# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

# **DIVISION OF AIR AND WASTE MANAGEMENT**

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

## **FINAL**

#### 1105 Particulate Emissions From Industrial Process Operations

#### Regulation No. 5 1105 Particulate Emissions From Industrial Process Operations

02/01/1981

Section 1 -

#### 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 Regulation No. 4 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 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, Regulation No. 2 2.0 of 7 DE Admin. Code 1102.

02/01/1981

Section 2 -

#### 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.

02/01/1981

Section 3 -

#### 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 4 3-1 of this regulation.

TABLE 4 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

### Section 4

# 4.0 Restrictions on Secondary Metal Operations

4. No person shall cause or allow particulate emissions from secondary metal operations into the atmosphere in excess of the quantity as listed in Table 2 4-1 of this regulation.

# TABLE 2 <u>4-1</u> ALLOWABLE MASS EMISSION RATE FROM SECONDARY METAL OPERATIONS

Process Weight Rate	Stack Emission Rate
(Pounds per Hour)	(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 Section 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

#### Section 5 -

# **<u>5.0</u>** 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 3 5-1 of this regulation.

TABLE 3 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."

No person shall cause or allow particulate emissions from fluid coking operations into the atmosphere in excess of the quantities as indicated in Table 4 <u>5-2 of this regulation</u>.

TABLE 4 <u>5-2</u>
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

Section 6

### 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 5 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

Section 7—

#### **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) (Final)