

## Chapter NR 415

## CONTROL OF PARTICULATE EMISSIONS

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**NR 415.01 Applicability; purpose.** (1) **APPLICABILITY.** This chapter applies to all air contaminant sources which emit particulate matter and to their owners and operators.

(2) **PURPOSE.** This chapter is adopted under ss. 144.31 and 144.38, Stats., to categorize particulate matter air contaminant sources and to establish emission limitations for these sources in order to protect air quality.

**History:** Cr. Register, September, 1986, No. 369, eff. 10-1-86; am. (1), Register, May, 1992, No. 437, eff. 6-1-92.

**NR 415.02 Definitions.** In addition to the definitions in this section, the definitions in ch. NR 400 apply to the terms used in this chapter.

(2) "Fugitive dust" means solid airborne particles emitted from any source other than a flue or stack.

(3) "Heatset web offset press" means a type of lithographic press which requires a heated dryer to solidify the printing inks, uses a blanket cylinder to transfer ink from the plate cylinder to the surface to be printed, and prints on a surface which is fed to the press by a continuous roll web.

(5) "Process weight" means the total weight of all materials introduced into any direct source operation, except liquid fuels, gaseous fuels and air.

(6) "Public trafficable area" means any trafficable area which is owned, operated, maintained or controlled by a municipality, interstate agency, state agency or federal agency.

(8) "Roadway areas" means any surface on which motor vehicles travel including, but not limited to, highways, roads, streets, parking areas and driveways.

(9) "Silt content" means that portion by weight of a particulate material which will pass through a no. 200 (75 micron) wire sieve as determined by the dry method in ASTM C136-84a, incorporated by reference in ch. NR 484, or other method approved by the department.

(10) "Trafficable area" means any area, including but not limited to a parking lot or storage area, which is external to a building or structure, is reasonably capable of being traveled by a motor vehicle, and is accessible to a motor vehicle.

**History:** Renum. from NR 154.01, cr. (intro.) and (7), Register, September, 1986, No. 369, eff. 10-1-86; renum. (3) to (9) to be (4) to (10), cr. (3), Register, April, 1989, No. 400, eff. 5-1-

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89; am. (intro.) and (9), r. (1), renum. (4) and (7) to be NR 400.02 (60m) and (80m), Register, May, 1992, No. 437, eff. 6-1-92.

**NR 415.03 General limitations.** No person may cause, allow, or permit particulate matter to be emitted into the ambient air which substantially contributes to exceeding of an air standard, or creates air pollution.

**History:** Renum. from NR 154.11 (1), Register, September, 1986, No. 369, eff. 10-1-86; am. Register, May, 1992, No. 437, eff. 6-1-92.

**NR 415.04 Fugitive dust.** No person may cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions.

(1) Such precautions shall include, but not be limited to:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations.

(b) Application of asphalt, oil, water, suitable chemicals, or plastic covering on dirt roads, material stockpiles, and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor, or water pollution problem.

(c) Installation and use of hoods, fans, and air cleaning devices to enclose and vent the areas where dusty materials are handled.

(d) Covering or securing of materials likely to become airborne while being moved on public roads, railroads, or navigable waters.

(e) Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution.

(f) The paving or maintenance of roadway areas so as not to create air pollution.

(2) In addition to meeting the requirements of sub. (1), any direct or portable source located in a nonattainment area identified under s. NR 401.025 (1) for suspended particulate matter; and any direct or portable source located near such areas whose aggregate fugitive dust emissions may cause an impact on the ambient air quality in such areas equal to or greater than one microgram per cubic meter (annual concentration) or 5 micrograms per cubic meter (maximum 24-hour concentration), as determined by the analysis under ch. NR 401, shall meet the following RACT requirements:

(a) *Storage piles having a material transfer greater than 100 tons in any year:* 1. Storage piles of material having a silt content of 5% to 20% shall be treated with water, surfactants, stabilizers or chemicals; draped; or enclosed on a minimum of 3 sides. Access areas surrounding storage piles shall be watered, cleaned or treated with stabilizers as needed to prevent fugitive dust from vehicle traffic.

2. Storage piles of materials having a silt content of 20% or more shall be completely enclosed or draped except any part being worked, loaded or unloaded. Access areas surrounding storage piles shall be watered,

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progress in achieving compliance commencing with the nonattainment determination under s. NR 401.025 (1):

- (a) Submit plans for compliance within 6 months.
- (b) Award any necessary contracts within 12 months.
- (c) Commence construction, installation or modification of any emission control system within 24 months.
- (d) Complete construction, installation or modification of any emission control system within 30 months.
- (e) Achieve final compliance with the applicable emission limitations and so certify to the department within 33 months.

**History:** Renum. from NR 154.11 (4) and am. Register, September, 1986, No. 369, eff. 10-1-86; correction in (2) (b) made under s. 13.93 (2m) (b) 7, Stats., Register, April, 1989; am. (intro.), (1) (a), (b), (c) 1. and 2., (2) (a) to (c), (3) (a) to (d) and (4), Register, May, 1992, No. 437, eff. 6-1-92.

**NR 415.07 Particulate emission limits for incinerators.** No person may cause, allow or permit particulate matter, concentrations corrected to 12% carbon dioxide, to be emitted to the ambient air from any incinerator in excess of one of the following limitations:

(1) All incinerators on which construction or modification was commenced on or before April 1, 1972 shall meet the emission limits of this subsection.

(a) Incinerators located throughout the state; emissions in excess of:

1. Incinerators rated at over 500 pounds of waste per hour: 0.50 pounds of particulate per 1,000 pounds of exhaust gas.

2. Incinerators rated at 500 pounds of waste per hour or less: 0.60 pounds of particulate per 1,000 pounds of exhaust gas.

(b) Incinerators located in subregion 1 of the Lake Michigan Intra-state AQCR or in the Southeastern Wisconsin Intrastate AQCR; in addition to meeting the emission limits of par. (a) these incinerators shall, by July 31, 1975, meet the following emission limits:

1. Incinerators of 5 cubic feet capacity or more: 0.30 pounds of particulate per 1,000 pounds of exhaust gas.

2. Prefabricated domestic incinerators below 5 cubic feet capacity may not exceed the performance emission requirements prescribed by the American National Standards Institute for domestic incinerators, standard Z21.6, incorporated by reference in ch. NR 484.

(2) All incinerators on which construction or modification is commenced after April 1, 1972 shall meet the emission limits of this subsection.

(a) Incinerators other than those specified in par. (b); emissions in excess of:

1. Incinerators rated at 4,000 pounds of waste per hour or more: 0.15 pounds of particulate per 1,000 pounds of exhaust gas.

2. Incinerators rated at over 500 pounds of waste per hour and less than 4,000 pounds of waste per hour: 0.20 pounds of particulate per 1,000 pounds of exhaust gas.

3. Incinerators rated at 500 pounds of waste per hour or less other than prefabricated domestic incinerators below 5 cubic feet capacity: 0.30 pounds of particulate matter per 1,000 pounds of exhaust gas.

4. Prefabricated domestic incinerators below 5 cubic feet capacity may not exceed the performance emission requirements prescribed by the American National Standards Institute for domestic incinerators, standard Z21.6, incorporated by reference in ch. NR 484.

(b) Sewage treatment plant sludge and grit incinerators on which construction or modification is commenced after February 1, 1975; emissions may not exceed 1.30 pounds per ton of dry sludge or grit input (0.65 grams per kilogram of dry sludge or grit input).

History: Renum. from NR 154.11 (5) and am. Register, September, 1986, No. 369, eff. 10-1-86; am. (intro.), (1) (b) 2., (2) (a) 4. and (b), Register, May, 1992, No. 437, eff. 6-1-92.

**NR 415.08 RACT requirements for coking operations.** (1) This section applies to all coking operations upon which construction or modification commenced before September 1, 1981. Notwithstanding any other provision of chs. NR 415 and 431, all requirements of this section shall be met on or before September 1, 1981.

(2) Visible emissions from charging procedures shall be limited by the application of RACT. RACT includes:

(a) The use and maintenance of suitable jumper pipes and leveling bar smoke boots,

(b) The use and maintenance of suitable seals on larry car drop sleeves and leveling bar smoke boots,

(c) The use and maintenance of a steam aspiration system which provides maximum safe levels of negative pressure on the oven chamber during the charging operation, and

(d) The completion of each charging procedure (including sweeping excess coal into the oven just charged) as quickly as possible.

(3) Fugitive emissions from pushing operations shall be captured by a traveling hood and controlled to not more than 0.080 pounds of particulate matter per 1000 pounds of exhaust gas. Any emissions escaping capture may not exceed 20% opacity for each pushing operation, as determined by the average of 6 consecutive observations made at 15 second intervals.

(4) There may be no visible emissions from 90% of the doors of all coke ovens in use; 95% of all coke oven charging port lids on ovens in use; and 90% of all offtake piping on ovens in use, except those open for charging, pushing, cleaning, and maintenance as determined by a one pass observation.

(5) Quench towers for the application of water on hot coke shall be equipped with grit arrestors or equivalent equipment approved by the department. Water used in quenching may not include coke by-product plant effluent, and total dissolved solids in make-up quenching water shall be less than 750 milligrams per liter.