 104** (version applicable to all regulations initially published on or after January 1, 2016), and has selected Exemption "B5" regarding same, as the proposed regulation Amendments are required by federal law. Moreover, the Department believes these proposed regulatory Amendments to be lawful, feasible and desirable, and that the recommendations as proposed should be applicable to all Delaware citizens equally;

7. The Department's proposed SIP revision, as published in the October 1, 2016 Delaware *Register of Regulations*, and as set forth in Appendix "B" as noted above, is adequately supported, is not arbitrary or capricious, and is consistent with the applicable laws and regulations. Consequently, they are approved as final regulatory amendments, which shall go into effect ten days after its publication in the next available issue of the Delaware *Register of Regulations*; and

8. The Department shall submit this Order approving as final regulatory amendments to **7 DE Admin. Code 1104**, "*Particulate Emissions from Fuel Burning Equipment*"; **7 DE Admin. Code 1105**, "*Particulate Emissions from Industrial Process Operations*"; **7 DE Admin. Code 1124**, "*Control of Volatile Organic Compound Emissions*"; and **7 DE Admin. Code 1142**, "*Specific Emission Control Requirements*", as well as the proposed revisions to the Delaware SIP, 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.

David S. Small, Secretary

1105 Particulate Emissions from Industrial Process Operations

1.0 General Provisions

- 1.1 The emission of particulate matter from industrial process 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 to indirect heat exchangers which shall be controlled by 7 DE Admin. Code 1104.
- 1.3 For all tables in this Regulation, unless otherwise indicated, the emission limitation for a process weight rate between any two consecutive process weight rates shall be determined by linear interpolation.
- 1.4 For all tables in this Regulation, unless otherwise indicated, the emission limitation for process weight rate above the maximum process weight rate or below the minimum process weight rate shall be determined by linear extrapolation.
- 1.5 For purposes of this Regulation, the allowable mass emission rate of particulate matter shall be determined for individual units of equipment.
- 1.6 For operations involving similar units which are manifolded to a common stack, control techniques shall be such that no unit is emitting particulate matter at a rate which is in excess of the mass emission rate allowed by this Regulation.
- 1.7 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.

02/01/1981 [~~xx/11/2016~~ 01/11/2017]

2.0 General Restrictions

- 2.1 No person shall cause or allow particulate emissions into the atmosphere from any source not provided for in subsequent sections of this Regulation in excess of 0.2 grains per standard cubic foot.
- 2.2 No person shall cause or allow particulate emissions into the atmosphere from any source not provided for in subsequent sections of this Regulation in excess of 0.2 grains per standard cubic foot on a 30-day rolling average basis.

02/01/81

3.0 Restrictions on Hot Mix Asphalt Batching Operations

- 3.1 No person shall cause or allow particulate emissions from a hot mix asphalt batching plant into the atmosphere in excess of the quantity as listed in Table 3-1 of this regulation.

Table 3-1
Allowable Mass Emission Rate From Hot Mix Asphalt Batching Operation

Process Weight Rate (Pounds Per Hour)	Stack Emission Rate (Pounds Per Hour)
10,000	10
20,000	16
30,000	22
40,000	28
50,000	31
100,000	33
200,000	37
300,000	40
400,000	43
500,000	47
600,000	50

02/01/1981 [~~xx/11/2016~~ 01/11/2017]

4.0 Restrictions on Secondary Metal Operations

- 4.1 No person shall cause or allow particulate emissions from secondary metal operations into the atmosphere in excess of the quantity as listed in Table 4-1 of this regulation.

Table 4-1

Allowable Mass Emission Rate From Secondary Metal Operations

Process Weight Rate (Pounds per Hour)	Stack Emission Rate (Pounds per Hour)
1,000	0.75
2,000	1.50
3,000	2.25
4,000	3.00
5,000	3.75
6,000	4.50
7,000	5.25
8,000	6.00
9,000	6.75
10,000	7.50
12,000	9.00
16,000	12.00
18,000	13.50
20,000	15.00
30,000	22.50
40,000	30.00
50,000	37.50

4.2 The provisions of subsection 4.1 of this regulation shall not apply to electric arc furnaces, and their associated dust-handling equipment, with a capacity of more than 100 tons.

02/01/1981 [~~xx/11/2016~~ 01/11/2017]

5.0 Restrictions on Petroleum Refining Operations

5.1 No person shall cause or allow particulate emissions from catalytic cracking operations into the atmosphere in excess of the quantities as indicated in Table 5-1 of this regulation.

Table 5-1

Allowable Mass Emission Rate From Catalytic Cracking Operations

Coke Burn-Off Rate (Pounds per Hour)	Mass Emission Rate (Pounds per Hour)
7,000	50
14,000	100
21,000	150
28,000	200
42,000	300
56,000	400
70,000	500

For the purpose of interpolation and extrapolation calculations, "Coke Burn-Off Rate" shall be construed to be equivalent to "Process Weight Rate."

- 5.2 No person shall cause or allow particulate emissions from fluid coking operations into the atmosphere in excess of the quantities as indicated in Table 5-2 of this regulation.

Table 5-2
Allowable Mass Emission Rate From Fluid Coking Operations

Process Weight Rate (Barrels per Day of Fresh Feed)	Mass Emission Rate (Pounds per Hour)
5,000	15
10,000	30
15,000	50
20,000	80
30,000	100
40,000	125
50,000	150

02/01/1981

6.0 Restrictions on Prill Tower Operation

- 6.1 No person shall cause or allow particulate emissions from prilling operations into the atmosphere in excess of the quantities as indicated in Table 6-1 of this regulation.

Table 6-1
Allowable Mass Emissions Rate From Prilling Operations

Process Weight Rate (Pounds per Hour)	Mass Emission Rate (Pounds per Hour)
5,000	25
10,000	50
15,000	75
20,000	100
25,000	125
50,000	250
75,000	375
100,000	500

02/01/1981

7.0 Control of Potentially Hazardous Particulate Matter

Persons responsible for a source operation from which potentially hazardous particulate matter may be emitted such as, but not limited to, lead, arsenic, beryllium, silica, asbestos, and other such materials shall list such contaminants and their exit concentrations in a written report to the Department. The Department shall assign emission limits on an individual basis.

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

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