

ARTICLE 6. PARTICULATE RULES

Rule 1. County Specific Particulate Matter Limitations

326 IAC 6-1-1 Applicability (Repealed)

Sec. 1. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-1.5 Definitions (Repealed)

Sec. 1.5. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-2 Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations; modification by commissioner (Repealed)

Sec. 2. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-3 Nonattainment area particulate limitations; compliance determination (Repealed)

Sec. 3. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-4 Compliance schedules (Repealed)

Sec. 4. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-5 Control strategies (Repealed)

Sec. 5. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-6 State implementation plan revisions (Repealed)

Sec. 6. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-7 Scope (Repealed)

Sec. 7. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-8 Dearborn County (Repealed)

Sec. 8. *(Repealed by Air Pollution Control Board; filed Jan 30, 1989, 5:00 p.m.: 12 IR 1382)*

326 IAC 6-1-8.1 Dearborn County particulate matter emission limitations (Repealed)

Sec. 8.1. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-9 Dubois County (Repealed)

Sec. 9. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-10 Lake County TSP point source strategy (Repealed)

Sec. 10. *(Repealed by Air Pollution Control Board; filed May 12, 1993, 11:30 a.m.: 16 IR 2401)*

326 IAC 6-1-10.1 Lake County PM₁₀ emission requirements (Repealed)

Sec. 10.1. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-10.2 Lake County PM₁₀ coke battery emission requirements (Repealed)

Sec. 10.2. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-11 Lake County fugitive dust limits (Repealed)

Sec. 11. *(Repealed by Air Pollution Control Board; filed May 12, 1993, 11:30 a.m.: 16 IR 2401)*

326 IAC 6-1-11.1 Lake County fugitive particulate matter control requirements (Repealed)

Sec. 11.1. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-11.2 Lake County particulate matter contingency measures (Repealed)

Sec. 11.2. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-12 Marion County (Repealed)

Sec. 12. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-13 Vigo County (Repealed)

Sec. 13. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-14 Wayne County (Repealed)

Sec. 14. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-15 Howard County (Repealed)

Sec. 15. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-16 Vanderburgh County (Repealed)

Sec. 16. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-17 Clark County (Repealed)

Sec. 17. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

326 IAC 6-1-18 St. Joseph County (Repealed)

Sec. 18. *(Repealed by Air Pollution Control Board; filed Aug 10, 2005, 1:00 p.m.: 28 IR 3550)*

Rule 2. Particulate Emission Limitations for Sources of Indirect Heating

326 IAC 6-2-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule establishes limitations for sources of indirect heating.

(b) Particulate emissions from the combustion of fuel for indirect heating from all facilities located in Lake, Porter, Marion, Boone, Hamilton, Hendricks, Johnson, Morgan, Shelby, and Hancock Counties, which were existing and in operation or which received permit to construct prior to September 21, 1983, shall be limited by section 2 of this rule.

(c) Particulate emissions from the combustion of fuel for indirect heating from all facilities not specified in subsection (b), which were existing and in operation or which received permits to construct prior to September 21, 1983, shall be limited by section 3 of this rule.

(d) Particulate emissions from the combustion of fuel for indirect heating from all facilities receiving permits to construct on or after September 21, 1983, shall be limited by section 4 of this rule.

(e) If any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6.5 and 326 IAC 6.8, then the limitations contained in 326 IAC 6.5 and 326 IAC 6.8 prevail.

(f) If any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 12 concerning new source performance standards, then the limitations contained in 326 IAC 12 prevail.

(g) If any limitation established by this rule is inconsistent with a limitation contained in a facility's construction or operation permit as issued pursuant to 326 IAC 2 concerning permit review regulations, then the limitations contained in the source's current permits prevail.

(h) If any limitation established by this rule is inconsistent with a limitation required by 326 IAC 2 concerning permit review regulations, to prevent a violation of the ambient air quality standards set forth in 326 IAC 1-4, then the limitations required by 326 IAC 2 prevail.

(i) The addition of a new facility at a source does not affect the limitations of the existing facilities unless such changes in the limitations are required by the provisions of 326 IAC 2, 326 IAC 6.5, or 326 IAC 6.8. (*Air Pollution Control Board; 326 IAC 6-2-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2493; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2366; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Dec 20, 2001, 4:30 p.m.: 25 IR 1598; errata filed Oct 19, 2005, 4:28 p.m.: 29 IR 819*)

326 IAC 6-2-2 Emission limitations for facilities specified in 326 IAC 6-2-1(b)

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 2. (a) Particulate emissions from existing indirect heating facilities located in the specified counties shall be limited by the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

For Q less than 10 mmBtu/hr, Pt shall not exceed 0.6. For Q greater than or equal to 10,000 mmBtu/hr, Pt shall not exceed 0.2. Figure 1 may be used to estimate allowable emissions.

(b) The emission limitations for those indirect heating facilities which were existing and in operation on or before June 8, 1972, shall be calculated using the equation contained in subsection (a) of this section where: Q shall reflect the total source capacity on June 8, 1972. The resulting Pt is the emission limitation for each facility existing on that date and will not be affected by the addition of any subsequent facility. The particulate emissions from all of the facilities which were in existence on June 8, 1972, may be allocated in any way among these facilities provided that they will not result in a significantly greater air quality impact level at any

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receptor than that which would result if the particulate emissions from each of these facilities were limited to Pt; and provided that the emission limitations for each facility are specified in its operation permit. Significant impact levels are defined in 326 IAC 2-3-2(f).

(c) The emission limitations for those indirect heating facilities which began operation after June 8, 1972, and before September 21, 1983, and those facilities which receive permits to construct prior September 21, 1983 shall be calculated using the equation contained in subsection (a) of this section where: Q includes the capacity for the facility in question and the capacities for those facilities which were previously constructed or received prior permits to construct. The limitations for all previously permitted facilities do not change. The Q and Pt for each facility at a source which begins operation or receives a construction permit during this time period will be different. (*Air Pollution Control Board; 326 IAC 6-2-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2494; errata filed Feb 9, 1999, 4:05 p.m.: 22 IR 2006; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Nov 21, 2006, 12:14 p.m.: 20061206-IR-326060557ACA*)

326 IAC 6-2-3 Emission limitations for facilities specified in 326 IAC 6-2-1(c)

Authority: IC 13-14-8; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 3. (a) Particulate emissions from indirect heating facilities existing and in operation before September 21, 1983, shall be limited by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where: C = Maximum ground level concentration with respect to distance from the point source at the “critical” wind speed for level terrain. This shall equal 50 micrograms per cubic meter (μ/m^3) for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/mmBtu).

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 mmBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 mmBtu/hr heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height to represent “N” stacks shall be calculated by weighing each stack height with its particulate matter emission rate as follows:

$$h = \frac{\sum_{i=1}^N H_i \times pa_i \times Q}{\sum_{i=1}^N pa_i \times Q}$$

Where: pa = the actual controlled emission rate in lb/mmBtu using the emission factor from AP-42 or stack test data. Stacks constructed after January 1, 1971, shall be credited with GEP stack height only. GEP stack height shall be calculated as specified in 326 IAC 1-7.

(b) The emission limitations for those indirect heating facilities which were existing and in operation on or before June 8, 1972, shall be calculated using the equation contained in subsection (a) of this section where: Q, N, and h shall include the parameters for all facilities in operation on June 8, 1972. The resulting Pt is the emission limitation for each facility existing on that date and will

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not be affected by the addition of any subsequent facility. The particulate emissions from all of the facilities which were in existence on June 8, 1972, may be allocated in any way among these facilities provided that they will not result in a significantly greater air quality impact level at any receptor than that which would result if the particulate emissions from each of these facilities were limited to Pt; and provided that the emission limitations for each facility are specified in its operation permit. Significant impact levels are defined in 326 IAC 2-3-2(d).

(c) The emission limitations for those indirect heating facilities which began operation after June 8, 1972, and before September 21, 1983, and those facilities which receive permits to construct prior to September 21, 1983, shall be calculated using the equation contained in subsection (a) of this section where: Q, N, and h shall include the parameters for the facility in question and for those facilities which were previously constructed or received prior permits to construct. The limitations for all previously permitted facilities do not change. The Q, N, h, and Pt for each facility at a source which begins operation or receives a construction permit during this time period will be different.

(d) Particulate emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 lb/mmBtu heat input.

(e) Particulate emissions from any facility used for indirect heating purposes which has 250 mmBtu/hr heat input or less and which began operation after June 8, 1972, shall in no case exceed 0.6 lb/mmBtu heat input. (*Air Pollution Control Board; 326 IAC 6-2-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2494; errata filed Feb 9, 1999, 4:05 p.m.: 22 IR 2006; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567*)

326 IAC 6-2-4 Emission limitations for facilities specified in 326 IAC 6-2-1(d)

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1; IC 13-7-10; IC 13-7-11

Sec. 4. (a) Particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

For Q less than 10 mmBtu/hr, Pt shall not exceed 0.6. For Q greater than or equal to 10,000 mmBtu/hr, Pt shall not exceed 0.1. Figure 2 may be used to estimate allowable emissions.

(b) As each new indirect heating facility is added to a plant Q will increase. As a result, the emission limitation for each progressively newer facility will be more stringent until the total plant capacity reaches 10,000 mmBtu/hr after which the emission limit for each newer facility will be 0.1 lb/mmBtu heat input. The rated capacities for facilities regulated by 326 IAC 12, New Source Performance Standards, shall be included when calculating Q for subsequent facilities.

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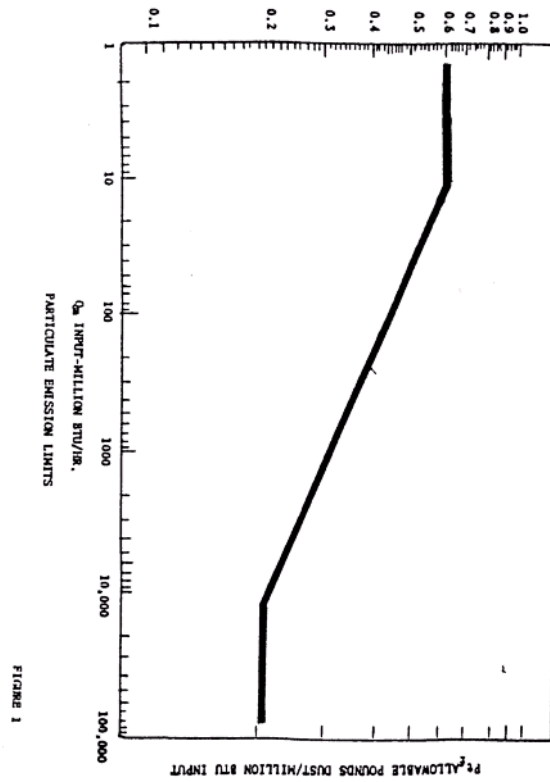
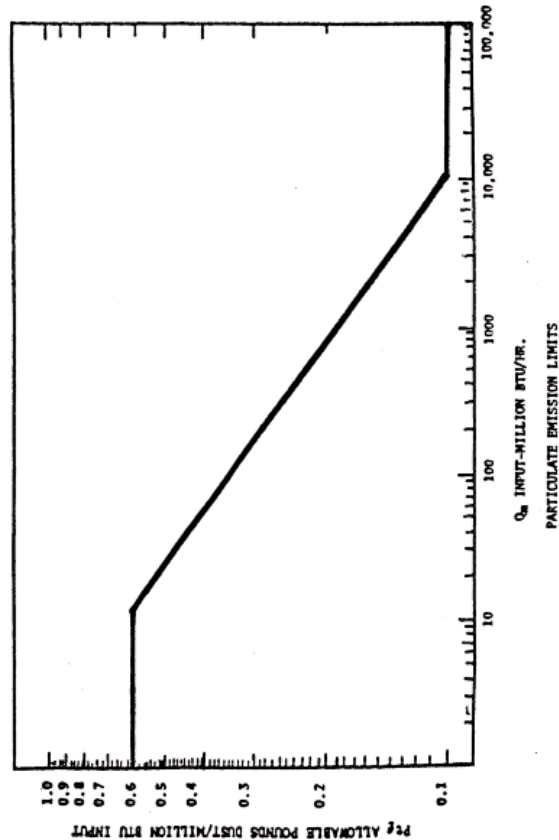


FIGURE 1

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(Air Pollution Control Board; 326 IAC 6-2-4; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2495; errata filed Feb 9, 1999, 4:05 p.m.: 22 IR 2006; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

Rule 3. Particulate Emission Limitations for Manufacturing Processes

326 IAC 6-3-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule establishes emission limitations for particulate emissions from manufacturing processes located anywhere in the state.

(b) The following manufacturing processes are exempt from this rule:

- (1) Combustion for indirect heating.
- (2) Incineration.
- (3) Open burning.
- (4) Existing foundry cupolas' manufacturing processes that are subject to the requirements of 326 IAC 11-1.
- (5) Surface coating using dip coating.
- (6) Surface coating using roll coating.
- (7) Surface coating using flow coating.
- (8) Surface coating using brush coating.
- (9) Welding, provided that less than six hundred twenty-five (625) pounds of rod or wire is consumed per day.
- (10) Torch cutting, provided that less than three thousand four hundred (3,400) inches per hour of stock one (1) inch thickness or less is cut.

- (11) Noncontact cooling tower systems.
- (12) Applications of aerosol coating products to repair minor surface damage and imperfections.
- (13) Trivial activities as defined at 326 IAC 2-7-1(40).
- (14) Manufacturing processes with potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour.
- (15) Surface coating manufacturing processes, not otherwise exempt in subdivisions (5) through (8), that use less than five (5) gallons per day.
- (c) This rule shall not apply if a particulate matter limitation established in:
 - (1) 326 IAC 2-2-3, concerning prevention of significant deterioration (PSD) best available control technology (BACT) determinations contained in a permit;
 - (2) 326 IAC 2-3-3, concerning lowest achievable emission rate (LAER) determinations contained in a permit;
 - (3) 326 IAC 6.5 and 326 IAC 6.8, concerning particulate matter emissions;
 - (4) 326 IAC 11, concerning existing emission limitations for specific operations;
 - (5) 326 IAC 12, concerning new source performance standards; or
 - (6) 326 IAC 20, concerning national emission standards for hazardous air pollutants;

is more stringent than the particulate limitation established in this rule. (*Air Pollution Control Board; 326 IAC 6-3-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2499; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2367; filed May 13, 2002, 11:30 a.m.: 25 IR 3051; errata filed Oct 19, 2005, 4:28 p.m.: 29 IR 819*)

326 IAC 6-3-1.5 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 1.5. For purposes of this rule, the following definitions shall govern if there is a conflict between this rule and 326 IAC 1-2:

- (1) "Aerosol coating products" means a mixture of resins, pigments, liquid solvents, and gaseous propellants packaged in a disposable can for hand-held application.
- (2) "Manufacturing process" means any single or series of actions, operations, or treatments in which a mechanical, physical, or chemical transformation of material occurs that emits, or has the potential to emit, particulate in the production of the product. The term includes transference, conveyance, or repair of a product.
- (3) "Particulate" means any finely divided solid or liquid material, other than uncombined water.
- (4) "Particulate matter" has the meaning defined in 40 CFR 60.2*.
- (5) "Surface coating" means the application of a solvent or waterbased coating to a surface that imparts protective, functional, or decorative films in which the application emits, or has the potential to emit, particulate. "Surface coating" does not include galvanizing.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. (*Air Pollution Control Board; 326 IAC 6-3-1.5; filed May 13, 2002, 11:30 a.m.: 25 IR 3052*)

326 IAC 6-3-2 Particulate emission limitations, work practices, and control technologies

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 2. (a) Any manufacturing process listed in subsections (b) through (d) shall follow the work practices and control technologies contained therein. All other manufacturing processes subject to this rule shall calculate emission limitations according to requirements in subsection (e).

(b) Cement manufacturing kilns commencing operation prior to December 6, 1968, shall not cause, allow, or permit any discharge to the atmosphere any gases containing particulate in excess of the following:

- (1) $E = 8.6 P^{0.67}$, equal to or below thirty (30) tons per hour of process weight.
- (2) $E = 15.0 P^{0.50}$, over thirty (30) tons per hour of process weight.

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Where: E = Emission rate in pounds per hour.

P = Process weight rate in tons per hour.

(c) Catalytic cracking units commencing operation prior to December 6, 1968, and equipped with cyclone separators, electrostatic precipitators, or other gas-cleaning systems shall recover ninety-nine and ninety-seven hundredths percent (99.97%) or more of the circulating catalyst or total gas-borne particulate.

(d) Surface coating, reinforced plastics composites fabricating manufacturing processes, and graphic arts manufacturing processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

(1) The source shall operate the control device in accordance with manufacturer's specifications.

(2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

(3) Sources that operate according to a valid permit pursuant to any of:

(A) 326 IAC 2-7;

(B) 326 IAC 2-8; or

(C) 326 IAC 2-9;

are exempt from subdivision (2).

(4) Surface coating manufacturing processes that use less than five (5) gallons of coating per day are exempted as defined in section 1(b)(15) of this rule. At any time the coating application rate increases to greater than five (5) gallons per day, control devices must be in place. A manufacturing process that is subject to this subsection shall remain subject to it notwithstanding any subsequent decrease in gallons of coating used.

(e) Manufacturing processes to which control methods in subsections (b) through (d) do not apply shall calculate allowable emissions as follows:

(1) No person shall operate any manufacturing process so as to produce, cause, suffer, or allow particulate to be emitted in excess of the amount shown in the table in this subsection. The allowable rate of emission shall be based on the process weight rate for a manufacturing process.

(2) When the process weight rate is less than one hundred (100) pounds per hour, the allowable rate of emission is five hundred fifty-one thousandths (0.551) pound per hour.

(3) When the process weight rate exceeds two hundred (200) tons per hour, the allowable emission may exceed that shown in the following table, provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

Allowable Rate of Emission Based on Process Weight Rate¹

Process Weight Rate			Process Weight Rate		
Pounds Per Hour	Tons Per Hour	Rate of Emission Pounds Per Hour	Pounds Per Hour	Tons Per Hour	Rate of Emission Pounds Per Hour
100	0.05	0.551	16,000	8.00	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.39	20,000	10.00	19.2
600	0.30	1.83	30,000	15.00	25.2
800	0.40	2.22	40,000	20.00	30.5
1,000	0.50	2.58	50,000	25.00	35.4
1,500	0.75	3.38	60,000	30.00	40.0
2,000	1.00	4.10	70,000	35.00	41.3
2,500	1.25	4.76	80,000	40.00	42.5
3,000	1.50	5.38	90,000	45.00	43.6
3,500	1.75	5.97	100,000	50.00	44.6
4,000	2.00	6.52	120,000	60.00	46.3

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5,000	2.50	7.58	140,000	70.00	47.8
6,000	3.00	8.56	160,000	80.00	49.1
7,000	3.50	9.49	200,000	100.00	51.3
8,000	4.00	10.4	1,000,000	500.00	69.0
9,000	4.50	11.2	2,000,000	1,000.00	77.6
10,000	5.00	12.0	6,000,000	3,000.00	92.7
12,000	6.00	13.6			

*¹Interpolation of the data in this table for process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

and interpolation and extrapolation of the data for process weight rates in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

Where: E = Rate of emission in pounds per hour.

P = Process weight rate in tons per hour.

(Air Pollution Control Board; 326 IAC 6-3-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2499; filed May 13, 2002, 11:30 a.m.: 25 IR 3052)

Rule 4. Fugitive Dust Emissions

326 IAC 6-4-1 Applicability of rule

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 1. This rule (326 IAC 6-4) shall apply to all sources of fugitive dust. For the purposes of this rule (326 IAC 6-4), “fugitive dust” means the generation of particulate matter to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located. (Air Pollution Control Board; 326 IAC 6-4-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2499; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1605)

326 IAC 6-4-2 Emission limitations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 2. A source or sources generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100 (R - U)}{U}$$

P = Percentage increase

R = Number of particles of fugitive dust measured at downward receptor site

U = Number of particles of fugitive dust measured at upwind or background site

(2) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$P_R = (1.5 \pm N) P$$

Where N = Fraction of fugitive dust that is respirable dust;

P_R = allowable percentage increase in dust concentration above background; and

P = no value greater than sixty-seven percent (67%).

(3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section.

(Air Pollution Control Board; 326 IAC 6-4-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2500; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1605)

326 IAC 6-4-3 Multiple sources of fugitive dust

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 3. (a) The allowable particles shall refer to the total of all particles leaving the boundaries or crossing the property lines of any source of fugitive dust regardless of whether from a single operation or a number of operations. If the source is determined to be comprised of two (2) or more legally separate persons, each shall be held proportionately responsible on the basis of contributions by each person as determined by microscopic analysis. In such cases, samples shall be taken downwind from the combination of sources and at the fence line of each source.

(b) No source which is contributing to a combined downwind fugitive dust concentration in excess of the limits of this rule (326 IAC 6-4) shall be required to reduce emissions if the concentrations at his property line are in compliance, unless all contributors are individually in compliance and a combined fugitive dust concentration still exceeds the limits of this rule (326 IAC 6-4). Each source shall then be required to reduce its emissions by like percentages to achieve an acceptable combined downwind concentration.

(c) When all contributors are individually in compliance and no nuisance to the surrounding community is created, the commissioner may waive the requirement for further reduction in emissions by combined contributors. *(Air Pollution Control Board; 326 IAC 6-4-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2500; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1605)*

326 IAC 6-4-4 Motor vehicle fugitive dust sources

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 4. No vehicle shall be driven or moved on any public street, road, alley, highway, or other thoroughfare, unless such vehicle is so constructed as to prevent its contents from dripping, sifting, leaking, or otherwise escaping therefrom so as to create conditions which result in fugitive dust. This section applies only to the cargo any vehicle may be conveying and mud tracked by the vehicle. *(Air Pollution Control Board; 326 IAC 6-4-4; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2500; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1606)*

326 IAC 6-4-5 Measurement processes

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 5. (a) Particle quantities and sizes will be measured by manual microscopic analysis of a dustfall sample collected on a sticky slide, or by use of commercially available particle counting devices which count and classify particles by micron size range, or other methods acceptable to the commissioner.

(b) Ambient air concentrations shall be measured using the standard hi volume sampling and analysis techniques as specified by 40 C.F.R. 50*.

(c) Observations by a qualified representative of the commissioner of visible emissions crossing the property line of the source at or near ground level.

*Copies of the Code of Federal Regulations (C.F.R.) referenced may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401. Copies are also available at the Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Board; 326 IAC 6-4-5; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2500; filed Jan 6, 1989, 3:30 p.m.: 12 IR 1125; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1606; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567)*

326 IAC 6-4-6 Exceptions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 6. The following conditions will be considered as exceptions to this rule (326 IAC 6-4) and therefore not in violation:

(1) Release of steam not in combination with any other gaseous or particulate pollutants unless the condensation from said steam creates a nuisance or hazard in the surrounding community.

(2) Fugitive dust from publicly maintained unpaved thoroughfares where no nuisance or health hazard is created by its usage or where it is demonstrated to the commissioner that no means are available to finance the necessary road improvements immediately. A reasonable long-range schedule for necessary road improvements must be submitted to support the commissioner's granting such an exception.

(3) Fugitive dust from construction or demolition where every reasonable precaution has been taken in minimizing fugitive dust emissions.

(4) Fugitive dust generated from agricultural operations providing every reasonable precaution is taken to minimize emissions and providing operations are terminated if a severe health hazard is generated because of prevailing meteorological conditions.

(5) Visible plumes from a stack or chimney which provide adequate dispersion and are in compliance with other applicable rules.

(6) Fugitive dust from a source caused by adverse meteorological conditions.

(Air Pollution Control Board; 326 IAC 6-4-6; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2501; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1606)

326 IAC 6-4-7 Compliance date

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-1-1

Sec. 7. All sources must comply with this rule (326 IAC 6-4) as soon as practicable but no later than July 1, 1974. *(Air Pollution Control Board; 326 IAC 6-4-7; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2501; readopted filed Dec 26, 2001, 2:57 p.m.: 25 IR 1606)*

Rule 5. Fugitive Particulate Matter Emission Limitations

326 IAC 6-5-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 1. (a) Any source of fugitive particulate matter emissions located in nonattainment areas for particulate matter as designated by the board (except for such a source located in Lake County) which has potential fugitive particulate matter emissions of twenty-five (25) tons per year or more, including the following:

(1) Primary nonattainment areas, to include the portion of Marion County bounded on the west by Keystone Avenue, on the north and east by Southeastern Avenue, and on the east and south by Center Township.

(2) Secondary nonattainment areas as follows:

(A) The portion of Clark County included in Jeffersonville Township.

(B) The portion of Dubois County included in Bainbridge Township.

(C) The portions of Marion County included in Center and Wayne Townships, the portion of Decatur Township located east and north of I-465, and the portion of Perry Township located north of I-465.

(D) The portion of St. Joseph County north of Kern Road and east of Pine Road.

(E) The portion of Vanderburgh County included in the city of Evansville and Pigeon Township.

(F) The portion of Vigo County located within a five-tenths (0.5) kilometer radius of UTM Coordinates four hundred sixty-four and five hundred nineteen-thousandths (464.519) east and four thousand three hundred sixty-nine and two hundred eight-thousandths (4,369.208) north, in Indiana State University parking lot number 23 in Terre Haute.

(b) Any new source of fugitive particulate matter emissions, located anywhere in the state, requiring a permit as set forth in

326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985. If any control measure established by this rule is inconsistent with an applicable control measure contained in 326 IAC 12, the more stringent measure shall apply.

(c) Any source or facility of fugitive particulate matter emissions subject to the requirements of this rule shall be subject to 326 IAC 6-4-6.

(d) The following emission factors and control efficiencies apply to sources subject to this rule:

(1) Emission factor equations listed in supplements 11.2.1, 11.2.3, and 11.2.6 of the May 1983 edition and no later amendments of "Compilation of Air Pollutant Factors" (AP-42)* shall be used to determine potential emissions for unpaved roads, aggregate handling and storage piles, and paved roads, respectively.

(2) Efficiencies of any existing control measures shall be obtained from the following:

(A) Supplement 11.2.1 of the May 1983 edition and no later amendments of "Compilation of Air Pollutant Factors" (AP-42)* for unpaved roads.

(B) The August 1983 edition* of "Iron and Steel Plant Open Source Fugitive Emission Control Evaluation" (prepared by Midwest Research Institute) for aggregate handling and storage piles.

(C) The April 26, 1984, edition* of "Cost Estimates for Selected Fugitive Dust Controls Applied to Unpaved and Paved Roads in Iron and Steel Plants" for paved roads (prepared by Midwest Research Institute).

(3) Emission factors and efficiencies of existing controls, if any, for sources in the categories not covered in subdivisions (1) and (2) shall be obtained from "Reasonably Available Control Measures for Fugitive Dust Sources", as amended August 1983 and no later amendments, Ohio EPA**. Where a range of values is available for a source or process as referenced in subdivisions (1) and (2), the mid-value of the range shall be used.

(4) A source may petition the commissioner to use emission factors and control efficiencies other than those referenced in subdivisions (1), (2), and (3) if adequate support documentation is submitted.

*These documents are incorporated by reference. Copies may be obtained from the U.S. Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

**This document is incorporated by reference. Copies may be obtained from Ohio Environmental Protection Agency, Office of Air Pollution Control, 361 East Broad Street, Columbus, Ohio 43216 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204 [sic., 46204]. (*Air Pollution Control Board; 326 IAC 6-5-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2501; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2367; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Dec 20, 2001, 4:30 p.m.: 25 IR 1599*)

326 IAC 6-5-2 Definitions

Authority: IC 13-1-1-4

Affected: IC 13-1-1; IC 13-7-1-22

Sec. 2. Terms used in this rule (326 IAC 6-5) are defined as set forth in this section.

"As needed basis" means the frequency of application necessary to minimize visible particulate matter emissions as defined in the control plan.

"Fugitive particulate matter emissions" means particulate matter which is emitted from any source by means other than a stack.

"Paved road" means any asphalt or concrete surfaced thoroughfare or right-of-way designed or used for vehicular traffic and located on the property of, or owned by, an individual or company.

"Potential emissions" means fugitive particulate matter emissions calculated after the application of air pollution control measures or air pollution control equipment.

"Unpaved roads" means any surfaced thoroughfare or right-of-way, other than a paved road as defined above, which is designed or used for vehicular traffic located on the property of, or owned by an individual or company. (*Air Pollution Control Board; 326 IAC 6-5-2; filed Mar 10, 1988, 1:20 pm: 11 IR 2502; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477*)

326 IAC 6-5-3 Submission of control plan

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1

Sec. 3. (a) Sources specified in 326 IAC 6-5-1(a) shall submit a fugitive particulate matter emissions control plan or request an exemption from the control plan within six (6) months following December 13, 1985.

(b) A control plan or request for an exemption from the control plan shall be included in all permit applications and submitted to the commissioner by those sources specified in 326 IAC 6-5-1(b).

(c) Any control practice or measure has been used to determine applicability or exemption of this rule (326 IAC 6-5) shall be incorporated into the source's operating permit. (*Air Pollution Control Board; 326 IAC 6-5-3; filed Mar 10, 1988, 1:20 pm: 11 IR 2502; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477*)

326 IAC 6-5-4 Control measures

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1; IC 13-7-1-2

Sec. 4. Fugitive particulate matter emissions resulting from the emission points specified in this section shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). All control measures specified in this section shall be considered reasonably available control measures (RCM). The frequency of application for all control measures shall be detailed in each control plan. No control plan shall contain control measures which violate the provisions of the Indiana statutes or the rules of any other state agency.

(a) Paved roads, unpaved roads, and parking lots. Fugitive particulate matter emissions resulting from paved roads, unpaved roads, and parking lots shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Paved roads and parking lots:

(A) Cleaning by vacuum sweeping.

(B) Flushing.

(C) An equivalent alternate measure.

(2) Unpaved roads and parking lots:

(A) Paving with a material such as asphalt or concrete.

(B) Treating with a suitable and effective oil or chemical dust suppressant approved by the commissioner. The frequency of application shall be on an as needed basis.

(C) Spraying with water, the frequency of application shall be on an as needed basis.

(D) Double chip and seal the road surface and maintain on an as needed basis.

(E) An equivalent alternate measure.

(b) Open aggregate piles:

(1) Measures to control fugitive particulate matter emissions shall be required for open aggregate piles consisting of material such as, but not limited to, sand, gravel, stone, grain, and coal and which material is finer than two hundred (200) mesh size equal to or greater than one percent (1%) by weight. Open aggregate material mesh size shall be determined by the "American Association of State Highway and Transportation Officials Test Method T27-74," or other equivalent procedures acceptable to the commissioner.

(2) Fugitive particulate matter emissions resulting from open aggregate piles consisting of such material as, but not limited to, sand, gravel, stone, grain, and coal shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(A) Cleaning the area around the perimeter of the aggregate piles.

(B) Application of a suitable and effective oil or other dust suppressant on an as needed basis.

(C) An equivalent alternate measure.

(c) Fugitive particulate matter emissions resulting from outdoor conveying of aggregate material such as, but not limited to, sand, gravel, stone, grain, and coal, by equipment such as belt conveyors and bucket elevators shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Enclosing the conveyor belt totally on the top and sides as needed to minimize visible emissions. Also, if needed, exhausting emissions to particulate control equipment during operation of conveyor.

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(2) Applying water or suitable and effective chemical dust suppressant at the feed and/or intermediate points as needed to minimize visible emissions.

(3) An equivalent alternate measure.

(d) Fugitive particulate matter emissions resulting from the transferring of aggregate material shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Minimizing the vehicular distance between the transfer points.

(2) Enclosing the transfer points and if needed exhausting emissions to particulate control equipment during the operation of the transferring system.

(3) Application of water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.

(4) An equivalent alternate measure.

(e) Fugitive particulate matter emissions resulting from transportation of aggregate material by truck, front end loaders, or similar vehicles shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Use of completely enclosed vehicles.

(2) Tarping the vehicle.

(3) Maintaining the vehicle body in such a condition that prevents any leaks of aggregate material.

(4) Spraying the materials in the vehicle with a suitable and effective dust suppressant.

(5) An alternate measure.

(f) Fugitive particulate matter emissions resulting from the loading and unloading operations of the material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles, shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Enclosure of the material loading/unloading area.

(2) Total or partial enclosure of the facility and exhausting of emissions to particulate collection equipment. Such equipment shall be approved by the board.

(3) Spraying with water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.

(4) Reduction of free fall distance.

(5) An equivalent alternate measure.

(g) Solid waste handling. Fugitive particulate matter emission resulting from activities involving solid waste (as defined in IC 13-7-1-2(10)) disposal shall be controlled unless exempted pursuant to 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Hauling

(A) Wet suppression of the material being transported.

(B) Hauling the material enclosed or covered.

(C) Minimizing the free fall distance when unloading from the particulate collection equipment and/or process equipment onto the hauling vehicle.

(D) An equivalent alternate measure.

(2) Dumping

(A) Applying water or suitable and effective chemical dust suppressant on an as needed basis to minimize visible emissions.

(B) Minimizing the free fall distance of the material.

(C) An equivalent alternate measure.

(h) Fugitive particulate matter emissions resulting from material handling operations such as crushing, grinding, screening, and mixing shall be controlled unless exempted by 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

(1) Wet suppression.

(2) Enclosure of emission source with venting of emissions to a fabric filter.

(3) An equivalent alternate measure.

(i) Provisions of this section are applicable in preventing particulate matter from escaping through building openings such as doors, windows, powered or unpowered ventilators, roof monitors, other than a stack as defined in 326 IAC 1-2-74, from sources subject to 326 IAC 6-5. However, grain elevators subject to the provisions of this section shall provide for good housekeeping and good maintenance procedures as set forth in 326 IAC 6.5-1-2(d)(2) and 326 IAC 6.8-1-2(d)(2).

(1) Fugitive particulate matter emissions escaping through building openings set forth above shall be controlled unless

exempted by 326 IAC 6-5-7(d). Sources may use one or more of the following measures:

- (A) Installing a removable filter over appropriate building openings.
- (B) Capturing emissions within the building by a proper hood system and conveying through a duct to particulate collection system approved by the commissioner.
- (C) An in-house operating and procedure maintenance program consisting of:
 - (i) Proper maintenance of the process equipment and particulate collection system approved by the commissioner.
 - (ii) Substitution of the process equipment, material, and/or operating procedure that will minimize visible emissions.
- (D) An equivalent alternate measure.

(Air Pollution Control Board; 326 IAC 6-5-4; filed Mar 10, 1988, 1:20 pm: 11 IR 2502; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Oct 19, 2005, 4:28 p.m.: 29 IR 819)

326 IAC 6-5-5 Contents of control plans

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1

Sec. 5. (a) The fugitive particulate matter emission control plan shall be in writing and shall include, at a minimum, the following information:

- (1) Name and address of the source.
- (2) Name and address of the owner or operator responsible for the execution of the control plan.
- (3) Identification of all processes, operations, and areas which have the potential to emit fugitive particulate matter in accordance with 326 IAC 6-5-4.
- (4) A map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.
- (5) The number and mix of vehicular activity occurring on paved roads, unpaved roads, and parking lots.
- (6) Type and quantity of material handled.
- (7) Equipment used to maintain aggregate piles.
- (8) A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in subdivision (3).
- (9) A specification of the dust suppressant material, such as oil or chemical including the estimated frequency of application rates and concentrations.
- (10) A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure.
- (11) A schedule of compliance with the provisions of the control plan. Such schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation, or modification of the fugitive particulate matter emission control measures.
- (12) Other relevant data that may be requested by the commissioner, to evaluate the effectiveness of the control plan.

(b) Records shall be kept and maintained which document all control measures and activities to be implemented in accordance with the approved control plan. Said records shall be available upon the request of the commissioner, and shall be retained for three (3) years. *(Air Pollution Control Board; 326 IAC 6-5-5; filed Mar 10, 1988, 1:20 pm: 11 IR 2504; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 6-5-6 Commencement of plans

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1

Sec. 6. All sources subject to this rule (326 IAC 6-5) shall have an approved control plan and shall start said plan: (a) Within twelve (12) months after December 13, 1985, or as otherwise specified in the approved plan, by sources located in primary nonattainment areas for total suspended particulate matter.

(b) As expeditiously as possible, but no later than December 31, 1989, or as otherwise specified in the approved plan, by sources located in secondary nonattainment areas for total suspended particulate matter.

(c) The date operation commences for new sources. (*Air Pollution Control Board; 326 IAC 6-5-6; filed Mar 10, 1988, 1:20 pm; 11 IR 2504; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477*)

326 IAC 6-5-7 Approval of plans

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 4-21.5; IC 13-1-1

Sec. 7. (a) Within three (3) months of receiving a control plan, the commissioner shall notify the source of:

- (1) the approval of the control plan or request for an exemption;
- (2) improvements that the commissioner deems necessary to the control plan; or
- (3) disapproval of the control plan or request for an exemption.

(b) If the commissioner finds a control plan or request for an exemption from the control plan to be incomplete, the applicant shall provide the board the required additional information.

(c) The commissioner shall approve control plans which contain any RCM specified in 326 IAC 6-5-4. In determining if (i) an alternate control measure represents a RCM, or (ii) exemptions from control plans are acceptable, the source shall submit and the commissioner shall consider information pertaining to factors, including, but not limited to the following:

- (1) the impact on the environment in terms of any increase in water, air, or solid waste pollution emissions;
- (2) the energy requirements of the selected control measure;
- (3) the capital expenditure, impact on production, and operating costs to implement the selected control measure;
- (4) the impact of these costs on the source; and
- (5) any adverse worker or product safety implications of the selected control measure.

(d) Sources that demonstrate to the satisfaction of the commissioner either that their fugitive emissions are not significantly impacting the air quality outside their property line or that the cost of controlling their fugitive emissions is not commensurate with the degree of air quality improvement to be achieved by implementing control measures pursuant to this rule (326 IAC 6-5) shall be exempted from implementing such controls.

(e) If a control plan or request for an exemption from the plan is disapproved by the commissioner, the applicant shall have up to fifteen (15) days from the date of receipt of the disapproval letter to request, in writing, a hearing on the matter. In the event a hearing is requested, it shall be held in accordance with the requirements set forth in IC 4-22-1 or IC 4-21.5 and the burden of proof shall lie with the applicant to demonstrate why the control plan or request for an exemption from the plan is appropriate.

(f) The control plan or exemption approved by the commissioner shall become part of the source's operation permit. (*Air Pollution Control Board; 326 IAC 6-5-7; filed Mar 10, 1988, 1:20 pm; 11 IR 2505; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568*)

326 IAC 6-5-8 Revision of control plans

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1

Sec. 8. The control plan shall be updated at the time of reapplication for the source's operation permit or as required in 326 IAC 2. (*Air Pollution Control Board; 326 IAC 6-5-8; filed Mar 10, 1988, 1:20 pm; 11 IR 2505; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477*)

326 IAC 6-5-9 Commissioner discretion

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1

Sec. 9. Any discretionary action taken by the commissioner in accordance with this rule (326 IAC 6-5) shall be established as a revision to the Indiana state implementation plan. (*Air Pollution Control Board; 326 IAC 6-5-9; filed Mar 10, 1988, 1:20 pm; 11 IR 2505; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477*)

Rule 6. Source Specific and Facility Emission Limitations for TSP in Porter County

326 IAC 6-6-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-15; IC 13-17

Sec. 1. This rule is effective December 7, 1984. Sources and facilities specifically listed in sections 4 and 5 of this rule shall comply with the limitations contained therein. Sources and facilities subject to this rule are exempt from the requirements of 326 IAC 6-2, 326 IAC 6-3, 326 IAC 6-4, 326 IAC 6-5, 326 IAC 6.5, and 326 IAC 6.8. (*Air Pollution Control Board; 326 IAC 6-6-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2505; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2368; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Dec 20, 2001, 4:30 p.m.: 25 IR 1600; errata filed Oct 19, 2005, 4:28 p.m.: 29 IR 819*)

326 IAC 6-6-2 Methods to determine compliance

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1-1; IC 13-1-1-4; IC 13-7-1-1; IC 13-7-5-1; IC 13-7-7-2

Sec. 2. (a) This section applies to the emission limitations contained in 326 IAC 6-6-4.

(b) All lb/ton (pound per ton) emission factor limits are expressed as “pounds of particulate emissions per ton of product” unless otherwise stated. By-products which may be sold as product shall not be included under the term “product.”

(c) All lb/MMBtu (pounds per million Btu) emission factor limits are expressed as “pounds of particulate emissions per million Btu of fuel(s) fired in the source” unless otherwise stated.

(d) Fuel usage data may be used to determine compliance for any non-fossil-fuel-fired source and any fossil fuel-fired source that does not have a gas cleaning device which is used to reduce particulate emissions to the atmosphere, provided that the following procedures are followed:

(1) The owner/operator shall collect fuel usage data at least once per month and shall record them in a log which is readily available for inspection. Records must be retained for two (2) years from the date of collection.

(2) The following fuel usage data shall be recorded for each source monthly:

- (A) number of hours in operation;
- (B) cubic feet of each gaseous fuel fired;
- (C) gallons of each liquid fuel fired;
- (D) pounds of each solid fuel fired.

(3) Compliance shall be determined using the equations in Table 1. An equivalent alternate method may be used with prior approval of the commissioner.

TABLE 1. Fuel Use Equations

(i) For sources with emission limits expressed in lb/hr:

$$\frac{(F_1 \times E_1) + \dots (F_i \times E_i)}{\text{Total hours of operation}} = T_t$$

Where: F_1 through F_i = the quantities (e.g., million cu. ft.) of each fuel type used in one (1) month.

E_1 through E_i = the emission factors (e.g., lb/million cu.ft.) corresponding to the fuel types used; the most recent emissions factors obtained by the procedures required by subdivision (d)(4) of this section shall be used.

T_t = Total emissions in lbs/hr.

(ii) For sources with short-term emission limits expressed in lb/MMBtu:

$$\frac{(F_1 \times E_1) + \dots (F_i \times E_i)}{(F_1 \times H_1) + \dots (F_i \times H_i)} = T_h$$

Where: F_1 through F_i = the quantities (e.g., million cu.ft.) of each fuel type used in one (1) month.

H_1 through H_i = the heat content factors (e.g., BTU/cu.ft.) corresponding to the fuel types used; the most recent heat content factors obtained by the procedures required by subdivision (d)(4) of this section shall be used.

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E_1 through E_i = the emission factors (e.g., lb/million cu.ft.) corresponding to the fuel types used; the most recent emissions factors obtained by the procedures required by subdivision (d)(4) of this section shall be used.

T_h = Total emissions in lbs/MMBtu.

(4) Once each calendar quarter the owner/operator shall conduct sampling and analysis to determine the heat content factors (i.e., H_i) contained in the equations set forth in this subsection.

Once each calendar quarter the owner/operator shall conduct sampling and analysis to determine the sulfur content of No. 6 fuel oil and shall calculate the emission factor for this fuel using the following equation:

$$(10)S + 3 = EF$$

Where EF = the particulate emission factor for No. 6 fuel oil (i.e., lb/1,000 gal.)

S = percent sulfur in the fuel, by weight.

The sampling and test methodologies used must be approved by the commissioner. The most recent No. 6 fuel oil emission factor obtained using the above procedure shall be used in emission rate calculations. The emission factors used for fuels other than No. 6 fuel oil shall be as follows:

Fuel	Emission Factor
Natural Gas	5.0 lbs per MM SCF
Blast Furnace Gas	1.5 lbs per MM SCF
Coke Oven Gas	6.6 lbs per MM SCF
Propane	0.44 lbs per 1,000 gallons
Waste Oil	8.8 lbs per 1,000 gallons
No. 2 Fuel Oil	2.0 lbs per 1,000 gallons

(5) Within thirty (30) days of the end of each monthly monitoring period the owner/operator shall calculate the pounds of particulate matter emitted per hour, or lb/MMBtu as applicable from each source using the equation given in this subsection. Results of these calculations must be retained for two (2) years. An equivalent alternate method and/or frequency may be used with the prior approval of the commissioner.

(6) A list of those sources which will rely on fuel usage data to determine compliance with their emission limitations is shown in Table 2:

TABLE 2. List of Sources Using Fuel Use Data to Determine Compliance with Particulate Emissions Limitations

Blast Furnace Stoves
Blast Furnace Flare
BOF Shop FM Boiler
Slab Mill Soaking Pits (32)
Slab Mill Soaking Pits (4)
Plate Mill Furnace No. 1 and Boiler No. 1
Plate Mill Furnace No. 2 and Boiler No. 3
160 Inch Plate Mill Boiler No. 2
160 Inch Plate Mill Boiler No. 4
160 Inch Plate Mill Furnaces No. 1 and 2
160 Inch Plate Mill In and Out Furnaces No. 4 and 5
160 Inch Plate Mill In and Out Furnaces No. 6 and 7
160 Inch Plate Mill In and Out Furnace No. 8
110 Inch Plate Mill Normalizing Furnace
160 Inch Plate Mill Heat Treating Furnace
80 Inch Hot Strip Mill Furnace No. 1
80 Inch Hot Strip Mill Furnace No. 2
80 Inch Hot Strip Mill Furnace No. 3
Continuous Anneal Furnace
Batch Anneal Furnaces (24)
Continuous Anneal Preheating
Continuous Anneal Heating and Soaking
Continuous Anneal Reheating

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Power Station Boiler Nos. 8, 9, 10, 11, and 12

Power Station Boiler No. 7

(7) Within thirty (30) days of the end of each calendar quarter the owner/operator shall submit to the commissioner a written report of any emissions exceeding the applicable limits and the nature and cause of the excess emissions, if known.

(e) When required by the commissioner the owner/operator shall make any stack modifications necessary to permit a stack test in accordance with 40 CFR 60, Appendix A, Methods 1-5.

(1) List of sources for which stack tests are required to determine compliance with particulate emission limitations

The BOF shop: Nos. 1 and 2 Vessel Scrubber stacks (three (3) stacks) shall be tested once in each four (4) year period.

The sinter plant windbox scrubber stack shall be tested once in each two (2) year period.

The sinter plant dedusting baghouse stack shall be tested once in each two (2) year period.

The coke oven battery nos. 1 and 2 pushing emissions control system stacks (two (2) stacks) shall be tested once in each four (4) year period.

(f) If a compliance determination based on fuel usage data does not agree with a compliance determination based on stack test data, the determination based on stack test data shall govern. Stack test data may reflect a total sampling time of less than twenty-four (24) hours and be acceptable for such a compliance determination.

(g) Application for an alternative source-specific opacity limit may not be based on fuel usage data.

(h) Stack tests of fossil-fuel-fired sources shall include soot blowing at a frequency that is representative of normal operations.

(i) Compliance with the coke quenching water quality limits shall be determined according to the procedures given below:

(1) The water as applied to the coke shall be sampled once per calendar quarter. Samples shall be collected once per day per tower for five (5) consecutive days and shall be composited into one (1) sample for each tower.

(2) Each composite sample shall be analyzed for total dissolved solids (TDS), in accordance with ASTM D-1888-78, Method A or an equivalent method approved by the commissioner, with the results expressed in milligrams per liter (mg/l).

(3) Compliance shall be determined on the basis of the results of the composite sample for each tower. Alternate testing and/or analysis intervals may be used with prior approval of the board.

(j) Compliance with applicable particulate emission limitations for stack sources for which compliance is not based on fuel monitoring shall be determined on the basis of opacity observations performed in accordance with 326 IAC 5-1. The following exceptions to 326 IAC 5-1 shall apply:

(1) When observing visible emissions, the observer may choose not to position himself with the sun in the one hundred forty (140) degree sector at his back provided the day is cloudy or overcast, causing the sun to be hidden from the observer.

(2) When determining an average opacity, the readings immediately preceding and following any interference or exceptions, as allowed by the limit, shall be deemed consecutive.

(3) Compliance with emission limits for baghouse discharges shall be determined as follows:

Visible emissions in excess of an average twenty percent (20%) opacity in twenty-four (24) consecutive readings shall constitute evidence of a violation of the applicable particulate emission limit. The commissioner may require a stack test performed in accordance with 40 CFR 60, Methods 1-5, to verify the mass emission rate.

(4) The commissioner may require stack tests in addition to the specific requirements of this rule (326 IAC 6-6). When such testing is required, the owner/operator shall permit the performance of stack tests in accordance with 40 CFR 60, Appendix A, Methods 1-5.

(k) Alternative opacity as provided for in 326 IAC 5-1-5 shall not apply to groups of sources collectively subject to a single mass emission limit.

(l) When compliance testing is required for those groups of sources collectively subject to a single mass emission limit, the testing need not be conducted simultaneously.

(m) Any revision to this rule (326 IAC 6-6) and the technical support document must be submitted to the U.S. EPA as a revision of the state implementation plan.

(n) In determining compliance for coke oven pushing, charging, oven door leaks, and charging lid and off-take leaks, the requirements specified under 326 IAC 11-3 shall govern. The mass emission limits for these sources given in this rule (326 IAC 6-6) shall be used only for the purpose of determining emission offsets resulting from source shutdown.

(o) Testing required by the commissioner to determine the amount of particulate matter emitted from any non-stack source or facility subject to the requirements of this rule (326 IAC 6-6) shall be conducted in accordance with procedures approved by the commissioner.

*Copies of the Code of Federal Regulations (CFR) referenced in 326 IAC 6-6 may be obtained from the Government Printing

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Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. (*Air Pollution Control Board; 326 IAC 6-6-2; filed Mar 10, 1988, 1:20 pm: 11 IR 2506; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568*)

326 IAC 6-6-3 Compliance time tables

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1-1; IC 13-1-1-4; IC 13-7-7-2

Sec. 3. (a) All services and facilities subject to the requirements of this rule (326 IAC 6-6) shall be in compliance by December 22, 1984.

(b) In cases where an existing service and facility cannot comply by December 22, 1984, the source or facility shall submit to the commissioner a letter of intent to comply with this rule (326 IAC 6-6) as expeditiously as possible as well as a compliance plan including the following milestone dates:

- (1) submittal of plans;
- (2) start construction;
- (3) completion of construction;
- (4) achieving compliance; and
- (5) submit performance results.

Once the commissioner has approved a source or facilities' compliance plan, the plan shall be incorporated into the source or facilities' operation permit and shall be submitted to the U.S. EPA as a SIP revision. Failure to operate within these conditions shall be considered a violation of this rule (326 IAC 6-6).

(c) If emission limitations for a source or facility are added to 326 IAC 6-6-4 or 326 IAC 6-6-5 after the original promulgation date hereof or the emission limit applicable to a source or facility is made more stringent by reason of amendments to this rule (326 IAC 6-6), then such source shall achieve compliance as soon as practicable but not later than specified by the following schedule:

- (1) Submittal of plans and specifications within six (6) months after the date the source becomes subject to the terms hereof, or the effective date of the amended rule imposing a stricter limit (whichever date is applicable to a particular source is hereafter referred to as the "effective date").
- (2) Initiation of on-site construction or installation within twelve (12) months after the effective date.
- (3) Completion of on-site construction or installation within twenty-four (24) months after the effective date.
- (4) Achievement of compliance within twenty-eight (28) months after the effective date.
- (5) Submittal of performance results within thirty (30) months of the effective date.

An owner or operator may submit a petition to the commissioner to establish an extended schedule for compliance with this section. The petition shall include both a demonstration that compliance cannot be achieved in accordance with this section and milestone dates for purchases or construction necessary to achieve compliance. The petition, if approved by the commissioner, shall be submitted to the U.S. EPA as a revision to the SIP. (*Air Pollution Control Board; 326 IAC 6-6-3; filed Mar 10, 1988, 1:20 pm: 11 IR 2508; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477*)

326 IAC 6-6-4 Bethlehem Steel Corporation specific source and facility TSP emission limits

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1-1; IC 13-1-1-4; IC 13-7-1-1; IC 13-7-7-5

Sec. 4. The annual particulate matter emissions of each of the following facilities shall not exceed the limit listed below for that facility.

Facility Description
Blast Furnace Casting

Annual Particulate Matter Emission Limits

(1) 0.6 lb/ton of iron

(2) No opacity limit shall apply to Blast Furnace Casting

Blast Furnace Stoves

0.016 lb/MMBTU

Blast Furnace Flare

0.017 lb/MMBTU

Blast Furnace Car Dumper Baghouse

20.6 lb/hr.

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Coke Oven Battery No. 1 Underfiring	0.129 lb/ton of coal
Coke Oven Battery No. 2 Underfiring	0.129 lb/ton of coal
Coke Oven Battery Charging, Lids, Offtakes, Collector Mains, Doors, Pushing and Quenching	(326 IAC 11-3 applies)
Coke Plant Material Handling Baghouses:	
Breaker Building Exhaust N	2.1 lb/hr.
Breaker Building Exhaust S	2.1 lb/hr.
Transfer Baghouse J-25	0.5 lb/hr.
Transfer Baghouse J-26	0.5 lb/hr.
Breaker Building Baghouse	1.2 lb/hr.
Sinter Plant Windbox Scrubber	0.277 lb/ton of sinter
Sinter Plant Dedusting Baghouse	42.9 lb/hr.
Sinter Plant Mixing Drum Scrubber	4.7 lb/hr.
BOF Shop—No. 1 & 2 Vessel Scrubber Stacks (three stacks collectively restricted to limit)	0.09 lb/ton of liquid steel
BOF Shop—Nos. 1 & 2 Vessel Charging and Tapping	0.35 lb/ton of liquid steel
BOF Shop—No. 3 Vessel Scrubber Stack	0.022 grains/DSCF
BOF Shop—No. 3 Vessel Charging and Tapping	0.05 lb/ton of liquid steel
BOF Shop FM Boiler	0.005 lb/MMBTU
BOF Shop Teeming	0.07 lb/ton of liquid steel
BOF Shop Reladling Baghouse	23.1 lb/hr.
BOF Shop Desulfurization Baghouse	6.0 lb/hr.
BOF Shop Material Handling Baghouses:	
Track Hopper Building Baghouse	1.2 lb/hr.
H1 Baghouse	0.6 lb/hr.
H2 Baghouse	0.6 lb/hr.
No. 1 Furnace Bin Baghouse	1.7 lb/hr.
No. 2 Furnace Bin Baghouse	1.7 lb/hr.
No. 1 Furnace Weigh Hopper Baghouse	2.2 lb/hr.
No. 2 Furnace Weigh Hopper Baghouse	2.2 lb/hr.
Continuous Casters	0.015 lb/ton of liquid steel cast
Slab Mill Scarfer	22.6 lb/hr.
No. 1 Roll Shop Baghouse (two stacks collectively restricted to limit)	1.7 lb/hr.
No. 2 Roll Shop Baghouse	0.7 lb/hr.
Slab Mill Soaking Pits (32)	0.014 lb/MMBTU
Slab Mill Soaking Pits (4)	0.014 lb/MMBTU
Plate Mill Furnace No. 1 and Boiler No. 1	0.082 lb/MMBTU
Plate Mill Furnace No. 2 and Boiler No. 3	0.082 lb/MMBTU
160 Inch Plate Mill Boiler No. 2	0.082 lb/MMBTU
160 Inch Plate Mill Boiler No. 4	0.082 lb/MMBTU
110 Inch Plate Mill Furnaces No.1 and 2	0.080 lb/MMBTU
160 Inch Plate Mill In & Out Furnaces No. 4 and 5	0.088 lb/MMBTU
160 Inch Plate Mill In and Out Furnaces No. 6 and 7	0.088 lb/MMBTU
160 Inch Plate Mill In & Out Furnaces No. 8	0.081 lb/MMBTU
110 Inch Plate Mill Normalizing Furnace	0.015 lb/MMBTU
160 Inch Plate Mill Heat Treating Furnace	0.005 lb/MMBTU
80 Inch Hot Strip Mill Furnace No. 1	0.085 lb/MMBTU
80 Inch Hot Strip Mill Furnace No. 2	0.084 lb/MMBTU
80 Inch Hot Strip Mill Furnace No. 3	0.084 lb/MMBTU
Continuous Anneal Furnace	0.005 lb/MMBTU
Batch Annealing Furnaces (24)	0.015 lb/MMBTU

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Continuous Anneal Preheating	0.005 lb/MMBTU
Continuous Anneal Heating & Soaking	0.005 lb/MMBTU
Continuous Anneal Reheating	0.005 lb/MMBTU
Power Station Boiler Nos. 8, 9, 10, 11, and 12	Collective limit of 0.088 lb/MMBTU
Power Station Boiler No. 7	0.10 lb/MMBTU

(Air Pollution Control Board; 326 IAC 6-6-4; filed Mar 10, 1988, 1:20 pm: 11 IR 2509; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568)

326 IAC 6-6-5 Bethlehem Steel Corporation fugitive dust control strategy

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1-1; IC 13-1-1-4; IC 13-7-1-1; IC 13-7-7-2

Sec. 5. (a) In order to implement its nontraditional fugitive dust control program, Bethlehem shall purchase a high pressure water flushing truck and a tractor sweeper with broom and install a water filling station for the flusher truck and a tank for the storage and dispensing of liquid chemical dust retardant. The following control measures shall then be implemented at the Burns Harbor Plant at the specified frequency.

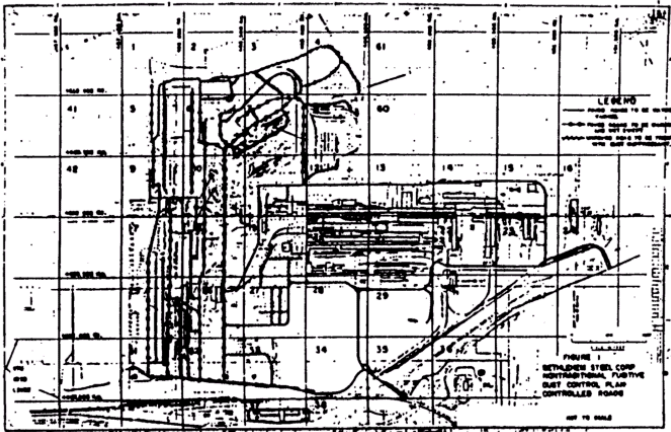
- (1) A total of twenty-four (24) miles of paved and unpaved roads as shown in Figure 1 shall be controlled as described below:
 - (A) A total of 12.7 miles of paved roads shall be cleaned three (3) times per week by water washing using a flusher truck except as indicated in subsection (a)(4) of this section. In addition, at least twice per week, 7.9 miles of these roads in the primary facilities area will also be wet swept using a tractor mounted broom following the flusher truck. Road shoulders on the 12.7 miles of paved roads will be graded as required and treated with a chemical dust retardant at the same frequency specified below for unpaved roads. Accumulated material on road shoulders will be removed at least once per month.
 - (B) A total of 11.3 miles of unpaved roads shall be controlled. This will consist of forming a uniform road surface by road grading to remove large material, and the application of a two (2) to four (4) inch layer of fine slag where necessary. Surfaces shall be sprayed with dust suppressant solution at an application rate consistent with the manufacturer's recommendations. The dust suppressant material and application rate shall be such that a crust will be formed on the road surface that is amenable to cleaning via flushing and sweeping. Road surfaces shall be cleaned twice per week with a flusher truck followed by a tractor mounted broom. Road surfaces shall be resprayed with chemical dust suppressant as necessary to maintain a cleanable surface. The solution strength and application rate will be determined prior to application based upon the condition of the surfaces.
- (2) Bethlehem shall control its low volatile coal storage piles by spraying them at least once per week with a chemical dust retardant.
- (3) Records of all fugitive dust control activities shall be maintained. At a minimum, records shall contain the following information:
 - (A) number of miles and location of the paved roads cleaned;
 - (B) number of miles of unpaved roads which were treated including the type, quantity, and dilution ratio of dust retardant used;
 - (C) the type, quantity, and dilution ratio of dust retardant sprayed on low volatile coal storage piles.

This information shall be summarized into progress reports and submitted to the board quarterly.

(4) This nontraditional fugitive dust control program can be adjusted on a daily basis as needed to take into account preceding day and forecasted meteorological conditions (for example, rainfall and temperature), and visual observations of the roadways scheduled to be cleaned.

(b) Bethlehem Steel Corporation nontraditional fugitive dust control roads is shown as follows (Figure 1):

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(Air Pollution Control Board; 326 IAC 6-6-5; filed Mar 10, 1988, 1:20 pm: 11 IR 2510; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

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