

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF AIR QUALITY

Statutory Authority: 7 Delaware Code, Section 6010(a) and (c) (7 **Del.C.** §6010(a) & (c))
7 **DE Admin. Code** 1105

PROPOSED

PUBLIC NOTICE

SAN # 2023-13
DOCKET # 2023-R-A-0025

1105 Particulate Emissions from Industrial Process Operations

1. TITLE OF THE REGULATIONS:

7 **DE Admin. Code** 1105 "Particulate Emissions from Industrial Process Operations".

2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:

The Division of Air Quality of the Department of Natural Resources and Environmental Control (DNREC) is proposing to amend 7 **DE Admin. Code** 1105, Sections 1.0 "General Provisions" and Section 2.0 "General Restrictions", regarding limits to particulate emissions from industrial process during the startup, shutdown and malfunction of equipment.

On June 12, 2015 the Environmental Protection Agency (EPA) identified the State Implementation Plans (SIP) of 36 states as inadequate because they allegedly allowed unregulated excess emissions (80 FR 33840). This EPA action is known as the "Startup, Shutdown, and Malfunction (SSM) SIP Call". 7 **DE Admin. Code** 1105 "Particulate Emissions from Industrial Process Operations" was cited in the SSM SIP Call because the EPA believed the regulation did not appropriately restrict emissions during startup or shutdown events. On October 23, 2023 EPA issued a final rule disapproving Delaware's November 26, 2016 SSM SIP Call submittal for Regulation 1105 (88 FR 72688). Delaware is proposing to amend Regulation 1105 in response to EPA's disapproval, to comply with the 2015 SSM SIP Call.

3. POSSIBLE TERMS OF THE AGENCY ACTION:

None.

4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:

7 **Del.C.** Ch. 60, Section 6010 (a) and (c).

5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:

None.

6. NOTICE OF PUBLIC COMMENT:

A virtual public hearing (Docket # 2023-R-A-0025) will be held on Tuesday, August 27, 2024, beginning at 6 p.m. The web link to the virtual hearing can be accessed through the DNREC Public Hearings site at <https://de.gov/dnrechearings>. If prompted for a password, please use: 478566. To access the audio-only portion of the virtual hearing, dial 1-646-931-3860 and enter the Meeting ID 837 6527 6725. Closed captioning in over 20 languages, including English and Spanish, is available to attendees via the Zoom platform utilized for all DNREC Public Hearings.

Those wishing to offer verbal comments during DNREC virtual public hearings must pre-register no later than noon on the date of the virtual hearing at <https://de.gov/dnrecomments> or by telephone at 302-739-9001.

The proposed amendments may be inspected online starting August 1, 2024 at http://regulations.delaware.gov/services/current_issue.shtml, or in-person, by appointment only, by contacting Kelsey Pangman by phone at 302-323-4542 or by email at Kelsey.Pangman@delaware.gov.

The Department will accept public comment through the close of business on Wednesday, September 11, 2024. Comments will be accepted in written form via email to DNRECHearingComments@delaware.gov, or by using the online form at <https://de.gov/dnrecomments>, or by U.S. mail to the following address:

Theresa Smith, Hearing Officer
DNREC - Office of the Secretary

7. PREPARED BY:

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1105 Particulate Emissions from Industrial Process Operations

01/11/2017

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.~~

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

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.~~

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

02/04/84

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)
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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

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.

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

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. For the purpose of interpolation and extrapolation

calculations. "Coke Burn-Off Rate" shall be construed to be equivalent to "Process Weight Rate."

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

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

~~02/01/1984~~

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)

28 DE Reg. 95 (08/01/24) (Prop.)