

**SECTION .0500 - EMISSION CONTROL STANDARDS****.0501 COMPLIANCE WITH EMISSION CONTROL STANDARDS**

(a) Purpose and Scope. The purpose of this Rule is to assure orderly compliance with emission control standards found in this Section. This Rule shall apply to all air pollution sources, both combustion and non-combustion.

(b) All new sources shall be in compliance prior to beginning operations.

(c) In addition to any control or manner of operation necessary to meet emission standards in this Section, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards of Section .0400 of this Chapter to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this Section are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

(d) The Bubble Concept. A facility with multiple emission sources or multiple facilities within the same area may choose to meet the total emission limitation for a given pollutant through a different mix of controls than that required by the rules in this Section or Section .0900 of this Chapter.

(1) In order for this mix of alternative controls to be permitted the Director shall determine that the following conditions are met:

(A) Sources to which Rules .0524, .0530, .0531, .1110 or .1111 of this Chapter, the federal New Source Performance Standards (NSPS), the federal National Emission Standards for Hazardous Air Pollutants (NESHAPS), regulations established pursuant to Section 111 (d) of the federal Clean Air Act, or state or federal Prevention of Significant Deterioration (PSD) requirements apply, shall have emissions no larger than if there were not an alternative mix of controls;

(B) The facility (or facilities) is located in an attainment area or an unclassified area or in an area that has been demonstrated to be attainment by the statutory deadlines (with reasonable further progress toward attainment) for those pollutants being considered;

(C) All of the emission sources affected by the alternative mix are in compliance with applicable regulations or are in compliance with established compliance agreements; and

(D) The review of an application for the proposed mix of alternative controls and the enforcement of any resulting permit will not require expenditures on the part of the Agency in excess of five times that which would otherwise be required.

(2) The owner(s) or operator(s) of the facility (facilities) shall demonstrate to the satisfaction of the Director that the alternative mix of controls is equivalent in total allowed emissions,

reliability, enforceability, and environmental impact to the aggregate of the otherwise applicable individual emission standards; and

- (A) that the alternative mix approach does not interfere with attainment and maintenance of ambient air quality standards and does not interfere with the PSD program; this demonstration shall include modeled calculations of the amount, if any, of PSD increment consumed or created;
- (B) that the alternatives mix approach conforms with reasonable further progress requirements in any non-attainment area;
- (C) that the emissions under the alternative mix approach are in fact quantifiable, and trades among them are even;
- (D) that the pollutants controlled under the alternative mix approach are of the same criteria pollutant categories, except that emissions of some criteria pollutants used in alternative emission control strategies are subject to the limitations as defined in 44 FR 71784 (December 11, 1979), Subdivision D.1.c.ii. The Federal Register referenced in this Part is hereby incorporated by reference and does not include subsequent amendments or editions.

The demonstrations of equivalence shall be performed with at least the same level of detail as The North Carolina State Implementation Plan for Air Quality demonstration of attainment for the area in question. Moreover, if the facility involves another facility in the alternative strategy, it shall complete a modeling demonstration to ensure that air quality is protected. Demonstrations of equivalency shall also take into account differences in the level of reliability of the control measures or other uncertainties.

- (3) The emission rate limitations or control techniques of each source within the facility (facilities) subjected to the alternative mix of controls shall be specified in the facility's (facilities') permits(s).
- (4) Compliance schedules and enforcement actions shall not be affected because an application for an alternative mix of controls is being prepared or is being reviewed.
- (5) The Director may waive or reduce requirements in this Paragraph up to the extent allowed by the Emissions Trading Policy Statement published in the Federal Register of April 7, 1982, pages 15076-15086, provided that the analysis required by Paragraph (e) of this Rule supports any waiver or reduction of requirements. The Federal Register referenced in this Paragraph is hereby incorporated by reference and does not include subsequent amendments or editions.

(e) In a permit application for an alternative mix of controls under Paragraph (d) of this Rule, the owner or operator of the facility shall demonstrate to the satisfaction of the Director that the proposal is equivalent to the existing requirements of the SIP in total allowed emissions, enforceability, reliability, and environmental impact. The Director shall provide for public notice with an opportunity

for a request for public hearing following the procedures under Chapter 17.0300 or .0500, as applicable.

- (1) If and when a permit containing these conditions is issued under Chapter 17.0300 (non-Title V permits), it shall become a part of the state implementation plan (SIP) as an appendix available for inspection at the office of the Agency. Until the U.S. Environmental Protection Agency (EPA) approves the SIP revision embodying the permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements.
- (2) If and when a permit containing these conditions is issued under Chapter 17.0500 (Title V permits), it shall be available for inspection at the office of the Agency. Until the EPA approves the Title V permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements.

The revision shall be approved by EPA on the basis of the revision's consistency with EPA's "Policy for Alternative Emission Reduction Options Within State Implementation Plans" as promulgated in the Federal Register of December 11, 1989, pages 71780-71788, and subsequent rulings.

If owner or operator of any combustion and non-combustion source or control equipment subject to the requirements of this Section is required to demonstrate compliance with a rule in this Section, the source testing procedures of Section .2600 of this Chapter shall be used.

*NCDAQ History Note: Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;  
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976.  
Amended Eff. June 1, 2008; April 1, 2001; April 1, 1999; July 1, 1996;  
February 1, 1995; July 1, 1994; August 1, 1991; October 1, 1989.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000.  
Amended Eff. November 17, 2008; April 9, 2001.*

#### **.0502 PURPOSE**

The purpose of the emission control standards set out in this Section is to establish maximum limits on the rate of emission of air contaminants into the atmosphere. All sources shall be provided with the maximum feasible control.

*NCDAQ History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. June 1, 1981.*

WNCRAQA History Note: *Adopted Eff. May 8, 2000*

**.0503 PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

- (a) For the purpose of this Rule the following definitions shall apply:
  - (1) 'Functionally dependent' means that structures, buildings or equipment are interconnected through common process streams, supply lines, flues, or stacks.
  - (2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one fluid by the use of another fluid in which the two fluids are separated by an impervious surface such that there is no mixing of the two fluids.
  - (3) A 'Plant site' means any single or collection of structures, buildings, facilities, equipment, installations, or operations which:
    - (A) are located on one or more adjacent properties,
    - (B) are under common legal control, and
    - (C) are functionally dependent in their operations.
- (b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable emission rate of any indirect heat exchanger permitted prior to April 1, 1999.
- (c) With the exceptions in Rule .0536 of this Section, emissions of particulate matter from the combustion of a fuel that are discharged from any stack or chimney into the atmosphere shall not exceed:

Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In Lb/Million Btu
Up to and Including 10	0.60
100	0.33
1,000	0.18
10,000 and Greater	0.10

For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of particulate matter shall be calculated by the equation  $E = 1.090 \times Q$  to the  $-0.2594$  power. E = allowable emission limit for particulate matter in lb/million Btu. Q = maximum heat input in million Btu/hour.

- (d) This Rule applies to installations in which fuel is burned for the purpose of producing heat or power by indirect heat transfer. Fuels include those such as coal, coke, lignite, peat, natural gas, and

fuel oils, but exclude wood and refuse not burned as a fuel. When any refuse, products, or by-products of a manufacturing process are burned as a fuel rather than refuse, or in conjunction with any fuel, this allowable emission limit shall apply.

(e) For the purpose of this Rule, the maximum heat input shall be the total heat content of all fuels that are burned in a fuel burning indirect heat exchanger, of which the combustion products are emitted through a stack or stacks. The sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under construction, or permitted pursuant to Chapter 17, shall be considered as the total heat input for the purpose of determining the allowable emission limit for particulate matter for each fuel burning indirect heat exchanger. Fuel burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been set. The removal of a fuel burning indirect heat exchanger shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established. However, for any fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another fuel burning indirect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect heat exchanger shall no longer be considered in the determination of the allowable emission limit of any fuel burning indirect heat exchanger constructed after or in conjunction with the removal. For the purposes of this Paragraph, refuse not burned as a fuel and wood shall not be considered a fuel. For residential facilities or institutions (such as military and educational) whose primary fuel burning capacity is for comfort heat, only those fuel burning indirect heat exchangers located in the same power plant or building or otherwise physically interconnected (such as common flues, steam, or power distribution line) shall be used to determine the total heat input.

(f) The emission limit for fuel burning equipment that burns both wood and other fuels in combination, or for wood and other fuel burning equipment that is operated such that emissions are measured on a combined basis, shall be calculated by the equation  $E_c = [(E_w)(Q_w) + (E_o)(Q_o)] / Q_t$ .

- (1)  $E_c$  = the emission limit for combination or combined emission source(s) in lb/million Btu.
- (2)  $E_w$  = plant site emission limit for wood only as determined by Rule .0504 of this Section in lb/million Btu.
- (3)  $E_o$  = the plant site emission limit for other fuels only as determined by Paragraphs (a), (b) and (c) of this Rule in lb/million Btu.
- (4)  $Q_w$  = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.
- (5)  $Q_o$  = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.
- (6)  $Q_t = Q_w + Q_o$  and is the actual total heat input to combination or combined emission source(s) in Btu/hr.

*NCDQA History Note: Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner; Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. February 1, 1976; Amended Eff. April 1, 1999; July 1, 1994; August 1, 1991; June 1, 1985; February 1, 1983.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000*

**.0504 PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

- (a) For the purpose of this Rule the following definitions shall apply:
  - (1) "Functionally dependent" means that structures, buildings or equipment are interconnected through common process streams, supply lines, flues, or stacks.
  - (2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one fluid by the use of another fluid in which the two fluids are separated by an impervious surface such that there is no mixing of the two fluids.
  - (3) "Plant site" means any single or collection of structures, buildings, facilities, equipment, installations, or operations which:
    - (A) are located on one or more adjacent properties,
    - (B) are under common legal control, and
    - (C) are functionally dependent in their operations.
- (b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable emission rate of any indirect heat exchanger permitted prior to April 1, 1999.
- (c) Emissions of particulate matter from the combustion of wood shall not exceed:

Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In Lb/Million Btu
Up to and Including 10	0.70
100	0.41
1,000	0.25
10,000 and Greater	0.15

For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of particulate matter shall be calculated by the equation  $E = 1.1698 (Q \text{ to the } -0.2230$

power). E = allowable emission limit for particulate matter in lb/million Btu. Q = Maximum heat input in million Btu/hour.

(d) This Rule applies to installations in which wood is burned for the primary purpose of producing heat or power by indirect heat transfer.

(e) For the purpose of this Rule, the heat content of wood shall be 8,000 Btu per pound (dry-weight basis). The total of maximum heat inputs of all wood burning indirect heat exchangers at a plant site in operation, under construction, or with a permit shall be used to determine the allowable emission limit of a wood burning indirect heat exchanger. Wood burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any wood burning indirect heat exchanger whose allowable emission limit has previously been set.

(f) The emission limit for fuel burning equipment that burns both wood and other fuels in combination or for wood and other fuel burning equipment that is operated such that emissions are measured on a combination basis shall be calculated by the procedure described in Paragraph (f) of Rule .0503 of this Section.

*NCDQAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff.; August 1, 2002; April 1, 1999; June 1, 1985;  
February 1, 1983.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000;  
Amended Eff. September 9, 2002.

**.0505 CONTROL OF PARTICULATES FROM INCINERATORS (REPEALED)**

*NCDQAQ History Note:* Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. July 1, 1987; June 1, 1985; February 1, 1983.  
Repealed Eff. October 1, 1991.

**.0506 PARTICULATES FROM HOT MIX ASPHALT PLANTS**

(a) The allowable emission rate for particulate matter resulting from the operation of a hot mix asphalt plant that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation  $E = 4.9445(P)^{0.4376}$  calculated to three significant figures, for process rates less than 300 tons per hour, where “E” equals the maximum allowable emission rate for particulate matter in pounds per hour and “P” equals the process rate in tons per hour. The allowable emission rate shall be 60.0 pounds per hour for process weights equal to or greater than 300 tons per hour.

(b) Visible emissions from stacks or vents at a hot mix asphalt plant shall be less than 20 percent opacity when averaged over a six-minute period.

(c) All hot mix asphalt batch plants shall be equipped with a scavenger process dust control system for the drying, conveying, classifying, and mixing equipment. The scavenger process dust control system shall exhaust through a stack or vent and shall be operated and maintained in such a manner as to comply with Paragraphs (a) and (b).

(d) Fugitive non-process dust emissions shall be controlled by Rule .0540 of this Section.

(e) Fugitive emissions for sources at a hot mix asphalt plant not covered elsewhere under this Rule shall not exceed 20 percent opacity averaged over six minutes.

(f) Any asphalt batch plant that was subject to the 40-percent opacity standard before August 1, 2004 shall be in compliance with the 20-percent opacity standard by January 1, 2005.

*NCDQA History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. August 1, 2004; July 1, 1998; January 1, 1985.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000;  
Amended Eff. September 13, 2004.

**.0507 PARTICULATES FROM CHEMICAL FERTILIZER MANUFACTURING PLANTS**

The allowable emissions rate for particulate matter resulting from the manufacture, mixing, handling, or other operations in the production of chemical fertilizer materials that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation  $E = 9.377(P)^{0.3067}$  calculated to three significant figures, where “E” equals the maximum allowable emission rate for particulate matter in pounds per hour and “P” equals the process rate (the sum of the production rate and the recycle rate) in tons per hour.

*NCDQA History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);



*Eff. February 1, 1976;*

*Amended Eff. April 1, 2003; July 1, 1998; January 1, 1985.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000;*

*Amended Eff. May 10, 2004.*

**.0508 PARTICULATES FROM PULP AND PAPER MILLS**

(a) Emissions of particulate matter from the production of pulp and paper that are discharged from any stack or chimney into the atmosphere shall not exceed:

- (1) 3.0 pounds per equivalent ton of air dried pulp from a recovery furnace stack;
- (2) 0.6 pounds per equivalent ton of air dried pulp from a dissolving tank vent; and
- (3) 0.5 pounds per equivalent ton of air-dried pulp from a lime kiln stack.

(b) Emissions from any kraft pulp recovery boiler established after July 1, 1971, shall not exceed an opacity of 35 percent when averaged over a six-minute period. However, six-minute averaging periods may exceed 35 percent opacity if:

- (1) no six-minute period exceeds 89 percent opacity;
- (2) no more than one six-minute period exceeds 35 percent opacity in any one hour; and
- (3) no more than four six-minute periods exceed 35 percent opacity in any 24-hour period.

Where the presence of uncombined water vapor is the only reason for failure to meet this opacity limitation, this opacity limitation shall not apply.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

*Eff. February 1, 1976;*

*Amended Eff. July 1, 1998; August 1, 1987; April 1, 1986,*

*January 1, 1985; May 30, 1978.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000*

**.0509 PARTICULATES FROM MICA OR FELDSPAR PROCESSING PLANTS**

(a) The allowable emission rate for particulate matter resulting from the processing of mica or feldspar that are discharged from any chimney, stack, vent, or outlet into the atmosphere shall not exceed the level calculated with the equation  $E = 4(P)^{0.677}$  calculated to three significant figures for process rates less than or equal to 30 tons per hour. For process rates greater than 30 tons per hour but less than 1,000 tons per hour, the allowable emission rate for particulate matter shall not exceed the level calculated with the equation  $E = 20.421(P)^{0.1977}$  calculated to three significant figures. For process rates greater than or equal to 1,000 tons per hour but less than 3,000 tons per hour, the allowable emission rate for particulate matter shall not exceed the level calculated with the equation  $E$

$= 38.147(P)^{0.1072}$  calculated to three significant figures. The allowable emission rate shall be 90.0 pounds per hour for process weight rates equal to or greater than 3,000 tons per hour. For the purpose of these equations, "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process weight rate in tons per hour.

(b) Fugitive non-process dust emissions shall be controlled by Rule .0540 of the Section.

(c) The owner or operator of any mica or feldspar plant shall control process-generated emissions:

- (1) from crushers with wet suppression, and
- (2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in Rule .0521 or .0524, of this Section are not exceeded.

*NCDQAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. April 1, 2003; July 1, 1998; April 1, 1986; January 1, 1985.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000;  
Amended Eff. May 10, 2004.

#### **.0510 PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS**

(a) The owner or operator of a sand, gravel, or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM10 and total suspended particulates.

(b) Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled by Rule .0540 of this Section.

(c) The owner or operator of any sand, gravel, or crushed stone operation shall control process-generated emissions:

- (1) from crushers with wet suppression, and
- (2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in Rule .0521 or .0524, of this Section are not exceeded.

*NCDQAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. July 1, 1998; January 1, 1985.

*WNCRAQA History Note:*        *Adopted Eff. May 8, 2000*

**.0511    PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES**

(a)    The owner or operator of a lightweight aggregate process shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM10 and total suspended particulates, from being exceeded beyond the property line.

(b)    Fugitive non-process dust emissions from lightweight aggregate processes subject to this Rule shall be controlled by Rule .0540 of this Section.

(c)    The owner or operator of any lightweight aggregate process shall control process-generated emissions:

- (1)    from crushers with wet suppression, and
- (2)    from conveyors, screens, and transfer points,

such that the applicable opacity standards in Rule .0521 or .0524, of this Section are not exceeded.

(d)    Particulate matter from any stack serving any lightweight aggregate kiln or lightweight aggregate dryer shall be reduced by at least 95 percent by weight before being discharged to the atmosphere. The 95-percent reduction shall be by air pollution control devices.

*NCDAQ History Note:*        *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. July 1, 1998; October 1, 1989; January 1, 1985; April  
1, 1977.*

*WNCRAQA History Note:*        *Adopted Eff. May 8, 2000*

**.0512    PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS**

A person shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors, or such other devices as approved by the commission, and in no case shall the ambient air quality standards be exceeded beyond the property line. Collection efficiency shall be determined on the basis of weight.

*NCDAQ History Note:*        *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

*Eff. February 1, 1976;*  
*Amended Eff. January 1, 1985.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000*

**.0513 PARTICULATES FROM PORTLAND CEMENT PLANTS**

- (a) Particulate matter from any Portland cement kiln shall:
  - (1) be reduced by at least 99.7 percent by weight before being discharged to the atmosphere; the 99.7-percent reduction shall be by air pollution control devices; and
  - (2) not exceed 0.327 pounds per barrel.
- (b) The emissions of particulate matter from any stacks, vent or outlets from all processes except Portland cement kilns shall be controlled by Rule .0515 of this Section.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
*Eff. February 1, 1976;*  
*Amended Eff. July 1, 1998; January 1, 1985.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000*

**.0514 PARTICULATES FROM FERROUS JOBBING FOUNDRIES**

Particulate emissions from any ferrous jobbing foundry cupola existing before January 2, 1972 shall not exceed:

Process Weight In Lb/Hour	Maximum Allowable Emission Rate For Particulate In Lb/Hr
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.65
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60

18,000	23.40
20,000	25.10

Any foundry existing before January 2, 1972, having a capacity greater than shown in the table and any new foundry, regardless of size, shall comply with the particulate emission limits specified in Paragraph (a) of Rule .0515 of this Section.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. July 1, 1998; April 1, 1986; January 1, 1985.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000.*

#### **.0515 PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

(a) The allowable emission rates for particulate matter from any stack, vent, or outlet of any industrial process for which no other emission control standards are applicable shall not exceed the level calculated with the equation  $E = 4.10(P)^{0.67}$  calculated to three significant figures for process rates less than or equal to 30 tons per hour. For process rates greater than 30 tons per hour, the allowable emission rates for particulate matter shall not exceed the level calculated with the equation  $E = 55.0(P)^{0.11} - 40$  calculated to three significant figures. For the purpose of these equations "E" equals the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process rate in tons per hour.

(b) Process rate means the total weight of all materials introduced into any specific process that may cause any emission of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process rate is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process rate is derived by dividing the process weight for a typical period of time by the number of hours in that typical period of time.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. February 1, 1976;  
Amended Eff. April 1, 2003; July 1, 1998; January 1, 1985.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000;  
Amended Eff. May 10, 2004.*

[Pages 15 Through 22 Reserved]