Chapter 123 -- Standards for Contaminants

PARTICULATE MATTER EMISSIONS

§123.11. Combustion units.

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

(2) The rate determined by the following formula:

$A = 3.6E^{-0.56}$, where:
A = Allowable emissions in pounds per million B.t.u. of heat input, and
E = Heat input to the combustion unit in millions of B.t.u.'s per hour, when E is equal to or greater than 50 but less than 600.

(3) The rate of 0.1 pounds per million Btu of heat input when the heat input to the combustion unit in millions of Btus per hour is equal to or greater than 600.

(b) Allowable emissions under subsection (a) are graphically indicated in Appendix A.

§123.12. Incinerators.

No person may permit the emission to the outdoor atmosphere of particulate matter from any incinerator, at any time, in such a manner that the particulate matter concentration in the effluent gas exceeds 0.1 grain per dry standard cubic foot, corrected to 12% carbon dioxide.

§123.13. Processes.

(a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

(b) No person may permit the emission into the outdoor atmosphere of particulate matter from any process listed in the following table, at any time, either in excess of the rate calculated by the formula in paragraph (2) or in such a manner that the concentration of particulate matter in the effluent gas exceeds .02 grains per dry standard cubic foot, whichever is greater:

(1) Table.

Process	Process Factor, F (in pounds per ton)
Byproduct coke production: pushing operation	1 (coke pushed)
Sole heated nonrecovery coke oven	20 (coal charged/oven)
Carbon black manufacturing	500 (product)
Charcoal manufacturing	400 (product)
Paint manufacturing	.05 (pigment handled)
Phosphoric acid manufacturing	6 (P_2O_{13} produced)
Detergent drying	30 (product)
Grain elevators (loading or unloading)	[not in SIP]
Grain screening and cleaning	[not in SIP]
Grain drying	[not in SIP]
Ammonium nitrate manufacturing (granulator)	.1 (product)
Ferroalloy production furnace	.3 (product)
Primary iron and/or steel making:	
Iron production	100 (product)
Sintering --windbox	20 (dry solids feed)
Steel production	40 (product)
Scarfing	20 (product)
Primary lead production:	
Roasting	.004 (ore feed)
Sintering --windbox	.2 (sinter)
Lead reduction	.5 (product)
Primary zinc production	
Roasting	3 (ore feed)
Sintering --windbox	2 (product)
Zinc reduction	10 (product)
Secondary aluminum production:	
Sweating	50 (aluminum product)
Melting and refining	10 (aluminum feed)
Brass and bronze production (melting and refining)	20 (product)
Iron foundry:	
Melting	
Five tons per hour and less	150 (iron)
More than five tons per hour	50 (iron)
Sand handling	20 (sand)
Shake-out	20 (sand)
Secondary lead smelting	.5 (product)
Secondary magnesium smelting	.2 (product)

Process	Process Factor, F (in pounds per ton)
Secondary zinc smelting:	

Sweating	.01 (product)
Refining	.3 (product)
Asphaltic concrete production	6 (aggregate feed)
Asphalt roofing manufacturing: (felt saturation)	.6 (asphalt used)
Portland cement manufacturing:	
Clinker production	150 dry solids feed)
Clinker cooling	50 (product)
Coal dry-cleaning	2 (product)
Lime calcining	200 (product)
Petroleum refining (catalytic cracking)	40 (liquid feed)
Pressed, blown, and spun glass; glass production melting furnaces	50 (Fill)

(2) Formula

$A = 9.76E^{0.42}$, where:

A = Allowable emissions in pounds per hour.

E = Emission index = F x W pounds per hour.

F = Process factor in pounds per unit, and

W = Production or charging rate in units per hour.

The factor F shall be obtained from the table in paragraph (1). The units for F and W shall be compatible.

(3) Allowable emissions. Allowable emissions under this subsection are graphically indicated in Appendix B.

(c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

(ii) The rate determined by the formula:

$A = 6000E^{-1}$, where:
where:

A = Allowable emissions in grains per dry standard cubic foot, and

E = Effluent gas volume in dry standard cunbic feet per minute, when E is equal to or greater than 150,000 but less than 300,000.

(iii) .02 grain per dry standard cubic foot, when the effluent gas volume is greater than 300,000 dry standard cubic feet per minute.

(2) Allowable emissions. Allowable emissions under this subsection are graphically indicated in Appendix C.

(d) [Not in SIP]