

1 15A NCAC 02D .0501 is readopted with changes as published in 34:16 NCR 1451 as follows:

2  
3 **SECTION .0500 - EMISSION CONTROL STANDARDS**  
4

5 **15A NCAC 02D .0501 COMPLIANCE WITH EMISSION CONTROL STANDARDS**

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

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

9 (c) In addition to any control or manner of operation necessary to meet emission standards in this Section, any source  
10 of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air  
11 quality standards of ~~Section .0400 of this Subchapter~~ pursuant to 15A NCAC 02D .0400 to be exceeded at any point  
12 beyond the premises on which the source is located. When controls ~~are~~ more stringent than those named in the  
13 applicable emission standards in this Section are required to prevent violation of the ambient air quality standards or  
14 are required to create an offset, the permit shall contain a condition requiring these controls.

15 (d) The Bubble Concept. As provided in this [paragraph,] Paragraph. aA facility with multiple emission sources or  
16 multiple facilities within the same area may choose to meet the total emission limitation for a given pollutant through  
17 a different mix of controls than ~~that those~~ required by the rules ~~in this Section or Section .0900 of this Subchapter.~~  
18 [pursuant to] 15A NCAC 02D .0500 or .0900.

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

21 (A) Sources ~~pursuant to which Rules 15A NCAC 02D .0524, .0530, .0531, .1110 or .1111 of~~  
22 ~~this Subchapter, 1111,~~ the federal New Source Performance Standards (NSPS), the federal  
23 National Emission Standards for Hazardous Air Pollutants ~~(NESHAPS), (NESHAP),~~  
24 regulations established pursuant to ~~Section 111(d)~~ 111(d) of the federal Clean Air Act, or  
25 state or federal Prevention of Significant Deterioration (PSD) requirements apply, shall  
26 have emissions no larger than if there were not an alternative mix of controls;

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

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

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

- (2) The ~~owners(s)~~ owners or ~~operators(s)~~ operators of the facility ~~(facilities)~~ or 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 the attainment and maintenance of the ambient air quality standards and does not interfere with the PSD ~~program;~~ program, which this demonstration shall include modeled calculations of the amount, if any, of PSD increment consumed or created;
- (B) that the alternative mix approach conforms with reasonable further progress requirements as defined in Clean Air Act Section 171(1), in any nonattainment area;
- (C) that the emissions ~~under~~ pursuant to the alternative mix approach are ~~in fact~~ quantifiable, and trades among them are ~~even;~~ equivalent; and
- (D) that the pollutants controlled ~~under~~ pursuant to 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 (SIP)~~ demonstration of attainment for the ~~area in question. Moreover, if area.~~ A copy of the SIPs can be found on the DAQ website at <https://deq.nc.gov/about/divisions/air-quality/air-quality-planning/state-implementation-plans>. 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 ~~or (facilities)~~ facilities subjected to the alternative mix of controls shall be specified in the facility's ~~(facilities') permits(s).~~ permit or facilities' permits.
- (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-Subparagraph~~ 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~~ pursuant to 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 pursuant to~~ 15A NCAC 02Q .0300 or .0500, as applicable.

(1) If ~~and when~~ a permit containing these conditions is issued ~~under pursuant to~~ 15A NCAC 02Q ~~.0300~~ ~~(non Title V permits), .0300~~, it shall become a part of the state implementation plan (SIP) as an appendix available for inspection at the ~~department's~~ Department's regional offices. 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 pursuant to~~ 15A NCAC 02Q .0500 ~~(Title V permits)~~, it shall be available for inspection at the ~~department's~~ Department's regional offices. 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 ~~submitted for~~ approved approval by the 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, 1979~~, 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 Subchapter shall be used.~~

(f) If the 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 pursuant to 15A NCAC 02D .2600 shall be used.

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

*Eff. February 1, 1976;*

*Amended Eff. August 1, 1991; October 1, 1989;*

*Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*

*Amended Eff. June 1, 2008; April 1, 2001; April 1, 1999; July 1, 1996; February 1, 1995; July 1, 1994, 1994;*

*Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0502 is readopted with changes as published in 34:16 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0502 PURPOSE**

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

6  
7 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

8 *Eff. February 1, 1976;*

9 *Amended Eff. June 1, ~~1981~~, 1981;*

10 *Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0503 is readopted with changes as published in 34:16 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0503 PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

4 (a) For the purpose of this ~~Rule~~ Rule, the following definitions shall apply:

5 (1) "Functionally dependent" means that structures, ~~buildings—buildings~~, or equipment are  
6 interconnected through common process streams, supply lines, flues, or stacks.

7 (2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one  
8 fluid by the use of another fluid in which the two fluids are separated by an impervious surface such  
9 that there is no mixing of the two fluids.

10 (3) "Plant site" means any single or collection of structures, buildings, facilities, equipment,  
11 installations, or operations ~~which:~~ that:

12 (A) are located on one or more adjacent ~~properties, properties;~~

13 (B) are ~~under in~~ common legal ~~control, control;~~ and

14 (C) are functionally dependent in their operations.

15 (b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable  
16 emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

17 (c) ~~With the exceptions in Rule .0536 of this Section,~~ The emissions of particulate matter from the combustion of a  
18 fuel that are discharged from any stack or chimney into the atmosphere shall not exceed:

19  
20

21 Maximum Heat Input In 22 Million Btu/Hour	23 Allowable Emission Limit 24 For Particulate Matter 25 In Lb/Million Btu
26 Up to and Including 10	0.60
27 100	0.33
28 1,000	0.18
29 10,000 and Greater	0.10

30 For a heat input between any two consecutive heat inputs stated in the ~~preceding table, table set forth in this Paragraph,~~  
31 the allowable emissions of particulate matter shall be calculated by the equation  ~~$E = 1.090 \text{ times } Q \text{ to the } -0.2594$~~   
~~power.  $E = 1.090 * Q^{-0.2594}$ .  $E =$  "E" equals the allowable emission limit for particulate matter in lb/million Btu.  $Q =$~~   
32 "Q" equals the maximum heat input in million Btu/hour.

33 (d) This Rule applies to installations in which fuel is burned for the purpose of producing heat or power by indirect  
34 heat transfer. Fuels include those such as coal, coke, lignite, peat, natural gas, and fuel oils, but exclude wood and  
35 refuse not burned as a fuel. When any refuse, products, or by-products of a manufacturing process are burned as a  
36 fuel rather than refuse, or in conjunction with any fuel, this allowable emission limit shall apply.

37 (e) For the purpose of this Rule, the maximum heat input shall be the total heat content of all fuels which are burned  
38 in a fuel burning indirect heat exchanger, of which the combustion products are emitted through a stack or stacks. The  
39 sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under  
40 construction, or permitted pursuant to ~~15A NCAC 2Q, 15A NCAC [02D] 02Q,~~ shall be considered as the total heat  
41 input for the purpose of determining the allowable emission limit for particulate matter for each fuel burning indirect

1 heat exchanger. Fuel burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not  
2 change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has  
3 previously been set. The removal of a fuel burning indirect heat exchanger shall not change the allowable emission  
4 limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established.  
5 However, for any fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another  
6 fuel burning indirect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect  
7 heat exchanger shall no longer be considered in the determination of the allowable emission limit of any fuel burning  
8 indirect heat exchanger constructed after or in conjunction with the removal. For the purposes of this Paragraph,  
9 refuse not burned as a fuel and wood shall not be considered a fuel. For residential facilities or ~~institutions (such~~  
10 ~~institutions, such~~ as military and ~~educational)~~educational, whose primary fuel burning capacity is for comfort heat,  
11 only those fuel burning indirect heat exchangers located in the same power plant or building or otherwise physically  
12 ~~interconnected (such interconnected, such~~ as common flues, steam, or power distribution ~~line) line,~~ shall be used to  
13 determine the total heat input.

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

- 17 (1)  $E_c$  = the emission limit for combination or combined emission source(s) in lb/million Btu.  
18 (2)  $E_w$  = plant site emission limit for wood only as determined ~~by Rule .0504 of this Section pursuant~~  
19 ~~to 15A NCAC 02D .0504~~ in lb/million Btu.  
20 (3)  $E_o$  = the plant site emission limit for other fuels only as determined by Paragraphs (a), (b) and (c)  
21 of this Rule in lb/million Btu.  
22 (4)  $Q_w$  = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.  
23 (5)  $Q_o$  = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.  
24 (6)  $Q_t$  =  $Q_w + Q_o$  and is the actual total heat input to combination or combined emission source(s) in  
25 Btu/hr.

26  
27 *History Note:* *Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the*  
28 *permanent rule is effective, whichever is sooner;*  
29 *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
30 *Eff. February 1, 1976;*  
31 *Amended Eff. April 1, 1999; July 1, 1994; August 1, 1991; June 1, 1985; February 1, 1983; 1983;*  
32 *Readopted Eff. November 1, 2020.*  
33

1 15A NCAC 02D .0504 is readopted with changes as published in 34:14 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0504 PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

4 (a) This Rule applies to fuel burning equipment that burns one hundred percent wood. All other fuel burning  
5 equipment that burns both wood and other fuels in combination shall be subject to 15A NCAC 02D .0503. For the  
6 purpose of this ~~Rule~~ Rule, the following definitions shall apply:

- 7 (1) "Functionally dependent" means that structures, buildings or equipment are interconnected through  
8 common process streams, supply lines, flues, or stacks.
- 9 (2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one  
10 fluid by the use of another fluid in which the two fluids are separated by an impervious surface such  
11 that there is no mixing of the two fluids.
- 12 (3) "Plant site" means any single or collection of structures, buildings, facilities, equipment,  
13 installations, or operations ~~which:~~ that:
- 14 (A) are located on one or more adjacent properties;
- 15 (B) are under [in] common legal control; and
- 16 (C) are functionally dependent in their operations.

17 (b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable  
18 emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

19 (c) Emissions of particulate matter from the combustion of wood shall not exceed:

20

21 22 23 24	Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In <del>Lb</del> lb/Million Btu
25	Up to and Including 10	0.70
26	100	0.41
27	1,000	0.25
28	10,000 and Greater	0.15

29

30 For a heat input between any two consecutive heat inputs stated in the ~~preceding table, table set forth in this Paragraph,~~  
31 the allowable emissions of particulate matter shall be calculated by the equation  ~~$E = 1.1698 (Q \text{ to the } 0.2230 \text{ power})$~~   
32  ~~$[E = 1.1698 * Q^{.2230}]$~~   $E = 1.1698 * Q^{.2230}$ . E = "E" equals the allowable emission limit for particulate matter in lb/million  
33 Btu. Q = "Q" equals the Maximum heat input in million Btu/hour.

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

36 (e) For the purpose of this Rule, the heat content of wood shall be 8,000 Btu per pound (dry-weight basis). The ~~total~~  
37 sum of maximum heat inputs of all wood burning indirect heat exchangers at a plant site that are in operation, under  
38 construction, or permitted pursuant to 15A NCAC [02D] 02Q, ~~with a permit shall be used to determine shall be~~  
39 considered as the total heat input for the purpose of determining the allowable emission limit ~~of a~~ for particulate matter  
40 for each 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. The removal of a wood burning indirect heat exchanger shall not change the allowable emission limit of any wood burning indirect heat exchanger subject to this Rule whose allowable emission limit has previously been established. However, for any wood burning indirect heat exchanger subject to this Rule constructed after, or in conjunction with, the removal of another wood burning indirect heat exchanger at the plant site, the maximum heat input of the removed wood burning indirect heat exchanger shall no longer be considered in the determination of the allowable emission limit of any wood burning indirect heat exchanger subject to this Rule constructed after or in conjunction with the removal. For facilities or institutions, such as military and educational, whose primary wood burning capacity is for comfort heat, only those wood burning indirect heat exchangers subject to this Rule 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 combination basis shall be calculated by the procedure described in Paragraph (f) of Rule .0503 of this Section.~~

*History Note: Authority G.S. 143-213; 143-215.3(a)(1); 143-215.107(a)(5); 143-215.107(h)(1);  
Eff. February 1, 1976;  
Amended Eff. August 1, 2002; April 1, 1999; June 1, 1985; February 1, 1983; 1983-1983;  
Readopted Eff. November 1, 2020.*



1 15A NCAC 02D .0506 is readopted with changes as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0506 PARTICULATES FROM HOT MIX ASPHALT PLANTS**

4 (a) The allowable emission rate for particulate matter resulting from the operation of a hot mix asphalt plant that are  
5 discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation  $E =$   
6  $4.9445(P)^{0.4376}$  calculated to three significant figures, for process rates less than 300 tons per hour, where "E" equals  
7 the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process rate in tons  
8 per hour. The allowable emission rate shall be 60.0 pounds per hour for process rates equal to or greater than 300 tons  
9 per hour.

10 (b) Visible emissions from stacks or vents at a hot mix asphalt plant shall ~~be less than~~ not exceed 20 percent opacity  
11 when averaged over a six-minute period.

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

16 (d) Fugitive non-process dust emissions shall be controlled by ~~Rule .0540 of this Section.~~ 15A NCAC 02D .0540.

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

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

21  
22 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

23 *Eff. February 1, 1976;*

24 *Amended Eff. August 1, 2004; July 1, 1998; January 1, ~~1985~~ 1985;*

25 *Readopted Eff. November 1, 2020.*  
26

1 15A NCAC 02D .0508 is readopted with changes as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0508 PARTICULATES FROM PULP AND PAPER MILLS**

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

- 6 (1) 3.0 pounds per equivalent ton of air dried pulp from a recovery furnace stack;  
7 (2) 0.6 pounds per equivalent ton of air dried pulp from a dissolving tank vent; and  
8 (3) 0.5 pounds per equivalent ton of air dried pulp from a lime kiln stack.

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

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

15 Where the presence of uncombined water vapor is the only reason for failure to meet this opacity limitation, ~~this~~  
16 ~~opacity limitation~~ the opacity limitation set forth in this Paragraph shall not apply.

17  
18 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

19 *Eff. February 1, 1976;*

20 *Amended Eff. July 1, 1998; August 1, 1987; April 1, 1986; January 1, 1985; May 30, ~~1978-1978~~;*

21 *Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0510 is readopted with changes as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0510 PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE**  
4 **OPERATIONS**

5 (a) The owner or operator of a sand, gravel, or crushed stone operation shall not cause, allow, or permit any material  
6 to be produced, handled, transported or stockpiled without taking ~~measures~~ measures, such as application of a dust or  
7 wet suppressant, soil stabilizers, covers, or add-on particulate control devices, to reduce to a minimum any particulate  
8 matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for  
9 particulate matter, both PM10 and total suspended particulates.

10 (b) Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled by ~~Rule~~  
11 ~~.0540 of this Section.~~ 15A NCAC 02D .0540.

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

13 (1) from crushers with wet ~~suppression~~ suppression; and

14 (2) from conveyors, screens, and transfer points,

15 such that the applicable opacity standards in ~~Rule .0521 or .0524, of this Section~~ 15A NCAC 02D .0521 or .0524 are  
16 not exceeded.

17  
18 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

19 *Eff. February 1, 1976;*

20 *Amended Eff. July 1, 1998; January 1, ~~1985~~ 1985;*

21 *Readopted. Eff. November 1, 2020.*

1 15A NCAC 02D .0511 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0511 PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES**

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

8 (b) Fugitive non-process dust emissions from lightweight aggregate processes subject to this Rule shall ~~be controlled~~  
9 ~~by Rule .0540 of this Section.~~ meet the requirement of 15A NCAC 02D .0540.

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

11 (1) from crushers with wet ~~suppression~~, suppression; and

12 (2) from conveyors, screens, and transfer points,

13 such that the applicable opacity standards in ~~Rule .0521 or .0524, of this Section~~ 15A NCAC 02D .0521 or .0524 are  
14 not exceeded.

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

18  
19 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

20 *Eff. February 1, 1976;*

21 *Amended Eff. July 1, 1998; October 1, 1989; January 1, 1985; April 1, ~~1977~~ 1977;*

22 *Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0512 is readopted with changes as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0512 PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS**

4 A person shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to  
5 be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection,  
6 duct work and collectors that are properly designed and adequate to collect particulate to the maximum extent  
7 practicable, adequate duct work and properly designed collectors, or such other devices as approved by the  
8 Commission, and in Commission. Commission approval of other devices proposed to meet the requirements of this  
9 Rule shall occur on a case-by-case basis. In no case shall the ambient air quality standards be exceeded beyond the  
10 property line. Collection efficiency shall be determined on the basis of weight.

11  
12 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

13 *Eff. February 1, 1976;*

14 *Amended Eff. January 1, ~~1985~~1985;*

15 *Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0513 is readopted with changes as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0513 PARTICULATES FROM PORTLAND CEMENT PLANTS**

4 (a) Particulate matter from any Portland cement kiln shall:

- 5 (1) be reduced by at least 99.7 percent by weight before being discharged to the atmosphere; ~~the 99.7-~~  
6 ~~percent reduction shall be by air pollution control devices;~~ and  
7 (2) not exceed 0.327 pounds per barrel.

8 (b) The emissions of particulate matter from any stacks, ~~vent-vent,~~ or outlets from all processes except Portland  
9 cement kilns shall be controlled ~~by Rule .0515 of this Section.~~ pursuant to 15A NCAC 02D .0515.

10  
11 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
12 Eff. February 1, 1976;  
13 Amended Eff. July 1, 1998; January 1, ~~1985-1985;~~  
14 Readopted Eff. November 1, 2020.  
15

1 15A NCAC 02D .0521 is readopted with changes as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0521 CONTROL OF VISIBLE EMISSIONS**

4 (a) Purpose. The intent of this Rule is to prevent, ~~abate~~ abate, and control emissions generated from fuel burning  
5 operations and industrial processes where an emission can ~~reasonably~~ be expected to occur, except during  
6 ~~startup, startups~~, shutdowns, and malfunctions approved according to procedures ~~set out in Rule .0535 of this Section.~~  
7 15A NCAC 02D .0535.

8 (b) Scope. This Rule shall apply to all fuel burning sources and to other industrial processes ~~that may have~~ having a  
9 visible ~~emission. However, emission.~~ Sources subject to a specific visible emission standard in ~~Rules~~ 15A NCAC 02D  
10 .0506, .0508, .0524, .0543, .0544, .1110, .1111, .1205, .1206, or .1210, .1210, .1211, or .1212 of this Subchapter shall  
11 meet that standard instead of the standard contained in this Rule. This Rule does not apply to engine maintenance,  
12 rebuild, and testing activities where controls are infeasible, ~~except~~ but it does apply to the testing of peak shaving and  
13 emergency generators. ~~(In In deciding if controls are infeasible, the Director shall consider emissions, capital cost of~~  
14 ~~compliance, annual incremental compliance cost, and environmental and health impacts.)~~ impacts.

15 (c) For sources manufactured as of July 1, 1971, visible emissions shall not be more than 40 percent opacity when  
16 averaged over a six-minute period. However, except for sources required to comply with Paragraph (g) of this Rule,  
17 six-minute averaging periods may exceed 40 percent opacity if:

- 18 (1) ~~No~~ no six-minute period exceeds 90 percent opacity;  
19 (2) ~~No~~ no more than one six-minute period exceeds 40 percent opacity in any hour; and  
20 (3) ~~No~~ no more than four six-minute periods exceed 40 percent opacity in any 24-hour period.

21 (d) For sources manufactured after July 1, 1971, visible emissions shall not be more than 20 percent opacity when  
22 averaged over a six-minute period. ~~However, except~~ Except for sources required to comply with Paragraph (g) of this  
23 Rule, six-minute averaging periods may exceed 20 percent opacity if:

- 24 (1) ~~No~~ no six-minute period exceeds 87 percent opacity;  
25 (2) ~~No~~ no more than one six-minute period exceeds 20 percent opacity in any hour; and  
26 (3) ~~No~~ no more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

27 (e) Where the presence of uncombined water ~~is the only reason for~~ contributes solely to the failure of an emission to  
28 meet the limitations of Paragraph (c) or (d) of this Rule, those requirements shall not apply.

29 (f) Exception from Opacity Standard in Paragraph (d) of this Rule. Sources subject to Paragraph (d) of this Rule shall  
30 be allowed to comply with Paragraph (c) of this Rule if:

- 31 (1) ~~The~~ the owner or operator of the source demonstrates compliance with applicable particulate mass  
32 emissions standards; and  
33 (2) ~~The~~ the owner or operator of the source submits data ~~necessary~~ to show that emissions up to those  
34 allowed by Paragraph (c) of this Rule shall not violate any national ambient air quality standard.

35 The burden of proving these conditions shall be on the owner or operator of the source and shall be approached in ~~the~~  
36 ~~following manner, accordance with this Paragraph.~~ The owner or operator of a source seeking an exception shall  
37 apply to the Director requesting this modification in its permit. The applicant shall submit the results of a source test

1 within 90 days of application. Source testing shall be by the appropriate procedure as designated by rules in this  
2 Subchapter. During this 90-day period the applicant shall submit data necessary to show that emissions up to those  
3 allowed by Paragraph (c) of this Rule will not contravene ambient air quality standards. This evidence shall include  
4 an inventory of past and projected emissions from the facility. In its review of ambient air quality, the Division may  
5 require additional information that it considers necessary to assess the resulting ambient air quality. If the applicant  
6 can thus show that it will be in compliance both with particulate mass emissions standards and ambient air quality  
7 standards, the Director shall modify the permit to allow emissions up to those allowed by Paragraph (c) of this Rule.  
8 (g) For sources required to install, operate, and maintain continuous opacity monitoring systems (COMS), compliance  
9 with the numerical opacity limits in this Rule shall be determined as follows excluding startups, shutdowns,  
10 maintenance periods when fuel is not being combusted, and malfunctions approved as such according to procedures  
11 approved under ~~Rule 15A NCAC 02D .0535~~ of this Section:

- 12 (1) ~~No~~ no more than four six-minute periods shall exceed the opacity standard in any one day; and
- 13 (2) ~~The~~ the percent of excess emissions (~~defined, defined~~ as the percentage of monitored operating time  
14 in a calendar quarter above the opacity ~~limit~~) limit, shall not exceed 0.8 percent of the total operating  
15 hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess  
16 emissions shall be calculated by including hours operated immediately ~~previous~~ prior to this quarter  
17 until 500 operational hours are obtained.

18 In no instance shall excess emissions exempted ~~under~~ pursuant to this Paragraph cause or contribute to a violation of  
19 any emission standard in this Subchapter or 40 CFR Part 60, 61, or 63 or any ambient air quality standard in ~~Section~~  
20 15A NCAC 02D .0400 or 40 CFR Part 50.

21  
22 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

23 *Eff. February 1, 1976;*

24 *Amended Eff. January 1, 2009; July 1, 2007; January 1, 2005; June 1, 2004; April 1, 2003; April*  
25 *1, 2001; July 1, 1998; July 1, 1996; December 1, 1992; August 1, 1987; January 1, 1985; May 30,*  
26 *~~1978-1978;~~*

27 *Readopted Eff. November 1, 2020.*



1 15A NCAC 02D .0524 is readopted with changes as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0524 NEW SOURCE PERFORMANCE STANDARDS**

4 (a) With the exception of Paragraph (b) and (c) of this Rule, sources subject to new source performance standards  
5 promulgated in 40 CFR Part 60 shall comply with emission standards, monitoring and reporting requirements,  
6 maintenance requirements, notification and record keeping requirements, performance test requirements, test method  
7 and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable  
8 rule in this Section ~~which that~~ would be in conflict therewith.

9 (b) The following ~~is are~~ not included ~~under pursuant to~~ this Rule:

- 10 (1) 40 CFR Part 60, Subpart ~~AAA (new residential wood heaters);AAA;~~  
11 (2) 40 CFR Part 60, Subpart ~~B (adoption and submittal of state plans for designated facilities);B;~~  
12 (3) 40 CFR Part 60, Subpart ~~C (emission guidelines and compliance times);C;~~  
13 (4) 40 CFR Part 60, Subpart ~~Cb (guidelines for municipal waste combustors constructed on or before~~  
14 ~~September 20, 1994);Cb;~~  
15 (5) 40 CFR Part 60, Subpart ~~Cc (guidelines for municipal solid waste landfills);Cc;~~  
16 (6) 40 CFR Part 60, Subpart ~~Cd (guidelines for sulfuric acid production units);Cd;~~  
17 (7) 40 CFR Part 60, Subpart ~~Ce (guidelines for hospital, medical, infectious waste incinerators);Ce;~~  
18 (8) 40 CFR Part 60, Subpart ~~BBBB (guidelines for small municipal waste combustion units constructed~~  
19 ~~on or before August 30, 1999);BBBB;~~  
20 (9) 40 CFR Part 60, Subpart ~~DDDD (guidelines for commercial and industrial solid waste incinerators~~  
21 ~~constructed on or before November 30, 1999);DDDD;~~  
22 (10) 40 CFR Part 60, Subpart ~~FFFF (guidelines for other solid waste incinerators constructed on or before~~  
23 ~~December 9, 2004);FFFF; or~~  
24 (11) 40 CFR Part 60, Subpart ~~HHHH (guidelines for coal-fired electric steam generating units);HHHH.~~

25 (c) Along with the notice appearing in the North Carolina Register for a public hearing to amend this Rule to exclude  
26 a standard from this Rule, the Director shall state whether or not the new source performance standards promulgated  
27 under 40 CFR Part 60, or part thereof, shall be enforced. If the Environmental Management Commission does not  
28 adopt the amendment to this Rule to exclude or amend the standard within 12 months after the close of the comment  
29 period on the proposed amendment, the Director shall begin enforcing that standard when 12 months has elapsed after  
30 the end of the comment period on the proposed amendment.

31 (d) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as  
32 nonattainment for ozone or an area identified in accordance with 15A NCAC 02D .0902 as being in violation of the  
33 ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 60 ~~that~~ are not excluded by  
34 this Rule, as well as with any applicable requirements in ~~Section .0900 of this Subchapter.~~ 15A NCAC 02D .0900.

35 (e) All requests, reports, applications, submittals, and other communications to the administrator required under  
36 Paragraph (a) of this Rule shall be submitted to the Director ~~of the Division of Air Quality~~ rather than to the  
37 Environmental Protection Agency.

1 (f) In the application of this Rule, definitions contained in 40 CFR Part 60 shall apply rather than those of Section  
2 ~~.0100 of this Subchapter.~~ in 15A NCAC 02D .0100.

3 (g) With the exceptions allowed ~~under~~ in 15A NCAC 02Q .0102, Activities Exempted from Permit Requirements,  
4 the owner or operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500.

5  
6 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); ~~150B-21.6;~~

7 *Eff. June 18, 1976;*

8 *Temporary Amendment Eff. January 3, 1988, for a period of 180 days to expire on June 30, 1988;*

9 *Amended Eff. December 1, 1992; July 1, 1992;*

10 *Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent rule is*  
11 *effective, whichever is sooner;*

12 *Amended Eff. July 1, 2007; January 1, 2007; July 1, 2000; April 1, 1997; July 1, 1996; July 1,*  
13 *~~1994-1994;~~*

14 *Readopted Eff. November 1, 2020.*  
15  
16

1 15A NCAC 02D .0528 is readopted with changes as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0528 TOTAL REDUCED SULFUR FROM KRAFT PULP MILLS**

4 (a) ~~For the purpose of this Regulation, the following definitions apply:~~

- 5 (1) ~~"Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl~~  
6 ~~mercaptain, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping~~  
7 ~~operation.~~
- 8 (2) ~~"Kraft pulp mill" means any facility that produces pulp from wood by cooking (digesting) wood~~  
9 ~~chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature~~  
10 ~~and pressure. Regeneration of cooking chemicals through a recovery process is also considered part~~  
11 ~~of the kraft pulp mill.~~
- 12 (3) ~~"Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace and~~  
13 ~~includes the direct contact evaporator for a direct contact furnace.~~
- 14 (4) ~~"Cross recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium~~  
15 ~~and sulfur compounds by burning black liquor which on a quarterly basis contains more than seven~~  
16 ~~percent by weight of the total pulp solids from the neutral sulfite semichemical process and has a~~  
17 ~~green liquor sulfidity of more than 28 percent.~~
- 18 (5) ~~"Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of~~  
19 ~~sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven~~  
20 ~~percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or~~  
21 ~~has green liquor sulfidity of 28 percent or less.~~
- 22 (6) ~~"Old design recovery furnace" means a straight kraft recovery furnace that does not have membrane~~  
23 ~~wall or welded wall construction or emission control designed air systems.~~
- 24 (7) ~~"New design recovery furnace" means a straight kraft recovery furnace that has both membrane wall~~  
25 ~~or welded wall construction and emission control designed air systems.~~
- 26 (8) ~~"Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced~~  
27 ~~from wood by cooking (digesting) wood chips in a solution of sodium sulfite and sodium~~  
28 ~~bicarbonate, followed by mechanical defibrating (grinding).~~
- 29 (9) ~~"Digester system" means each continuous digester or each batch digester used for the cooking of~~  
30 ~~wood in white liquor, and associated flash tanks, blow tanks, chip steamers and condensers.~~
- 31 (10) ~~"Multiple effect evaporator system" means the multiple effect evaporators and associated~~  
32 ~~condensers and hot wells used to concentrate the spent cooking liquid that is separated from the pulp~~  
33 ~~(black liquor).~~
- 34 (11) ~~"Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate,~~  
35 ~~into quicklime, which is calcium oxide.~~

1 (12) ~~"Condensate stripper system" means a column, and associated condensers, used to strip, with air or~~  
2 ~~steam, total reduced sulfur compounds from condensate streams from various processes within a~~  
3 ~~kraft pulp mill.~~

4 (13) ~~"Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery~~  
5 ~~furnace.~~

6 (14) ~~"Black liquor solids" means the dry weight of the solids which enter the recovery furnace in the~~  
7 ~~black liquor.~~

8 (15) ~~"Green liquor sulfidity" means the sulfidity of the liquor which leaves the smelt dissolving tank.~~

9 (a) For the purpose of this Rule, the following definitions apply:

10 (1) "Black liquor solids" means the dry weight of the solids~~[which]~~ that enter the recovery furnace in  
11 the black liquor.

12 (2) "Condensate stripper system" means a column, and associated condensers, used to strip, with air or  
13 steam, total reduced sulfur compounds from condensate streams from various processes within a  
14 kraft pulp mill.

15 (3) "Cross recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium  
16 and sulfur compounds by burning black liquor which on a quarterly basis contains more than seven  
17 percent by weight of the total pulp solids from the neutral sulfite semichemical process and has a  
18 green liquor sulfidity of more than 28 percent.

19 (4) "Digester system" means each continuous digester or each batch digester used for the cooking of  
20 wood in white~~[liquor,]~~ liquor and associated flash tanks, blow tanks, chip~~[steamers]~~ steamers, and  
21 condensers.

22 (5) "Green liquor sulfidity" means the sulfidity of the liquor~~[which]~~ that leaves the smelt dissolving  
23 tank.

24 (6) "Kraft pulp mill" means any facility that produces pulp from wood by "cooking", industry term for  
25 digesting, wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at  
26 high temperature and pressure. Regeneration of cooking chemicals through a recovery process is  
27 also considered part of the kraft pulp mill.

28 (7) "Lime kiln" means a unit used to calcine lime~~[mud, which]~~ mud that consists primarily of calcium  
29 carbonate, into quicklime, which is calcium oxide.

30 (8) "Multiple-effect evaporator system" means the multiple-effect evaporators and associated  
31 condensers and hot wells used to concentrate the spent cooking liquid that is separated from the  
32 pulp, known in the industry as "black liquor".

33 (9) "Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced  
34 from wood by "cooking", industry term for digesting, wood chips in a solution of sodium sulfite  
35 and sodium bicarbonate, followed by mechanical defibrating, also called grinding the wood~~[pulp]~~  
36 pulp, to separate into its fibrous constituents.

(10) "New design recovery furnace" means a straight kraft recovery furnace that has both membrane wall or welded wall construction and emission control designed air systems.

(11) "Old design recovery furnace" means a straight kraft recovery furnace that does not have membrane wall or welded wall construction or emission control designed air systems.

(12) "Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace and includes the direct-contact evaporator for a direct-contact furnace.

(13) "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery furnace.

(14) "Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or has green liquor sulfidity of 28 percent or less.

(15) "Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptain, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation.

(b) This ~~Regulation~~ Rule shall apply to recovery furnaces, digester systems, multiple-effect evaporator systems, lime kilns, smelt dissolving tanks, and condensate stripping systems of kraft pulp mills not subject to ~~Regulation .0524 of this Section.~~ 15A NCAC 02D .0524.

(c) Emissions of total reduced sulfur from any kraft pulp mill subject to this ~~Regulation~~ Rule shall not exceed:

- (1) 20 parts per million from any old design recovery furnace;
- (2) five parts per million from any new design recovery furnace;
- (3) 25 parts per million from any cross recovery furnace;
- (4) five parts per million from any digester system;
- (5) five parts per million from any multiple-effect evaporator system;
- (6) 20 parts per million from any lime kiln;
- (7) five parts per million from any condensate stripping system; and
- (8) 0.032 pounds per ton of black liquor solids (dry weight) from any smelt dissolving tank.

(d) The emission limitations given in Subparagraphs (c)(1) through (c)(7) of this Rule are measured as hydrogen sulfide on a dry gas basis and are averages of discrete contiguous 12-hour time periods. The emission limitations given in Subparagraphs (c)(1) through (c)(3) of this Rule are corrected to eight percent oxygen by volume. The emission limitations given in Subparagraph (c)(6) of this Rule is corrected to ~~10~~ ten percent oxygen by volume.

(e) One percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitations given in Subparagraphs (c)(1) through (c)(3) of this Rule, in the absence of start-ups, shut-downs and malfunctions, shall not be considered in violation. Two percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitation given in Subparagraph (c)(6) of this Rule, in the absence of start-ups, shut-downs, and malfunctions, shall not be considered in violation.

1    *History Note:*    *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
2                            *Eff. June 1, 1980;*  
3                            *Amended Eff. July 1, 1988; July 1, 1987; January 1, 1985; November 1, ~~1982~~; 1982;*  
4                            *Readopted Eff. November 1, 2020.*  
5

1 15A NCAC 02D .0529 is readopted with changes as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0529 FLUORIDE EMISSIONS FROM PRIMARY ALUMINUM REDUCTION PLANTS**

4 (a) For the purpose of this Rule, the following definitions apply:

- 5 (1) "Fluoride" means elemental fluorine and all fluoride compounds as measured by the methods  
6 specified in 15A NCAC 02D .2616 or by other equivalent or alternative methods demonstrated to  
7 be equivalent to those set forth in Rule 15A NCAC 02D .2616 approved by the ~~Director or his~~  
8 ~~delegate, Director on a case-by-case basis.~~ The Director may approve equivalent or alternative  
9 methods on an individual basis for sources or pollutants if equivalent or alternative methods can be  
10 demonstrated to determine compliance of permitted emission sources or pollutants.  
11 (2) "Prebake cell" is an aluminum reduction pot ~~which uses~~ using carbon anodes ~~that are~~ formed,  
12 pressed, and baked prior to their placement in the pot.  
13 (3) "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic  
14 reduction.

15 (b) This Rule shall apply to prebake cells at all primary aluminum reduction plants not subject to ~~Rule .0524 of this~~  
16 ~~Section.~~ 15A NCAC 02D .0524.

17 (c) An owner or operator of a primary aluminum reduction plant subject to this Rule shall not cause, allow, or permit  
18 the use of the ~~rebake~~ prebake cells unless:

- 19 (1) 95 percent of the fluoride emissions are captured; and  
20 (2) 98.5 percent of the captured fluoride emissions are removed before the exhaust gas is discharged  
21 into the atmosphere.

22 (d) The owner or operator of a primary aluminum reduction plant subject to this Rule shall:

- 23 (1) ensure ~~that~~ hood covers are in good repair and positioned over the prebake cells;  
24 (2) minimize the amount of time ~~that~~ hood covers are removed during pot working operations;  
25 (3) if the hooding system is equipped with a dual low and high hood exhaust rate, use the high rate  
26 whenever hood covers are removed and return to the normal exhaust rate when the hood covers are  
27 replaced;  
28 (4) minimize the occurrence of fuming pots and correct the cause of a fuming pot as soon as practical;  
29 and  
30 (5) if the tapping crucibles are equipped with hoses ~~which that~~ return aspirator air under the hood, ensure  
31 ~~that~~ the hoses are in good repair and ~~that~~ the air return system is functioning properly, by ensuring  
32 operation in accordance with the manufacturer's specifications.

33  
34 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
35 Eff. June 1, 1981;  
36 Amended Eff. June 1, 2008; July 1, 1988; January 1, ~~1985~~ 1985;  
37 Readopted Eff. November 1, 2020.

1 15A NCAC 02D .0531 is readopted with changes as published in 34:16 NCR 1456 as follows:

2  
3 **15A NCAC 02D .0531 SOURCES IN NONATTAINMENT AREAS**

4 (a) ~~For the purpose of this Rule, The purpose of this Rule is to implement a program for new source review in~~  
5 ~~nonattainment areas as required by 40 CFR 51.165. [and] the The definitions contained in 40 CFR 51.165(a)(1) and~~  
6 ~~40 CFR 51.301 shall apply, except for the definition of "baseline actual emissions." For the purposes of this Rule:~~  
7 following:

8 (1) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source  
9 review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this  
10 ~~[Subparagraph:] Subparagraph as follows: Subparagraph: [Subparagraphs] [(2)] [through] [(4)] [of~~  
11 ~~this Paragraph:]~~

12 ~~(A) [(2)]~~ For an existing emissions unit, baseline actual emissions means the average rate, in tons  
13 per year, at which the emissions unit actually emitted the pollutant during any consecutive  
14 24-month period selected by the owner or operator within the five year period immediately  
15 preceding the date that a complete permit application is received by the Division for a  
16 permit required under this Rule. The Director shall allow a different time period, not to  
17 exceed 10 years immediately preceding the date that a complete permit application is  
18 received by the Division, if the owner or operator demonstrates that it is more  
19 representative of normal source operation. For the purpose of determining baseline actual  
20 emissions, the following apply:

21 ~~(i) [(A)]~~ The average rate shall include fugitive emissions to the extent quantifiable, and  
22 emissions associated with startups, shutdowns, and malfunctions;

23 ~~(ii) [(B)]~~ The average rate shall be adjusted downward to exclude any non-compliant  
24 emissions that occurred while the source was operating above any emission  
25 limitation that was legally enforceable during the consecutive 24-month period;

26 ~~(iii) [(C)]~~ For an existing emission unit (other than an electric utility steam generating unit),  
27 the average rate shall be adjusted downward to exclude any emissions that would  
28 have exceeded an emission limitation with which the major stationary source must  
29 currently comply. However, if the State has taken credit in an attainment  
30 demonstration or maintenance plan consistent with the requirements of 40 CFR  
31 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum  
32 achievable control technology standard that the Administrator proposed or  
33 promulgated under Part 63 in Title 40 of the Code of Federal Regulations, the  
34 baseline actual emissions shall be adjusted to account for such emission  
35 reductions;



(iv)~~(D)~~ For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G.S. 143-215.107D and for which cost recovery is sought pursuant to G.S. 62-133.6;

(v)~~(E)~~ For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant; and

(vi)~~(F)~~ The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;

(B)~~(3)~~ For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and

(C)~~(4)~~ For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this Subparagraph;

~~(2)(b)~~ In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.165(a)(1)(vi)(C)(1) is seven ~~years; and years.~~

~~(3)(c)~~ ~~Particulate matter~~ PM<sub>2.5</sub> significant levels in 40 CFR 51.165(a)(1)(x)(A) are incorporated by reference except as otherwise provided in this Rule. Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) are precursors to ~~PM<sub>2.5</sub>~~ PM<sub>2.5</sub> in all nonattainment areas. Volatile organic compounds and ammonia are not significant precursors to ~~PM<sub>2.5</sub>~~ PM<sub>2.5</sub>.

~~(d)~~ In 40 CFR 51.165(a)(1)(xxvii)(D), starting January 1, 2011, in addition to PM<sub>10</sub> and PM<sub>2.5</sub>, for particulate matter (PM), condensable particulate matter shall be accounted for in applicability determinations and in establishing emission limitations for each of these regulated NSR pollutants in nonattainment major NSR permits.

~~(b)(e)~~ Redesignation to Attainment. If any county or part of a county to which this Rule applies is later designated in 40 CFR 81.334 as attainment, all sources in that county subject to this Rule before the redesignation date shall continue to comply with this Rule.

~~(e)(f)~~ Applicability. 40 CFR 51.165(a)(2) is incorporated by reference. This Rule applies to areas designated as nonattainment in 40 CFR 81.334, including any subsequent amendments or editions.

~~(4)(g)~~ This Rule is not applicable to:

- ~~(1)~~ ~~complex sources of air pollution regulated only under Section .0800 of this Subchapter and not under any other rule in this Subchapter;~~
- ~~(2)(1)~~ emission of pollutants at the new major stationary source or major modification located in the nonattainment area that are pollutants other than the pollutant or pollutants for which the area is

nonattainment. ~~(A) A~~ major stationary source or major modification that is major for volatile organic compounds or nitrogen oxides is also major for ~~ozone~~; ozone;

~~(3)(2)~~ emission of pollutants for which the source or modification is not major;

~~(4)(3)~~ a new source or modification that qualifies for exemption under the provision of 40 CFR 51.165(a)(4); or

~~(5)(4)~~ emission of compounds listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity except carbon monoxide.

~~(e)(h)~~ 15A NCAC 02Q .0102 ~~and .0302~~ are is not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500.

~~(f)(i)~~ To issue a permit to a source to which this Rule applies, the Director shall determine that the source meets the following requirements:

- (1) The new major stationary source or major modification will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate;
- (2) The owner or operator of the proposed new major stationary source or major modification has demonstrated that all major stationary sources in the State that are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance that is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter that EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality;
- (3) The owner or operator of the proposed new major stationary source or major modification will obtain sufficient emission reductions of the nonattainment pollutant from other sources in the nonattainment area so that the emissions from the new major source and any associated new minor sources will be less than the emissions reductions by a ratio of at least 1.00 to 1.15 for volatile organic compounds and nitrogen oxides and by a ratio of less than one to one for carbon monoxide. The baseline for this emission offset shall be the actual emissions of the source from which offset credit is obtained. Emission reductions shall not include any reductions resulting from compliance (or scheduled compliance) with applicable rules in effect before the application. The difference between the emissions from the new major source and associated new minor sources of carbon monoxide and the emission reductions shall be sufficient to represent reasonable further progress toward attaining the National Ambient Air Quality Standards. The emissions reduction credits shall also conform to the provisions of 40 CFR 51.165(a)(3)(ii)(A) through (G) and (J); and
- (4) The North Carolina State Implementation Plan for Air Quality is being carried out for the nonattainment area in which the proposed source is located.

~~(g)(j)~~ New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-133.6 shall install lowest achievable emission rate technology for NO<sub>x</sub> and SO<sub>2</sub>, regardless of the applicability of the rest of this Rule.

1 ~~(h)(k)~~ For the purposes of this Rule, 40 CFR 51.165(f) is incorporated by reference except that 40 CFR  
2 51.165(f)(10)(iv)(A) reads: "If the emissions level calculated in accordance with Paragraph (f)(6) of this Section is  
3 equal to or greater than 80 percent of the PAL level, the Director shall renew the PAL at the same level." 40 CFR  
4 51.165(f)(10)(iv)(B) is not incorporated by reference.

5 ~~(i)(l)~~ When a particular source or modification becomes a major stationary source or major modification solely by  
6 virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or  
7 modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply  
8 to the source or modification as though construction had not yet begun on the source or modification.

9 ~~(j)(m)~~ To issue a permit to a source of a nonattainment pollutant, the Director shall determine, in accordance with  
10 Section 173(a)(5) of the Clean Air Act and in addition to the other requirements of this Rule, that an analysis (produced  
11 by the permit applicant) of alternative sites, sizes, production processes, and environmental control techniques for the  
12 source demonstrates that the benefits of the source significantly outweigh the environmental and social costs imposed  
13 as a result of its location, construction, or modification.

14 ~~(k)(n)~~ For the purposes of this Rule, the provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval  
15 to construct are incorporated by reference except that the term "Administrator" is replaced with "Director."

16 ~~(l)(o)~~ Approval of an application regarding the requirements of this Rule does not relieve the owner or operator of  
17 the responsibility to comply with applicable provisions of other rules of this Chapter and any other requirements ~~under~~  
18 in local, ~~state~~, State, or federal law.

19 ~~(m)(p)~~ Except as provided in 40 CFR 52.28(c)(6), for a source or modification subject to this Rule the following  
20 procedures shall be followed:

- 21 (1) Notwithstanding any other provisions of this Paragraph, the Director shall, no later than 60 days  
22 after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior  
23 and U.S. Department of Agriculture of an application from a source or modification subject to this  
24 Rule;
- 25 (2) The owner or operator of the source shall provide an analysis of the impairment to visibility that  
26 would occur because of the source or modification and general commercial, industrial and other  
27 growth associated with the source or modification;
- 28 (3) When a source or modification may affect the visibility of a Class I area, the Director shall provide  
29 written notification to all affected Federal Land Managers within 30 days of receiving the permit  
30 application or within 30 days of receiving advance notification of an application. The notification  
31 shall be given at least 30 days before the publication of the notice for public comment on the  
32 application. The notification shall include a copy of all information relevant to the permit  
33 application, including an analysis provided by the source of the potential impact of the proposed  
34 source on visibility;
- 35 (4) The Director shall consider any analysis concerning visibility impairment performed by the Federal  
36 Land Manager if the analysis is received within 30 days of notification. If the Director finds that  
37 the analysis of the Federal Land Manager fails to demonstrate to the Director's satisfaction that an

adverse impact on visibility will result in the Class I area, the Director shall follow the public hearing process described in 40 CFR 51.307(a)(3) on the application and include an explanation of the Director's decision or notice where the explanation can be obtained;

- (5) The Director shall issue permits only to those sources whose emissions will be consistent with making reasonable progress, as defined in Section 169A of the Clean Air Act, toward the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I areas when the impairment results from manmade air pollution. In making the decision to issue a permit, the Director shall consider the cost of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source; and

- (6) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

The requirements of this Paragraph do not apply to nonprofit health or nonprofit educational institutions.

~~(a)(q)~~ In lieu of the requirements in 40 CFR 51.165(a)(6) and (7), this Paragraph shall apply. If the owner or operator of a source is using projected actual emissions to ~~determine avoid~~ applicability ~~of with~~ nonattainment new source ~~review, review requirements,~~ the owner or operator shall notify ~~[submit an application to]~~ the Director of the modification before beginning actual construction. The notification shall include:

- (1) a description of the project;
- (2) identification of sources whose emissions could be affected by the project;
- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.165(a)(1)(xxviii)(B)(3);
- (4) the calculated baseline actual emissions in Subparagraph (a)(1) of this Rule and an explanation of how the baseline actual emissions were calculated; and
- (5) any netting calculations, if applicable.

If upon reviewing the ~~notification, [application,]~~ the Director finds that the project will ~~cause require~~ a nonattainment new source review evaluation, the Director shall notify the owner or operator of his or her ~~findings. The findings and~~ the owner or operator shall not make the modification until ~~it has received~~ a nonattainment new source review permit ~~has been~~ issued pursuant to this Rule. ~~If a permit revision is not required pursuant to this Rule, If the Director finds that the project will not require a nonattainment new source review evaluation and the projected actual emissions, calculated pursuant to 40 CFR 51.165(a)(1)(xxviii)(B)(1) and (2) minus the baseline actual emissions is 50 percent or greater of the amount that is a significant emissions increase, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant, then, the Director [will] shall require a permit application to include a permit condition for the monitoring, recordkeeping, and reporting of the the owner or operator shall maintain records of annual emissions related to the project in tons per years, on a calendar year basis related to the modifications for 10 years, years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit for the regulated NSR pollutant; otherwise these records shall~~

1 be maintained for five years following resumption of regular operations after the change. The owner or operator shall  
2 submit a report to the Director within 60 days after the end of each year during which these records must be generated.  
3 The report shall contain the items listed in 40 CFR 51.165(a)(6)(v)(A) through (C). The owner or operator shall make  
4 the information documented and maintained under this Paragraph available to the Director and the general public  
5 pursuant to the requirements in 40 CFR 70.4(b)(3)(viii). The monitoring, recordkeeping, and reporting requirements  
6 in this Paragraph shall not apply if the projected actual emissions calculated pursuant to 40 CFR  
7 51.165(a)(1)(xxviii)(B)(1) and (2), minus the baseline actual emissions, is less than 50 percent of the amount that is a  
8 significant emissions increase, without reference to the amount that is a significant net emissions increase, for the  
9 regulated NSR pollutant.  
10 ~~(e)(r)~~ The reference to Portions of the regulations in the Code of Federal Regulations (CFR) that are referred to in  
11 this Rule are incorporated by reference unless a specific reference states otherwise. Except for 40 CFR 81.334, the  
12 The version of the CFR incorporated in this Rule Rule, with respect to 40 CFR 51.165, is that as of May 16, 2008 July  
13 1, \_\_\_\_\_, 2019, \_\_\_\_\_ at \_\_\_\_\_ <http://www.gpo.gov/fdsys/pkg/FR-2008-05-16/pdf/E8-10768.pdf>  
14 <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-sec51-165.pdf> and does  
15 not include any subsequent amendments or ~~editions to the referenced material.~~ editions. Federal regulations referenced  
16 in 40 CFR 51.165 shall include subsequent amendments and editions. The publication may be accessed free of charge.

17  
18 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b);*  
19 *Eff. June 1, 1981;*  
20 *Amended Eff. December 1, 1993; December 1, 1992; August 1, 1991; December 1, 1989; October*  
21 *1, 1989; July 1, 1988; October 1, 1987; June 1, 1985; January 1, 1985; February 1, 1983;*  
22 *Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is*  
23 *effective, whichever is sooner;*  
24 *Amended Eff. September 1, 2013; January 2, 2011; September 1, 2010; May 1, 2008; May 1, 2005;*  
25 *July 1, 1998; July 1, 1996; July 1, 1995; July 1, 1994, 1994;*  
26 *Readopted Eff. November 1, 2020.*  
27  
28

1 15A NCAC 02D .0532 is readopted with changes as published in 34:16 NCR 1456 as follows:

2  
3 **15A NCAC 02D .0532 SOURCES CONTRIBUTING TO AN AMBIENT VIOLATION**

4 (a) This Rule applies to new major stationary sources and major modifications to which ~~Rule .0531 of this Section~~  
5 15A NCAC 02D .0531 does not apply and which would contribute to a violation of a national ambient air quality  
6 standard but which would not cause a new violation.

7 (b) For the purpose of this Rule the definitions contained in Section II.A. of Appendix S of 40 CFR Part 51 shall  
8 apply.

9 (c) The Rule is not applicable to:

10 ~~(1)~~ ~~complex sources of air pollution that are regulated only under Section .0800 of this Subchapter and~~  
11 ~~not under any other rule of this Subchapter;~~

12 ~~(2)~~(1) emission of pollutants for which the area in which the new or modified source is located is  
13 designated as nonattainment;

14 ~~(3)~~(2) emission of pollutants for which the source or modification is not major;

15 ~~(4)~~(3) emission of pollutants other than sulfur dioxide, ~~total suspended particulates~~, nitrogen oxides, and  
16 carbon monoxide;

17 ~~(5)~~(4) a new or modified source whose impact will not increase ~~not~~ more than:

18 (A) ~~1.0 ug/m3 of SO2 on an annual basis;~~ 1.0  $\mu\text{g}/\text{m}^3$  of  $\text{SO}_2$  on an annual basis;

19 (B) ~~5 ug/m3 of SO2 on a 24 hour basis;~~ 5  $\mu\text{g}/\text{m}^3$  of  $\text{SO}_2$  on a 24-hour basis;

20 (C) ~~25 ug/m3 of SO2 on a 3 hour basis;~~ 25  $\mu\text{g}/\text{m}^3$  of  $\text{SO}_2$  on a 3-hour basis;

21 (D) ~~1.0 ug/m3 of total suspended particulates on an annual basis;~~ 0.3  $\mu\text{g}/\text{m}^3$  of PM2.5 on an  
22 annual basis;

23 (E) ~~5 ug/m3 of total suspended particulates on a 24 hour basis;~~ 1.2  $\mu\text{g}/\text{m}^3$  of PM2.5 on a 24-  
24 hour basis;

25 (F) ~~1.0 ug/m3 of NO2 on an annual basis;~~ 1.0  $\mu\text{g}/\text{m}^3$  of  $\text{NO}_2$  on an annual basis;

26 (G) ~~0.5 mg/m3 of carbon monoxide on an 8 hour basis;~~ 0.5  $\text{mg}/\text{m}^3$  of carbon monoxide on an 8-  
27 hour basis;

28 (H) ~~2 mg/m3 of carbon monoxide on a one hour basis;~~ 2  $\text{mg}/\text{m}^3$  of carbon monoxide on a one-  
29 hour basis;

30 (I) ~~1.0 ug/m3 of PM10 on an annual basis;~~ or 1.0  $\mu\text{g}/\text{m}^3$  of PM10 on an annual basis; or

31 (J) ~~5 ug/m3 of PM10 on a 24 hour basis;~~ 5  $\mu\text{g}/\text{m}^3$  of PM10 on a 24-hour basis

32 at any locality that does not meet a national ambient air quality standard;

33 ~~(6)~~(5) sources which are not major unless secondary emissions are included in calculating the potential to  
34 emit;

35 ~~(7)~~(6) sources which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;

36 ~~(8)~~(7) temporary emission sources which will be relocated within two years; and

37 ~~(9)~~(8) emissions resulting from the construction phase of the source.

(d) 15A NCAC ~~2Q.02Q .0102 and .0302~~ is not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in 15A NCAC ~~2Q.02Q .0300 or .0500~~.

(e) To issue a permit to a new or modified source to which this Rule applies, the Director shall determine that the source will meet the following conditions:

(1) The sources will emit the nonattainment pollutant at a rate no more than the lowest achievable emission ~~rate~~ rate;

(2) The owner or operator of the proposed new or modified source has demonstrated that all major stationary sources in the State ~~which~~ that are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance which is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter which EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air ~~Quality~~ Quality; and

(3) The source will satisfy one of the following conditions:

(A) The source will comply with ~~Subparagraph (e)(3) of Rule .0531 of this Section~~ 15A NCAC 02D .0531 (e)(3)(i) when the source is evaluated as if it were in the nonattainment area; or

(B) The source will have an air quality offset, i.e., the applicant will have caused an air quality improvement in the locality where the national ambient air quality standard is not met by causing reductions in impacts of other sources greater than any additional impact caused by the source for which the application is being made. The emissions reductions creating the air quality offset shall be placed as a condition in the permit for the source reducing emissions. The requirements of this Part may be partially waived if the source is a resource recovery facility burning municipal solid waste, the source must switch fuels due to lack of adequate fuel supplies, or the source is required to be modified as a result of EPA regulations and no exemption from such regulations is available and if:

- (i) the permit applicant demonstrates that it made its best efforts to obtain sufficient air quality offsets to comply with this Part;
- (ii) the applicant has secured all available air quality offsets; and
- (iii) the applicant will continue to seek the necessary air quality offsets and apply them when they become available.

(f) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(g) The version of the Code of Federal Regulations incorporated in this Rule is that as of ~~January 1, 1989~~ July 1, 2019, at <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-part51-appS.pdf>

1 and does not include any subsequent amendments or editions to the referenced material. The publication may be  
2 accessed free of charge.

3  
4 *History Note:* *Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the*  
5 *permanent rule becomes effective, whichever is sooner;*  
6 *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b); 150B-21.6;*  
7 *Eff. June 1, 1981;*  
8 *Amended Eff. July 1, 1994; December 1, 1993; December 1, 1992; October 1, ~~1989~~1989;*  
9 *Readopted Eff. November 1, 2020.*



1 15A NCAC 02D .0533 is readopted with changes as published in 34:16 NCR 1457 as follows:

2  
3 **15A NCAC 02D .0533 STACK HEIGHT**

4 (a) For the purpose of this Rule, the following definition shall apply:

5 ~~(1) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including~~  
6 ~~a pipe or duct but not including flares.~~

7 ~~(1)(2)~~ "A stack in existence" means that the owner or operator had:

8 (A) begun, or caused to begin, a continuous program of physical on-site construction of the  
9 stack; or

10 (B) entered into binding agreements or contractual obligations, which could not be canceled or  
11 modified without substantial loss to the owner or operator, to undertake a program of  
12 construction of the stack to be completed in the time that is normally required to construct  
13 such a stack.

14 ~~(2)(3) "Dispersion technique" ["Dispersion technique";] "Dispersion technique":~~

15 (A) "Dispersion technique" means any technique which attempts to affect the concentration of  
16 a pollutant in the ambient air by:

17 (i) using that portion of a stack ~~which that~~ exceeds good engineering practice stack  
18 ~~height, height;~~

19 (ii) varying the rate of emission of a pollutant according to atmospheric conditions or  
20 ambient concentrations of that ~~pollutant, pollutant;~~ or

21 (iii) increasing final exhaust gas plume rise by manipulating source process  
22 parameters, exhaust gas parameters, stack parameters, or combining exhaust gases  
23 from several existing stacks into one stack; or other selective handling of exhaust  
24 gas streams so as to increase the exhaust gas plume rise.

25 (B) "Dispersion technique" does not include:

26 (i) the reheating of a gas stream, following use of a pollution control system, for the  
27 purpose of returning the gas to the temperature at which it was originally  
28 discharged from the facility generating the gas stream;

29 (ii) the using of smoke management in agricultural or silvicultural prescribed burning  
30 programs;

31 (iii) the merging of exhaust gas streams where:

32 (I) ~~The the~~ facility owner or operator demonstrates that the source was  
33 originally designed and constructed with such merged gas streams;

34 (II) ~~After after~~ July 8, 1985, such merging is part of a change in operation at  
35 the facility that includes the installation of pollution controls and is  
36 accompanied by a net reduction in the allowable emissions of a pollutant.

37 This exclusion from the definition of "dispersion techniques" shall apply

- only to the emission limitation for the pollutant affected by such change in operation; or
- (III) ~~Before~~before July 8, 1985, such merging was part of a change in operation at the source that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Director shall deny credit for the effects of such merging in calculating the allowable emissions for the source;
- (iv) ~~Episodic~~episodic restrictions on residential woodburning and open burning; or
- (v) ~~Techniques~~techniques ~~under~~ pursuant to Subpart (A)(iii) of this Subparagraph which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
- (4) ~~"Good engineering practice (GEP) stack height" means the greater of:~~
- (A) ~~65 meters measured from the ground level elevation at the base of the stack;~~
- (B) ~~2.5 times the height of nearby structure(s) measured from the ground level elevation at the base of the stack for stacks in existence on January 12, 1979 and for which the owner or operator had obtained all applicable permit or approvals required under 15A NCAC 2Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;~~
- (C) ~~for stacks not covered under Part (B) of this Subparagraph, the height of nearby structures measured from the ground level elevation at the base of the stack plus 1.5 times the lesser dimension (height or projected width) of nearby structure(s) provided that the Director may require the use of a field study or fluid model to verify GEP stack height for the source; or~~
- (D) ~~the height demonstrated by a fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.~~
- (5) ~~"Nearby" means, for a specific structure or terrain feature:~~
- (A) ~~under Parts (4)(B) and (C) of this Paragraph, that distance up to five times the lesser of the height or the width dimension of a structure but not greater than one half mile. The height of the structure is measured from the ground level elevation at the base of the stack.~~

1 (B) ~~under Part (4)(D) of this Paragraph, not greater than one half mile, except that the portion~~  
2 ~~of a terrain feature may be considered to be nearby which falls within a distance of up to~~  
3 ~~10 times the maximum height [Ht] of the feature, not to exceed two miles if such feature~~  
4 ~~achieves a height [ht] one half mile from the stack that is at least 40 percent of the GEP~~  
5 ~~stack height determined by Part (4)(C) of this Paragraph or 26 meters, whichever is greater,~~  
6 ~~as measured from the ground level elevation at the base of the stack. The height of the~~  
7 ~~structure or terrain feature is measured from the ground level elevation at the base of the~~  
8 ~~stack.~~

9 (3) "Emission limitation" means a requirement established by this Subchapter or a local air quality  
10 program certified by the Commission that limits the quantity, rate, or concentration of emissions of  
11 air pollutants on a continuous basis, including any requirements that limit the level of opacity,  
12 prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a  
13 source to assure continuous emission reduction.

14 (4)(6) "Excessive concentrations" means, for the purpose of determining good engineering practice stack  
15 height ~~under in~~ Part (4)(D)(5)(D) of this Paragraph:

16 (A) for sources seeking credit for stack height exceeding that established ~~under in~~ Part  
17 (4)(B)(5)(B) or (C) of this Paragraph, a maximum ground-level concentration due to  
18 emissions from a stack due in whole or part to downwash, wakes, and eddy effects  
19 produced by nearby structures or nearby terrain features which individually is at least 40  
20 percent in excess of the maximum concentration experienced in the absence of such  
21 downwash, wakes, or eddy effects and which contributes to a total concentration due to  
22 emissions from all sources that is greater than an ambient air quality standard. For sources  
23 subject to ~~Rule .0530 of this Section, 15A NCAC 02D .0530~~, an excessive concentration  
24 alternatively means a maximum ground-level concentration due to emissions from a stack  
25 due in whole or part to downwash, wakes, or eddy effects produced by nearby structures  
26 or nearby terrain features which individually is at least 40 percent in excess of the  
27 maximum concentration experienced in the absence of such downwash, wakes, or eddy  
28 effects and greater than a prevention of significant deterioration increment. The allowable  
29 emission rate to be used in making demonstrations ~~under in~~ this Part shall be prescribed by  
30 the new source performance standard that is applicable to the source category unless the  
31 owner or operator demonstrates that this emission rate is infeasible. Where such  
32 demonstrations are approved by the Director, an alternative emission rate shall be  
33 established in consultation with the source owner or operator;

34 (B) for sources seeking credit after October 11, 1983, for increases in existing stack heights up  
35 to the heights established ~~under in Part (4)(B) or (C) of this Paragraph; 15A NCAC 02D~~  
36 ~~.0533 (a)(5)(B) or (C);~~

- (i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided in Part (A) of this Subparagraph, except that the emission rate specified by any applicable Rule in this Subchapter (or, in the absence of such a limit, the actual emission rate) shall be ~~used, or used; or~~
- (ii) the actual presence of a local nuisance (odor, visibility impairment, or pollutant concentration) caused by the existing stack, as determined by the Director; and
- (C) for sources seeking credit after January 12, 1979, for a stack height determined ~~under by Part (4)(B) or (C) of this Paragraph, 15A NCAC 02D .0533 (a)(5)(B) or [(e),(C)]~~ where the Director requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by ~~Part (4)(B) or (C) of this Paragraph, 15A NCAC 02D .0533 (a)(5)(B) or [(e),(C)]~~, a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.
- ~~(7) "Emission limitation" means a requirement established by this Subchapter or a local air quality program certified by the Commission that limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.~~
- (5) "Good engineering practice (GEP) stack height" means the greater of:
- (A) 65 meters measured from the ground-level elevation at the base of the stack;
- (B) 2.5 times the height of nearby structure(s) measured from the ground-level elevation at the base of the stack for stacks in existence on January 12, 1979 and for which the owner or operator had obtained all applicable permit or approvals required pursuant to 15A NCAC 02Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence that this equation was ~~actually~~ relied on in establishing an emission limitation;
- (C) for stacks not covered by Part (B) of this Subparagraph, the height of nearby structures measured from the ground-level elevation at the base of the stack plus 1.5 times the lesser dimension (height or projected width) of nearby structure(s) provided that the Director ~~may~~ ~~requires~~ require the use of a field study or fluid model to verify GEP stack height for the source; or
- (D) the height demonstrated by a fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

(6) "Nearby" means, for a specific structure or terrain feature:

(A) in Parts (5)(B) and (C) of this Subparagraph, that distance up to five times the lesser of the height or the width dimension of a structure but not greater than one-half mile. The height of the structure is measured from the ground-level elevation at the base of the Stack;

~~for~~ and

(B) in Part (5)(D) of this Subparagraph, not greater than one-half mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height [ht] of the feature, not to exceed two miles if such feature achieves a height [ht] one-half mile from the stack that is at least 40 percent of the GEP stack height determined by Part (5)(C) of this Subparagraph or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(7) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

(b) With the exception stated in Paragraphs (c) and (d) of this Rule, the degree of emission limitations required by any rule in this Subchapter shall not be affected by:

(1) that amount of a stack height that exceeds good engineering practice; or

(2) any other dispersion technique.

(c) Paragraph (b) shall not apply to:

(1) stack heights in existence or dispersion techniques implemented before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in ~~Rules 15A NCAC 02D .0530 (b) and .0531 (b) of this Section~~ were carried out after December 31, 1970; or

(2) coal-fired steam electric generating units, subject to provisions of Section 118 of the federal Clean Air Act, which began operation before July 1, 1957, and whose stacks were constructed ~~under~~ by a construction contract awarded before February 8, 1974.

However, these exemptions shall not apply to a new stack that replaces a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph. These exemptions shall not apply to a new source using a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph.

(d) This Rule shall not restrict the actual stack height of any source.

*History Note: Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;*

*Authority G.S. 143-215.3(a)(1);*

*Eff. November 1, 1982;*

*Amended Eff. July 1, 1994; July 1, 1987; April 1, ~~1986~~ 1986;*



1 15A NCAC 02D .0535 is readopted with changes as published in 34:16 NCR 1457 as follows:

2  
3 **15A NCAC 02D .0535 EXCESS EMISSIONS REPORTING AND MALFUNCTIONS**

4 (a) For this Rule the following definitions apply:

5 (1) "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or  
6 standard allowed by any rule in ~~Sections~~ 15A NCAC 02D .0500, .0900, .1200, or .1400 of this  
7 ~~Subchapter, 1400~~; or by a permit condition; or that exceeds an emission limit established in a permit  
8 issued ~~under~~ pursuant to 15A NCAC 02Q .0700.

9 (2) "Malfunction" means any unavoidable failure of air pollution control equipment, process equipment,  
10 or process to operate in a normal and usual manner that results in excess emissions. Excess  
11 emissions during periods of routine start-up and shut-down of process equipment are not considered  
12 a malfunction. Failures caused entirely or in part by poor maintenance, careless operations or any  
13 other upset condition within the control of the emission source are not considered a malfunction.

14 (3) "Start-up" means the commencement of operation of any source that has shut-down or ceased  
15 operation for a period sufficient to cause temperature, pressure, process, chemical, or a pollution  
16 control device imbalance that would result in excess emission.

17 (4) "Shut-down" means the cessation of the operation of any source for any purpose.

18 (b) This Rule does not apply to sources to which Rules .0524, .1110, or .1111 of this Subchapter applies unless excess  
19 emissions exceed an emission limit established in a permit issued under 15A NCAC 02Q .0700 that is more stringent  
20 than the emission limit set by Rules .0524, .1110 or .1111 of this Subchapter.

21 (c) Any excess emissions that do not occur during start-up or shut-down are considered a violation of the appropriate  
22 rule unless the owner or operator of the source of excess emissions demonstrates to the Director, that the excess  
23 emissions are the result of a malfunction. To determine if the excess emissions are the result of a malfunction, the  
24 Director shall consider, along with any other pertinent information, the following:

25 (1) ~~The the~~ air cleaning device, process equipment, or process has been maintained and operated, to the  
26 maximum extent practicable, consistent with good practice for minimizing emissions;

27 (2) ~~Repairs repairs~~ have been made expeditiously when the emission limits have been exceeded;

28 (3) ~~The the~~ amount and duration of the excess emissions, including any bypass, have been minimized  
29 to the maximum extent practicable;

30 (4) ~~All all~~ practical steps have been taken to minimize the impact of the excess emissions on ambient  
31 air quality;

32 (5) ~~The the~~ excess emissions are not part of a recurring pattern indicative of inadequate design,  
33 operation, or maintenance;

34 (6) ~~The the~~ requirements of Paragraph (f) of this Rule have been met; and

35 (7) ~~If if~~ the source is required to have a malfunction abatement plan, it has followed that plan. All  
36 malfunctions shall be repaired as expeditiously as practicable. However, the Director shall not  
37 excuse excess emissions caused by malfunctions from a source for more than 15 percent of the

1 operating time during each calendar year. The ~~Director may require the~~ owner or operator of a  
2 facility ~~to~~ shall maintain records of the time that a source operates when it or its air pollution control  
3 equipment is malfunctioning or otherwise has excess emissions.

4 (d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the  
5 requirements of Subparagraphs (1) through (3) of this Paragraph. In addition, the Director may require any other  
6 source to have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs  
7 (1) through (3) of this Paragraph. If the Director requires a malfunction abatement plan for a source other than an  
8 electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days  
9 after receipt of the Director's request. The malfunction plans of electric utility boiler units and of other sources  
10 required to have them shall be implemented when a malfunction or other breakdown occurs. The purpose of the  
11 malfunction abatement plan is to prevent, detect, and correct malfunctions or equipment failures that could result in  
12 excess emissions. A malfunction abatement plan shall contain:

- 13 (1) a complete preventive maintenance program including:
  - 14 (A) the identification of individuals or positions responsible for inspecting, maintaining and  
15 repairing air cleaning devices;
  - 16 (B) a description of the items or conditions that will be inspected and maintained;
  - 17 (C) the frequency of the inspection, maintenance services, and repairs; and
  - 18 (D) an identification and quantities of the replacement parts that shall be maintained in  
19 inventory for quick replacement;
- 20 (2) an identification of the source and air cleaning operating variables and outlet variables, such as  
21 opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction  
22 or failure; the normal operating range of these variables and a description of the method of  
23 monitoring or surveillance procedures and of informing operating personnel of any malfunctions,  
24 including alarm systems, lights or other indicators; and
- 25 (3) a description of the corrective procedures that the owner or operator will take in case of a  
26 malfunction or failure to achieve compliance with the applicable rule as expeditiously as practicable  
27 but no longer than the next boiler or process outage that would provide for an orderly repair or  
28 correction of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates  
29 that the malfunction would continue for more than 15 days, a case-by-case repair schedule shall be  
30 established by the Director with the source. The owner or operator shall maintain logs to show that  
31 the operation and maintenance parts of the malfunction abatement plan are implemented. These  
32 logs are subject to inspection by the Director or his designee upon request during business hours.

33 (e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit  
34 a malfunction abatement plan to the Director within six months after it has been required by the Director. The  
35 malfunction abatement plan and any amendment to it shall be reviewed by the Director or his designee. If the plan  
36 carries out the objectives described by Paragraph (d) of this Rule, the Director shall approve it. If the plan does not  
37 carry out the objectives described by Paragraph (d) of this Rule, the Director shall disapprove the plan. The Director



shall state his reasons for his disapproval. The person who submits the plan shall submit an amendment to the plan to satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director's notification of disapproval. Any person having an approved malfunction abatement plan shall submit to the Director for his approval amendments reflecting changes in any element of the plan required by Paragraph (d) of this Rule or amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written notice of approval.

(f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

(1) notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:

(A) name and location of the facility,

(B) the nature and cause of the malfunction or ~~breakdown, breakdown;~~

(C) the time when the malfunction or breakdown is first ~~observed, observed;~~

(D) the expected ~~duration, duration;~~ and

(E) an estimated rate of ~~emissions, emissions.~~

(2) notify the Director or his designee ~~immediately when after~~ the corrective measures have been accomplished;

(3) submit to the Director within 15 days after the request a written report that includes:

(A) name and location of the facility,

(B) identification or description of the processes and control devices involved in the malfunction or ~~breakdown, breakdown;~~

(C) the cause and nature of the ~~event, event;~~

(D) time and duration of the violation or the expected duration of the excess emission if the malfunction or breakdown has not been ~~fixed, fixed;~~

(E) estimated quantity of pollutant ~~emitted, emitted;~~

(F) steps taken to control the emissions and to prevent recurrences and if the malfunction or breakdown has not been fixed, steps planned to be ~~taken, taken;~~ and

(G) any other pertinent information requested by the Director. After the malfunction or breakdown has been corrected, the Director may require the owner or operator of the source to test the source in accordance with Section .2600 of this Subchapter to demonstrate compliance.

(g) Start-up and shut-down. Excess emissions during start-up and shut-down are considered a violation of the ~~appropriate applicable~~ rule if the owner or operator cannot demonstrate that the excess emissions are unavoidable. To determine if excess emissions are unavoidable during startup or shutdown the Director shall consider the items listed in ~~Paragraphs Subparagraphs~~ (c)(1), (c)(3), (c)(4), (c)(5), and (c)(7) of this Rule along with any other pertinent information. The Director may specify for a particular source the amount, time, and duration of emissions allowed during start-up or ~~shut down, shut down if necessary to limit excess emissions and protect the NAAQS.~~ The owner

1 or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or  
2 monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize  
3 emissions during start-up and shut-down.  
4

5 *History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(4); 143-215.107(a)(5);*

6 *Eff. March 1, 1983;*

7 *Amended Eff. June 1, 2008; April 1, 2001; July 1, 1998; July 1, 1996; October 1, 1991; May 1,*  
8 *1990; April 1, 1986; July 1, ~~1984~~.*

9 *Readopted Eff. November 1, 2020.*  
10  
11

1 15A NCAC 02D .0537 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0537 CONTROL OF MERCURY EMISSIONS**

4 (a) For the purpose of this Rule, the following definitions shall apply:

5 (1) "Mercury" means the element mercury, excluding any associated elements, and includes mercury  
6 in particulates, vapors, aerosols, and compounds.

7 (2) "Stationary source" means the total plant site. This includes all ~~emissions (stacks, ducts, vents,~~  
8 ~~openings, fugitives, etc.)~~ emissions, such as stacks, ducts, vents, openings, and fugitives to the  
9 atmosphere within the property boundary.

10 (b) This Rule shall apply to all new and existing stationary sources engaged in the handling or processing of mercury  
11 and not subject to standards on emissions for mercury ~~in Rule .0530, .1110, or .1111 of this Subchapter.~~ in 15A NCAC  
12 02D .0530, .1110, or .1111.

13 (c) An owner or operator of a stationary source engaged in the handling or processing of mercury shall not cause,  
14 allow, or permit particulate or gaseous mercury emissions ~~in excess of~~ more than 2300 grams per day into the ~~outdoor~~  
15 atmosphere.

16  
17 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

18 *Eff. June 1, 1985;*

19 *Amended Eff. July 1, ~~1996~~.1996;*

20 *Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0538 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0538 CONTROL OF ETHYLENE OXIDE EMISSIONS**

4 (a) For purposes of this Rule, "medical devices" means instruments, apparatus, implements, machines, implants, in  
5 vitro reagents, ~~contrivances~~, or other similar or related articles including their components, parts, and accessories,  
6 intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or  
7 intended to affect the structure or any function of the body of man or other animals.

8 (b) This Rule applies to emissions at facilities for which construction began after August 31, 1992 of ethylene oxide  
9 resulting from use as a sterilant in:

10 (1) the production and subsequent storage of medical devices; or

11 (2) the packaging and subsequent storage of medical devices for sale;

12 at facilities for which construction began after August 31, 1992.

13 (c) This Rule does not apply to hospital or medical facilities.

14 (d) Facilities subject to this Rule shall comply with the following standards:

15 (1) ~~For~~for sterilization chamber evacuation, a closed loop liquid ring vacuum pump, or equipment  
16 demonstrated to be as effective at reducing emissions of ethylene oxide shall be used;

17 (2) ~~For~~for sterilizer exhaust, a reduction in the weight of uncontrolled emissions of ethylene oxide of  
18 at least 99.8 percent by weight shall be achieved;

19 (3) ~~For~~for sterilizer unload and backdraft valve ~~exhaust, a reduction:~~ exhaust:

20 (A) a reduction in uncontrolled emissions of ethylene oxide of at least 99 percent by weight  
21 shall be achieved; or

22 (B) ~~to~~ a concentration of no more than one part per million by volume of ethylene oxide shall  
23 be achieved;

24 (4) ~~Sterilized~~sterilized product ethylene oxide residual emissions shall be reduced by:

25 (A) a heated degassing room to aerate the products after removal from the sterilization  
26 ~~chamber;~~chamber. ~~the~~The temperature of the degassing room shall be maintained at a  
27 minimum of 95 degrees Fahrenheit during the degassing ~~cycle,~~ cycle and product hold time  
28 in the aeration room shall be at least 24 hours; or

29 (B) a process demonstrated to be as effective as Part (d)(4)(A) of this Rule.

30 (5) ~~Emissions~~emissions of ethylene oxide from the degassing area ~~(or or equivalent process)~~ process  
31 shall be vented to a control device capable of reducing uncontrolled ethylene oxide emissions by at  
32 least 99 percent by weight or to no more than one part per million by volume of ethylene ~~oxide.~~  
33 oxide. The product aeration room and the product transfer area shall be maintained under a negative  
34 pressure.

35 (e) Before installation of the controls required by Paragraph (d) of this Rule, and annually thereafter, a written  
36 description of waste reduction, elimination, or recycling plan shall be submitted to the Director ~~as specified in G.S.~~

1 ~~143-215.108(g)~~ to determine if ethylene oxide use can be reduced or eliminated through alternative sterilization  
2 methods or process modifications.

3 (f) The owner or operator of the facility shall conduct a performance test to verify initial efficiency of the control  
4 devices. The owner or operator shall maintain temperature records to demonstrate proper operation of the degassing  
5 room. For purposes of this Paragraph, "proper operation" means in accordance with the manufacturer's specifications.  
6 Such records shall be retained for a period of at least two calendar years and shall be made available for inspection by  
7 Division personnel.

8 (g) If the owner or operator of a facility subject to the Rule demonstrates, using the procedures in ~~Rule .1106 of this~~  
9 ~~Section, 15A NCAC 02D .1106,~~ that the emissions of ethylene oxide from all sources at the facility do not cause the  
10 acceptable ambient level of ethylene oxide in ~~Rule .1104 of this Section 15A NCAC 02D .1104~~ to be exceeded, then  
11 the requirements of Paragraphs (d) through (e) of this Rule shall not apply. This demonstration shall be at the option  
12 of the owner or operator of the facility. If this option is chosen, the Director shall write the facility's permit to satisfy  
13 the requirements of ~~Rule .1104(a) of this Section.~~ 15A NCAC 02D .1104(a).

14  
15 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5); 143-215.108(c);  
16 Eff. September 1, 1992;  
17 Amended Eff. June 1, 2004; August 1, ~~2002, 2002~~;  
18 Readopted Eff. November 1, 2020.  
19  
20

1 15A NCAC 02D .0539 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0539 ODOR CONTROL OF FEED INGREDIENT MANUFACTURING PLANTS**

4 (a) Applicability. The requirements of this Rule apply to any facility that produces feed-grade animal proteins or feed-  
5 grade animal fats and oils, but do not apply to any portions of such facilities ~~that are~~ engaged exclusively in the  
6 processing of food for human consumption.

7 (b) This Rule does not apply to those facilities solely engaged in the processing of marine byproducts. ~~Those facilities,~~  
8 Those facilities ~~however,~~ shall ~~continue to~~ control their odorous emissions ~~in accordance with Rule .1806 of this~~  
9 ~~Subchapter.~~ pursuant to 15A NCAC 02D .1806.

10 (c) A person shall not allow, cause, or permit the operation or use of any device, machine, equipment, or other  
11 contrivance to process material to be used in the production of feed-grade animal proteins or feed-grade animal fats  
12 and oils unless all gases, vapors, and gas-entrained effluents from these processes are passed through condensers to  
13 remove all steam and other condensible materials. All noncondensibles passing through the condensers shall then be  
14 incinerated at 1200 degrees Fahrenheit for a period of not less than 0.3 seconds, or treated in an equally effective  
15 manner.

16 (d) Measurement and Recording Requirements. Any person processing or incinerating gases, vapors, or gas-entrained  
17 matter as required by Paragraph (c) of this Rule shall install, operate, and maintain in good working order and  
18 calibration continuous measuring and recording devices for equipment operational parameters to document equipment  
19 operation in accordance with this Rule. In addition, the owner or operator of the facility shall:

- 20 (1) demonstrate ~~that~~ the measuring and recording devices are capable of verifying the compliance status  
21 of the equipment on a continuous basis;
- 22 (2) describe the parameters to be used to determine the compliance status and how these parameters:
- 23 (A) are to be measured;
- 24 (B) are to be used to determine compliance status; and
- 25 (3) provide a quality assurance program approved by the Director for all monitoring devices and  
26 systems that includes:
- 27 (A) procedures and frequencies for calibration;
- 28 (B) standards traceability;
- 29 (C) operational ~~checks,~~ checks;
- 30 (D) maintenance schedules and procedures;
- 31 (E) auditing schedules and procedures;
- 32 (F) data validation; and
- 33 (G) schedule for implementing the quality assurance program.

34 These data shall be available to the Director upon request.

35 (e) A person shall not allow, cause, or permit the installation or operation of expeller units unless they are properly  
36 hooded ~~and to ensure that~~ all exhaust gases are collected or ducted to odor control equipment.

(f) A person subject to this Rule shall not cause or permit any raw material to be handled, transported, or stored, or to undertake the preparation of any raw material without taking reasonable precautions to prevent odors from being discharged. For the purpose of this Rule, such raw material is in "storage" after it has been unloaded at a facility or after it has been located at the facility for at least 36 hours. Reasonable precautions shall include the following:

- (1) storage of all raw material before or in the process of preparation, in properly enclosed and vented equipment or areas, together with the use of effective devices and methods to prevent the discharge of odor bearing gases;
- (2) use of covered vehicles or containers of watertight construction for the handling and transporting of any raw material; and
- (3) use of hoods and fans to enclose and vent the storage, handling, preparation, and conveying of any odorous materials together with effective devices or methods, or both, to prevent emissions of odors or odor bearing gases.

(g) A vehicle or container holding raw material, which has not been unloaded inside or parked inside an odor controlled area within the facility, shall be unloaded for processing of the raw material prior to the expiration of the following time limits:

- (1) for feathers with only trace amounts of blood, such as those obtained from slaughtering houses that separate blood from offal and feathers, no later than 48 hours after being weighed upon arrival at the ~~facility.~~ facility; and
- (2) for used cooking oil in sealed tankers, no later than 96 hours after being weighed upon arrival at the facility.

(h) The owner or operator shall notify the regional supervisor of the appropriate regional office within two business days after the provisions of Paragraph (g) of this Rule are not met and the conditions ~~that~~ are encountered that cause or may cause release of excessive and malodorous gases or vapors.

~~(i) Compliance Schedule. The owner or operator of a facility subject to this Rule that begins construction or is in operation before July 1, 1996, shall adhere to the following increments of progress and schedules:~~

- ~~(1) documentation that the facility complies with this Rule or an air permit application containing plans to bring the facility into compliance and a schedule shall be submitted by January 1, 1997;~~
- ~~(2) the compliance schedule shall contain the following increments of progress:~~
  - ~~(A) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;~~
  - ~~(B) a date by which on site construction or installation of the emission control and process equipment shall begin;~~
  - ~~(C) a date by which on site construction or installation of the emission control and process equipment shall be completed; and~~
  - ~~(D) a date by which final compliance shall be achieved.~~
- ~~(3) The final compliance date under Subparagraph (2)(D) of this Paragraph shall be no later than July 1, 2001.~~

1 ~~The owner or operator shall certify to the Director within five days after the deadline, for each increment of progress,~~  
2 ~~whether the required increment of progress has been met.~~

3 ~~(j)(i)~~ (i) The owner or operator of a facility that begins construction after June 30, 1996, shall be in compliance with this  
4 Rule before beginning operation.

5  
6 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5);*  
7 *Eff. July 1, 1996;*  
8 *Amended Eff. June 1, 2018; April 1, ~~2001~~, 2001;*  
9 *Readopted Eff. November 1, 2020.*



1 15A NCAC 02D .0542 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0542 CONTROL OF PARTICULATE EMISSIONS FROM COTTON GINNING**  
4 **OPERATIONS**

5 (a) Purpose. The purpose of this Rule is to establish control requirements for particulate emissions from cotton ginning  
6 operations.

7 (b) Definitions. For the purposes of this Rule, the following definitions apply:

8 (1) "1D-3D cyclone" means any cyclone-type collector of the 1D-3D configuration. This designation  
9 refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A  
10 1D-3D cyclone has a cylinder length of 1xD and a cone length of 3xD.

11 (2) "2D-2D cyclone" means any cyclone-type collector of the 2D-2D configuration. This designation  
12 refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A  
13 2D-2D cyclone has a cylinder length of 2xD and a cone length of 2xD.

14 (3) "Bale" means a compressed and bound package of cotton lint, ~~nominally~~approximately weighing  
15 500 pounds.

16 (4) "Existing facility" means a cotton ginning operation ~~that operated~~ site operating prior to July 1,  
17 2002.

18 (5) "Ginning operation" means any facility or plant ~~that removes~~removing seed, lint, ~~and~~ trash, ~~or one~~  
19 ~~or more~~ any combination of these from raw cotton or bales of lint cotton.

20 (6) "Ginning season" means the period of time during which the gin is in operation, which is generally  
21 from September of the current year through January of the following year.

22 (7) "High pressure exhausts" means the exhaust air systems at a cotton gin ~~that are~~ not defined as "low  
23 pressure exhausts."

24 (8) "Low pressure exhausts" means the exhaust cotton handling systems located at a cotton gin that  
25 handle air from the cotton lint handling system and battery condenser.

26 (c) Applicability. This rule applies to all ~~existing, new, new, existing~~ and modified cotton ginning operations. Existing  
27 facilities with a maximum rated capacity of less than 20 bales per hour that do not have cyclones on lint cleaners and  
28 battery condensers as of July 1, 2002 are not ~~be~~ required to add:

29 (1) the emission control devices in ~~Paragraph Subparagraph~~ (d)(1) of this Rule to lint cleaning exhausts  
30 if emissions from the lint cleaning are controlled by fine mesh screens; and

31 (2) the emission control devices in ~~Paragraph Subparagraph~~ (d)(2) of this Rule to battery condenser  
32 exhausts if the emissions from the battery condenser are controlled by fine mesh screens.

33 (d) Emission Control Requirements. The owner or operator of each cotton ginning operation shall control particulate  
34 emissions from the facility by controlling:

35 (1) all high pressure exhausts and lint cleaning exhausts with an emission control system ~~that~~  
36 ~~includes:~~including:

37 (A) one or more 1D-3D or 2D-2D cyclones to achieve 95 percent efficiency; or

(B) a device with a minimum of 95 percent efficiency.

(2) low pressure exhausts, except lint cleaning exhausts, by an emission control system ~~that includes:~~including:

(A) one or more 1D-3D or 2D-2D cyclones to achieve 90 percent efficiency; or

(B) a device with at least a 90 percent efficiency.

Efficiency is based on the removal of particulate matter between the cyclone's inlet and outlet; it is measured using test methods in ~~Section 2600 of this Subchapter.~~ 15A NCAC 02D .2600.

(e) ~~Raincaps-Exhaust Rain Caps.~~ Exhausts from emission points or control devices shall not be equipped with ~~raincaps exhaust rain caps~~ or other devices that deflect the emissions downward or outward.

(f) Operation and Maintenance. To ensure ~~that~~ optimum control efficiency is maintained, the owner or operator shall establish, based on manufacturers recommendations, an inspection and maintenance schedule for the control devices, other emission processing equipment, and monitoring devices ~~that are~~ used pursuant to this Rule. The inspection and maintenance schedule shall be followed throughout the ginning season. The results of the inspections and any maintenance performed on the control equipment, emission processing equipment, or monitoring devices shall be recorded in the log book required in Paragraph (k) of this Rule.

(g) Fugitive Emissions. The owner or operator shall minimize fugitive emissions from cotton ginning operations ~~as follows.~~ in accordance with this Paragraph:

(1) The owner or operator of a

(A) trash stacker shall:

(i) install, maintain, and operate a three sided enclosure with a roof whose sides are high enough above the opening of the dumping device to prevent wind from dispersing dust or debris; or

(ii) install, maintain, and operate a device to provide wet suppression at the dump area of the trash cyclone and minimize free fall distance of waste material exiting the trash ~~cyclone; or cyclone.~~

(B) ~~trash stacker/trash stacker and~~ composting system ~~shall; shall:~~ install, maintain, and operate a wet suppression system providing dust suppression in the auger box assembly and at the dump area of the trash stacker system. The owner or operator shall keep the trash material wet and compost it in place until the material is removed from the dump area for additional composting or disposal.

(2) Gin Yard. The owner or operator shall clean and dispose of accumulations of trash or lint on the non-storage areas of the gin yard daily.

(3) Traffic areas. The owner or operator shall clean paved roadways, parking, and other traffic areas at the facility as necessary to prevent re-entrainment of dust or debris. The owner or operator shall treat unpaved roadways, parking, and other traffic areas at the facility with wet or chemical dust suppressant as necessary to prevent dust from leaving the facility's property and shall install and

maintain signs limiting vehicle speed to 10 miles per hour where chemical suppression is used and to 15 miles per hour where wet suppression is used.

- (4) Transport of Trash Material. The owner or operator shall ensure ~~that~~ all trucks transporting gin trash material are covered and ~~that~~ the trucks are cleaned of over-spill material before trucks leave the trash hopper dump area. The dump area shall be cleaned daily.

(h) Alternative Control Measures. The owner or operator of a ginning operation may petition for use of alternative control measures to those specified in this Rule. The petition shall include:

- (1) the name and address of the petitioner;
- (2) the location and description of the ginning operation;
- (3) a description of the alternative control measure;
- (4) a demonstration ~~that the alternative control measure is at least as effective as~~ measure's effectiveness is equal to or greater than the control device or method specified in this Rule.

(i) Approval of Alternative Control Measure. The Director shall approve the alternative control measure if he or she ~~finds that:~~ finds:

- (1) all the information required by Paragraph (h) of this Rule has been submitted; and
- (2) the alternative control ~~measure is at least as effective as~~ measure's effectiveness is equal to or greater than the control device or method specified in this Rule.

(j) Monitoring.

- (1) The owner or operator of each ginning operation shall install, maintain, and calibrate monitoring devices ~~that measure~~ measuring pressures, rates of flow, and other operating conditions necessary to determine if the control devices ~~are functioning~~ function ~~properly in accordance with the engineering specifications set forth in the permit.~~

- (2) Before or during the first week of operation of the 2002-2003 ginning season, the owner or operator of each gin shall conduct a baseline study of the entire dust collection system, without cotton being processed, to ensure air flows ~~are stay~~ stay within the design range for each collection device. For 2D-2D cyclones the air flow design range is 2600 to 3600 feet per minute. For 1D-3D cyclones the design range is 2800 to 3600 feet per minute. For other control devices the air flow design range is that found in the manufacturer's specifications. Gins constructed after the 2002-2003 ginning season shall conduct the baseline study before or during the first week of operation of the first ginning season following construction. During the baseline study the owner or operator shall measure or determine according to the methods specified in this Paragraph and record in a logbook:

- (A) the calculated inlet velocity for each control device; and
- (B) the pressure drop across each control device.

The owner or operator shall use Method 1 and Method 2 of 40 CFR Part 60 Appendix A to measure flow and static pressure and determine inlet velocity or the USDA method for determining duct velocity and static pressure in Agricultural Handbook Number 503, *Cotton Ginners Handbook*, dated December 1994. The Cotton Ginners Handbook method shall only be used where test holes

are located a minimum of eight and one-half pipe diameters downstream and one and one-half pipe diameters upstream from elbows, valves, dampers, changes in duct diameter or any other flow disturbances. Where Method 2 is used a standard pitot tube may be used in lieu of the s-pitot specified in Method 2 subject to the conditions specified in Paragraph 2.1 of Method 2.

- (3) On a monthly basis following the baseline study, the owner or operator shall measure and record in the logbook the static pressure at each port where the static pressure was measured in the baseline study. Measurements shall be made using a manometer, a Magnahelic® gauge, or other device ~~that~~ the Director ~~has approved~~ approves as being equivalent to a manometer. If the owner or operator measures a change in static pressure of 20 percent or more from that measured in the baseline study, the owner or operator shall initiate corrective action. Corrective action shall be recorded in the logbook. If corrective action will take more than 48 hours to complete, the owner or operator shall notify the regional supervisor of the region in which the ginning operation is located as soon as possible, but by no later than the end of the day such static pressure is measured.
- (4) When any design changes to the dust control system are made, the owner or operator shall conduct a new baseline study for that portion of the system and shall record the new values in the logbook required in Paragraph (k) of this Rule. Thereafter monthly static pressure readings for that portion of the system shall be compared to the new values.
- (5) During the ginning season, the owner or operator shall daily inspect for structural integrity of the control devices and other emissions processing systems and shall ensure that the control devices and emission processing systems conform to normal and proper operation of the gin. If a problem is found, corrective action shall be taken and recorded in the logbook required in Paragraph (k) of this Rule.
- (6) At the conclusion of the ginning season, the owner or operator shall conduct an inspection of the facility to identify all scheduled maintenance activities and repairs needed relating to the maintenance and proper operation of the air pollution control devices for the next season. Any deficiencies identified through the inspection shall be corrected before beginning operation of the gin for the next season.

(k) Recordkeeping. The owner operator shall establish and maintain on-site a logbook documenting the following items:

- (1) ~~Results~~ results of the baseline study as specified in ~~Paragraph Subparagraph~~ (j)(2) of this Rule;
- (2) ~~Results~~ results of new baseline studies as specified in ~~Paragraph Subparagraph~~ (j)(4) of this Rule;
- (3) ~~Results~~ results of monthly static pressure checks and any corrective action taken as specified in ~~Paragraph Subparagraph~~ (j)(3) of this Rule;
- (4) ~~Observations~~ observations from daily inspections of the facility and any resulting corrective actions taken as required in ~~Paragraph Subparagraph~~ (j)(5) of this Rule; and
- (5) ~~A~~ a copy of the manufacturer's specifications for each type of control device installed.

The logbook shall be maintained on site and made available to Division representatives upon request.

1 (l) Reporting. The owner or operator shall submit by March 1 of each year a report containing the following:

2 (1) the name and location of the cotton gin;

3 (2) the number of bales of cotton produced during the previous ginning season;

4 (3) a maintenance and repair schedule based on inspection of the facility at the conclusion of the  
5 previous cotton ginning season required in ~~Paragraph~~ Subparagraph (j)(6) of this Rule; and

6 (4) signature of the ~~appropriate~~ responsible official as identified in 15A NCAC 02Q .0304(j), ~~certifying~~  
7 ~~as to the truth and accuracy of the report.~~ .0303.

8 (m) Compliance Schedule. Existing sources shall comply as specified in Paragraph (d) of this Rule. New and modified  
9 sources shall be in compliance upon start-up.

10 (n) Record retention. The owner or operator shall retain all records required to be kept by this Rule for three years  
11 from the date of recording.

12  
13 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);

14 *Eff. August 1, 2002;*

15 *Amended Eff. June 1, ~~2008~~, 2008;*

16 *Readopted Eff. November 1, 2020.*

1 15A NCAC 02D .0543 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0543 BEST AVAILABLE RETROFIT TECHNOLOGY**

4 (a) For the purposes of this Rule, the definitions at 40 CFR 51.301 shall apply.

5 (b) Mandatory Class I Federal areas are identified in 40 CFR Part 81, Subpart D.

6 (c) The Director shall have the maximum flexibility allowed ~~under~~ pursuant to 40 CFR 51.308 or 40 CFR Part 51,  
7 Appendix Y.

8 (d) This ~~rule~~ Rule applies to BART-eligible sources ~~as determined using 40~~ meeting the requirements of 40 CFR Part  
9 51, Appendix Y ~~that cause or contribute~~ causing or contributing to any visibility impairment in a mandatory Class I  
10 Federal area as determined ~~by~~ using 40 CFR Part 51, Subpart P.

11 (e) Unless exempted ~~under~~ pursuant to 40 CFR 51.303, the owner or operator of a BART-eligible emission unit  
12 subject to this Rule shall perform a best available retrofit technology (BART) ~~evaluation for that emission unit.~~  
13 evaluation. Pursuant to 40 CFR 51.308, the evaluation shall include:

14 (1) the technology ~~available,~~ available;

15 (2) the cost of ~~compliance,~~ compliance;

16 (3) the energy and non-air quality environmental impacts of ~~compliance,~~ compliance;

17 (4) any pollution control equipment in use at ~~source,~~ the source;

18 (5) the remaining useful life of the ~~source,~~ source; and

19 (6) the degree of improvement in visibility ~~that may reasonably be~~ anticipated to result from the use of  
20 such technology.

21 (f) The owner or operator of a BART-subject emission unit shall install, operate, and maintain BART as approved by  
22 the Director after considering the ~~six items~~ factors listed in Paragraph (e) of this Rule and incorporated in the unit's  
23 permit issued ~~under~~ pursuant to 15A NCAC 02Q.

24 ~~(g) The owner or operators of a BART-eligible source required to install BART under this Rule shall submit permit~~  
25 ~~applications for the installation and operation of BART by September 1, 2006. The Director shall extend the deadline~~  
26 ~~for submitting a permit application if additional time is needed to complete the evaluation required under Paragraph~~  
27 ~~(e) of this Rule.~~

28 ~~(h)(g)~~ BART shall be determined using "Guidelines for Determining Best Available Retrofit Technology for Coal-  
29 fired Power Plants and Other Existing Stationary Facilities" (1980), 40 CFR 51.308(e)(1)(ii), and 40 CFR Part 51,  
30 Appendix Y. ~~Electric generating units covered under and complying with 15A NCAC 02D .2400, Clean Air Interstate~~  
31 ~~Rules, are considered to be in compliance with the BART requirements for nitrogen oxides and sulfur dioxide under~~  
32 ~~this Rule.~~

33 ~~(i) The owner or operator of a BART-eligible source required to install BART under this Rule shall have installed~~  
34 ~~and begun operation of the BART controls by December 31, 2012.~~

35 ~~(j)(h)~~ "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other  
36 Existing Stationary Facilities" is incorporated by reference, exclusive of appendix E, and shall include any later  
37 amendments or editions. This document, which was published in the Federal Register on ~~February 6,~~ February 6,

1 1980 (45 FR 8210), is EPA publication No. 450/3-80-009b and can be obtained from the National Service Center  
2 for Environmental Publications (NSCEP) available for free through their online publication search tool at:  
3 <https://www.epa.gov/nscep>. The document is also available through the U.S. Department of Commerce, National  
4 Technical Information Service located at 5301 Shawnee Road Alexandria, VA 22312. ~~5285 Port Royal Road,~~  
5 ~~Springfield, Virginia 22161 for eighty four dollars (\$84.00).~~ It is also available for inspection at the National  
6 ~~Archives and Records Administration (NARA).~~ Information on the availability of this material at NARA may be  
7 found at: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

8  
9 *History Note:* Authority *G.S.143-215.3(a)(1); 143-215.107(a)(5),(10);*  
10 *Eff. September 1, 2006;*  
11 *Amended Eff. May 1, ~~2007~~2007;*  
12 *Readopted Eff. November 1, 2020.*  
13  
14

1 15A NCAC 02D .0544 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0544 PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS FOR**  
4 **GREENHOUSE GASES**

5 (a) The purpose of this Rule is to implement a program for the prevention of significant deterioration of air quality  
6 for greenhouse gases as required by 40 CFR 51.166. ~~[Wherever the language of the portions of 40 CFR 51.166~~  
7 ~~referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which~~  
8 ~~they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this~~  
9 ~~Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those~~  
10 ~~exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However, this provision shall~~  
11 ~~not be interpreted so as to limit information that may be requested from the owner or operator by the Director as~~  
12 ~~specified in 40 CFR 51.166(n)(2).]~~ The minimum requirements described in the portions of 40 CFR 51.166 are hereby  
13 adopted as requirements under this Rule, except as otherwise provided in this Rule. Wherever the language of the  
14 portions of 40 CFR 51.166 adopted in this Rule speaks of the "plan," the requirements described therein shall apply  
15 to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR  
16 51.166 adopted in this Rule provide that the State plan may exempt or not apply certain requirements in certain  
17 circumstances, those exemptions and provisions of non-applicability are also hereby adopted under this Rule.  
18 However, this provision shall not be interpreted so as to limit information that may be requested from the owner or  
19 operator by the Director as specified in 40 CFR 51.166(n)(2). For purposes of greenhouse gases, the provisions of  
20 this Rule shall apply rather than the provisions of Rule .0530 of this Section, in 15A NCAC 02D .0530. For all other  
21 regulated new source review (NSR) pollutants, the provisions in 15A NCAC 02D .0530 shall apply. A major  
22 stationary source or major modification shall not be required to obtain a prevention of significant deterioration (PSD)  
23 permit on the sole basis of its greenhouse gases emissions. ~~For all other regulated new source review (NSR) pollutants,~~  
24 ~~the provisions of Rule .0530 of this Section [in 15A NCAC 02D .0530 shall] apply.~~

25 (b) For the purposes of this Rule, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply except  
26 the definition of "baseline actual emissions." "Baseline actual emissions" means the rate of emissions, in tons per year,  
27 of a regulated NSR pollutant, as determined in accordance with Subparagraphs (1) through (3) of this Paragraph:

- 28 (1) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at  
29 which the emissions unit emitted the pollutant during any consecutive 24-month period selected by  
30 the owner or operator within the 5-year period preceding the date that a complete permit application  
31 is received by the Division for a permit required under this Rule. The Director shall allow a different  
32 time period, not to exceed 10 years preceding the date that a complete permit application is received  
33 by the Division, if the owner or operator demonstrates that it is more representative of normal source  
34 operation. For the purpose of determining baseline actual emissions, the following shall apply:
- 35 (A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions  
36 associated with startups, shutdowns, and malfunctions;



- (B) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;
- (C) For an existing emission ~~unit (other unit, other~~ than an electric utility steam generating ~~unit), unit,~~ the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source shall currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;
- (D) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G.S. 143-215.107D and for which cost recovery is sought pursuant to G.S. 62-133.6;
- (E) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and
- (F) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Parts (B) and (C) of this Subparagraph;
- (2) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and
- (3) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Subparagraph (1) of this Paragraph and for a new emissions unit in accordance with the procedures contained in Subparagraph (2) of this Paragraph.
- (c) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be seven years.
- (d) In the definition of "subject to regulation", a greenhouse gas's global warming potential is the global warming potential published at Table A-1 of Subpart A of 40 CFR Part 98 and shall include subsequent amendments and editions.
- (e) The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply.
- (f) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through ~~(e)(r)~~ and (w). ~~The transition provisions allowed~~

1 by 40 CFR 52.21 (i)(1)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum  
2 requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the  
3 requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the  
4 portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall  
5 apply to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR  
6 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain  
7 circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However,  
8 this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by  
9 the Director as specified in 40 CFR 51.166(n)(2).

10 (g) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: "If the emissions level calculated in accordance with Paragraph  
11 (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limit] level, the  
12 Director shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

13 (h) 15A NCAC 02Q .0102 and .0302 are is not applicable to any source to which this Rule applies. The owner or  
14 operator of the sources to which this Rule applies shall apply for and receive a permit as required in 15A NCAC 02Q  
15 .0300 or .0500.

16 (i) When a particular source or modification becomes a major stationary source or major modification solely by virtue  
17 of a relaxation in any enforceable limitation that was established after August 7, 1980, on the capacity of the source  
18 or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall  
19 apply to the source or modification as though construction had not yet begun on the source or modification.

20 (j) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by  
21 reference except that the term "Administrator" is replaced with "Director".

22 (k) Permits may be issued based on innovative control technology as set forth in 40 CFR 51.166(s)(1) if the  
23 requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the  
24 allowance set forth in 40 CFR 51.166(s)(4).

25 (l) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements  
26 of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is  
27 complete as to initial information submitted. Commencement of construction before full prevention of significant  
28 deterioration approval is obtained constitutes a violation of this Rule.

29 (m) Approval of an application with regard to the requirements of this Rule shall not relieve the owner or operator of  
30 the responsibility to comply with applicable provisions of other rules of this Subchapter or Subchapter 02Q of this  
31 Title and any other requirements under local, ~~state~~, State, or federal law.

32 (n) In [the] lieu of the requirements in 40 CFR 51.166(r)(6) and (7), [the following] this Paragraph shall apply. If the  
33 owner or operator of a source is using projected actual emissions to avoid determine applicability of with prevention  
34 of significant deterioration requirements, the owner or operator shall notify [submit an application to] the Director of  
35 the modification before beginning actual construction. The notification [application] shall include:

- 36 (1) a description of the project;
- 37 (2) identification of sources whose emissions could be affected by the project;

- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
- (4) the calculated baseline actual emissions in Subparagraph (b)(1) of this Rule an explanation of how the baseline actual emissions were calculated; and
- (5) any netting calculations, if applicable.

If upon reviewing the notification, [application,] the Director finds that the project will cause-require a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his or her findings, findings and the The owner or operator shall not make the modification until a prevention of significant deterioration permit has been the owner or operator has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this Rule, the If the Director finds that the project will not require a prevention of significant deterioration evaluation and the projected actual emissions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus the baseline actual emissions, is 50 percent or greater of the amount that is a significant emissions increase, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant, then, the Director [will] shall require a permit application to include a permit condition for the monitoring, recordkeeping, and reporting of the annual emissions related The owner or operator shall maintain records of [the] annual emissions [related] to the project in tons per year, on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit for the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii). The monitoring, recordkeeping, and reporting requirements in this Paragraph shall not apply if the projected actual emissions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus the baseline actual emissions, is less than 50 percent of the amount that is a significant emissions increase, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant.

(o) The references to Portions of the regulations in the Code of Federal Regulations (CFR) that are referred to in this Rule are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this Rule Rule, with respect to 40 CFR 51.166, is that as of July 20, 2011 July 1, 2019 as set forth here <http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol2/pdf/CFR-2011-title40-vol2-sec51-166.pdf>, <http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol3/pdf/CFR-2011-title40-vol3-sec52-21.pdf>, and with the amendment set forth on 76 FR 43507 at <http://www.gpo.gov/fdsys/pkg/FR-2011-07-20/pdf/2011-17256.pdf> at <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-sec51-166.pdf> and does not include any subsequent amendments or editions to the referenced material. editions. Federal regulations referenced in 40 CFR 51.166 shall include subsequent amendments and editions. This Rule is applicable in accordance with 40 CFR 51.166(b)(48) and (b)(49)(iv) and (v). The publication may be accessed free of charge.

1 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(5); 143-215.107(a)(7); 143-*  
2 *215.108(b); 150B-21.6;*  
3 *Eff. January 28, 2011 pursuant to E.O. 81, Beverly E. Perdue;*  
4 *Pursuant to G.S. 150B-21.3(c), a bill was not ratified by the General Assembly to disapprove this*  
5 *rule;*  
6 *Temporary Amendment Eff. December 23, 2011;*  
7 *Amended Eff. July 1, 2012;*  
8 *Temporary Amendment Eff. December 2, 2014;*  
9 *Amended Eff. September 1, ~~2015~~, 2015;*  
10 *Readopted Eff. November 1, 2020.*  
11  
12



STATE OF NORTH CAROLINA  
OFFICE OF ADMINISTRATIVE HEARINGS

Mailing address:  
6714 Mail Service Center  
Raleigh, NC 27699-6700

Street address:  
1711 New Hope Church Rd  
Raleigh, NC 27609-6285

August 20, 2020

Jennifer Everett, Rulemaking Coordinator  
Environmental Management Commission  
**Sent via email only to: [Jennifer.everett@ncdenr.gov](mailto:Jennifer.everett@ncdenr.gov)**

Re: Extension of the Period of Review 15A NCAC 02D .0403, .0501, .0502, .0503, .0504, .0506, .0507, .0508, .0509, .0510, .0511, .0512, .0513, .0514, .0515, .0516, .0517, .0519, .0521, .0524, .0527, .0528, .0529, .0530, .0531, .0532, .0533, .0534, .0535, .0536, .0537, .0538, .0539, .0541, .0542, .0543, .0544, .0615

Dear Ms. Everett:

At its meeting this morning, the Rules Review Commission extended the period of review for the above-captioned rules in accordance with G.S. 150B-21.10. They did so in response to a request from the Environmental Management Commission to extend the period in order to allow the agency to address the requested technical changes and submit the revised rules at a later meeting.

Pursuant to G.S. 150B-21.13, when the Commission extends the period of review, it is required to approve or object to the rules or call a public hearing on the same within 70 days.

If you have any questions regarding the Commission's actions, please let me know.

Sincerely,

*Amber May*

Amber May  
Commission Counsel

Administration  
919/431-3000  
fax: 919/431-3100

Rules Division  
919/431-3000  
fax: 919/431-3104

Judges and  
Assistants  
919/431-3000  
fax: 919/431-3100

Clerk's Office  
919/431-3000  
fax: 919/431-3100

Rules Review  
Commission  
919/431-3000  
fax: 919/431-3104

Civil Rights  
Division  
919/431-3036  
fax: 919/431-3103

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: All Rules

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In Box 6 the Submission for Permanent Rule Form for each Rule, you have listed May 31, 2020 as the hearing date; however, you published that the hearing would occur on March 31, 2020. As a May 31, 2020 hearing would have occurred after the close of the comment period, I believe this is a typographical error. Please insert the correct date on each form.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0403

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

***PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.***

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please confirm that 40 CFR 50 and 53 are incorporated by reference in accordance with G.S. 150B-21.6 elsewhere in your Rules. If they are not, please do so here.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0403 is readopted as published in 34:16 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0403 TOTAL SUSPENDED PARTICULATES**

4 (a) The ambient air quality standards for total suspended particulate matter are:

5 (1) 75 micrograms per cubic meter annual geometric ~~mean, mean; and~~

6 (2) 150 micrograms per cubic meter maximum 24-hour concentration not to be exceeded more than  
7 once per year.

8 (b) Sampling and analysis shall be in accordance with procedures in ~~Appendix B of 40 C.F.R. Part 50~~ 40 CFR Part  
9 50, Appendix B or equivalent methods established ~~under~~ pursuant to 40 CFR Part 53.

10  
11 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*

12 *Eff. February 1, 1976;*

13 *Amended Eff. July 1, 1988; July 1, 1984; October 15, ~~1981~~ 1981;*

14 *Readopted Eff. September 1, 2020.*  
15



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0501

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please consider deleting the introductory phrases at the beginning of the Paragraphs, such as "Purpose and Scope" in (a) and "The Bubble Concept" in (c), since you've not done this elsewhere in the majority of this Rule or other Rules of this Section.*

*Please consider deleting the first sentence of (a) as it appears to be unnecessary. If you keep it, delete "orderly"*

*Please review lines 12-15. There appears to be too many "are"s*

*In (d), please provide some sort of link to (d)(1) through (5). Perhaps something like "as provided in this Paragraph"*

*In (d)(1)(B), what are the "statutory deadlines"? Can you provide a cross-reference?*

*In (d)(1)(B), delete or define "reasonable"*

*In (d)(1)(C), what are the "applicable regulations"? Are you really just referring to CFRs or are you referring to your Rules? Also, what are compliance agreements?*

*In (d)(1)(D), how are the expenditures calculated?*

*In (d)(2), why is the requirement that they show the equivalency separated out from (d)(2)(A) through (D)? I'm reading this to be included with the "and" on lines 2 and 10.*

*In (d)(2)(B), delete or define "reasonable"*

*Delete "in fact" in (d)(2)(C).*

*Please provide where the Register can be found and the cost in (d)(2)(D), (d)(5), and (e).*

*Where can The North Carolina State Implementation Plan for Air Quality be found? Is this not considered a Rule pursuant to G.S. 150B-2? Is this exempted from rulemaking*

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

*requirements of the APA? Please note that this Plan is referenced elsewhere in your Rules, but specifically addressed here.*

*On line 19, delete "in question. Moreover" and "also" on line 21*

*Please provide some sort of link between (e) and (e)(1) and (2). How do these go together?*

*Please capitalize "department" in (e)(1) and (2).*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0501 is readopted with changes as published in 34:16 NCR 1451 as follows:

2  
3 **SECTION .0500 - EMISSION CONTROL STANDARDS**  
4

5 **15A NCAC 02D .0501 COMPLIANCE WITH EMISSION CONTROL STANDARDS**

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

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

9 (c) In addition to any control or manner of operation necessary to meet emission standards in this Section, any source  
10 of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air  
11 quality standards of ~~Section .0400 of this Subchapter~~ pursuant to 15A NCAC 02D .0400 to be exceeded at any point  
12 beyond the premises on which the source is located. When controls are more stringent than those named in the  
13 applicable emission standards in this Section are required to prevent violation of the ambient air quality standards or  
14 are required to create an offset, the permit shall contain a condition requiring these controls.

15 (d) The Bubble Concept. A facility with multiple emission sources or multiple facilities within the same area may  
16 choose to meet the total emission limitation for a given pollutant through a different mix of controls than ~~that those~~  
17 required by the rules ~~in this Section or Section .0900 of this Subchapter.~~ pursuant to 15A NCAC 02D .0500 or .0900.

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

20 (A) Sources ~~pursuant to which Rules 15A NCAC 02D .0524, .0530, .0531, .1110 or .1111 of~~  
21 ~~this Subchapter, 1111~~, the federal New Source Performance Standards (NSPS), the federal  
22 National Emission Standards for Hazardous Air Pollutants ~~(NESHAPS)~~, (NESHAP),  
23 regulations established pursuant to Section ~~111(d)~~ 111(d) of the federal Clean Air Act, or  
24 state or federal Prevention of Significant Deterioration (PSD) requirements apply, shall  
25 have emissions no larger than if there were not an alternative mix of controls;

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

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

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

35 (2) The ~~owners(s)~~ owners or ~~operators(s)~~ operators of the facility ~~(facilities)~~ or facilities shall  
36 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 the attainment and maintenance of the ambient air quality standards and does not interfere with the PSD ~~program; program,~~ which this demonstration shall include modeled calculations of the amount, if any, of PSD increment consumed or created;
- (B) that the alternative mix approach conforms with reasonable further progress requirements in any nonattainment area;
- (C) that the emissions ~~under-pursuant to~~ the alternative mix approach are in fact quantifiable, and trades among them are ~~even; equivalent; and~~
- (D) that the pollutants controlled ~~under-pursuant to~~ 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 ~~or (facilities)~~ facilities subjected to the alternative mix of controls shall be specified in the facility's ~~(facilities') permits(s); permit or facilities' permits.~~
- (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-Subparagraph~~ 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-pursuant to~~ 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-pursuant to~~ 15A NCAC 02Q .0300 or .0500, as applicable.

(1) If ~~and when~~ a permit containing these conditions is issued ~~under~~ pursuant to 15A NCAC 02Q .0300 ~~(non Title V permits), .0300~~, it shall become a part of the state implementation plan (SIP) as an appendix available for inspection at the department's regional offices. 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~~ pursuant to 15A NCAC 02Q .0500 ~~(Title V permits)~~, it shall be available for inspection at the department's regional offices. 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 submitted for approved approval by the 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 Subchapter shall be used.~~

(f) If the 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 pursuant to 15A NCAC 02D .2600 shall be used.

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

*Eff. February 1, 1976;*

*Amended Eff. August 1, 1991; October 1, 1989;*

*Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*

*Amended Eff. June 1, 2008; April 1, 2001; April 1, 1999; July 1, 1996; February 1, 1995; July 1, 1994, 1994;*

*Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0502

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Overall, is this Rule necessary? If it is, do you mean something like "The Rules of this Section establish maximum..."?*

*What is meant by "all sources shall be provided with the maximum feasible control"? How is the "maximum feasible control" to be determined and by whom?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0502 is readopted as published in 34:16 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0502 PURPOSE**

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

6  
7 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
8 *Eff. February 1, 1976;*  
9 *Amended Eff. June 1, ~~1981~~ 1981;*  
10 *Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0503

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(1), add a comma after "buildings"*

*In (a)(3), change "which" to "that"*

*End (a)(3)(A) and (b) with semi-colons, rather than commas.*

*In (c), line 29, change "preceding table" to "the table set forth in this Paragraph"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020



1 15A NCAC 02D .0503 is readopted with changes as published in 34:16 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0503 PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS**

4 (a) For the purpose of this ~~Rule~~ Rule, the following definitions shall apply:

- 5 (1) "Functionally dependent" means that structures, buildings or equipment are interconnected through  
6 common process streams, supply lines, flues, or stacks.  
7 (2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one  
8 fluid by the use of another fluid in which the two fluids are separated by an impervious surface such  
9 that there is no mixing of the two fluids.  
10 (3) "Plant site" means any single or collection of structures, buildings, facilities, equipment,  
11 installations, or operations which:  
12 (A) are located on one or more adjacent properties,  
13 (B) are ~~under~~ in common legal control, and  
14 (C) are functionally dependent in their operations.

15 (b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable  
16 emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

17 (c) ~~With the exceptions in Rule .0536 of this Section,~~ The emissions of particulate matter from the combustion of a  
18 fuel that are discharged from any stack or chimney into the atmosphere shall not exceed:

19  
20

21 Maximum Heat Input In 22 Million Btu/Hour	23 Allowable Emission Limit 24 For Particulate Matter 25 In Lb/Million Btu
26 Up to and Including 10	0.60
27 100	0.33
28 1,000	0.18
29 10,000 and Greater	0.10

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

33 (d) This Rule applies to installations in which fuel is burned for the purpose of producing heat or power by indirect  
34 heat transfer. Fuels include those such as coal, coke, lignite, peat, natural gas, and fuel oils, but exclude wood and  
35 refuse not burned as a fuel. When any refuse, products, or by-products of a manufacturing process are burned as a  
36 fuel rather than refuse, or in conjunction with any fuel, this allowable emission limit shall apply.

37 (e) For the purpose of this Rule, the maximum heat input shall be the total heat content of all fuels which are burned  
38 in a fuel burning indirect heat exchanger, of which the combustion products are emitted through a stack or stacks. The  
39 sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under  
40 construction, or permitted pursuant to ~~15A NCAC 2Q, 15A NCAC [02D] 02Q,~~ shall be considered as the total heat  
41 input for the purpose of determining the allowable emission limit for particulate matter for each fuel burning indirect

1 heat exchanger. Fuel burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not  
2 change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has  
3 previously been set. The removal of a fuel burning indirect heat exchanger shall not change the allowable emission  
4 limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established.  
5 However, for any fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another  
6 fuel burning indirect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect  
7 heat exchanger shall no longer be considered in the determination of the allowable emission limit of any fuel burning  
8 indirect heat exchanger constructed after or in conjunction with the removal. For the purposes of this Paragraph,  
9 refuse not burned as a fuel and wood shall not be considered a fuel. For residential facilities or ~~institutions (such~~  
10 ~~institutions, such~~ as military and ~~educational)~~educational, whose primary fuel burning capacity is for comfort heat,  
11 only those fuel burning indirect heat exchangers located in the same power plant or building or otherwise physically  
12 ~~interconnected (such interconnected, such~~ as common flues, steam, or power distribution ~~line) line,~~ shall be used to  
13 determine the total heat input.

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

- 17 (1)  $E_c$  = the emission limit for combination or combined emission source(s) in lb/million Btu.  
18 (2)  $E_w$  = plant site emission limit for wood only as determined ~~by Rule .0504 of this Section pursuant~~  
19 ~~to 15A NCAC 02D .0504~~ in lb/million Btu.  
20 (3)  $E_o$  = the plant site emission limit for other fuels only as determined by Paragraphs (a), (b) and (c)  
21 of this Rule in lb/million Btu.  
22 (4)  $Q_w$  = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.  
23 (5)  $Q_o$  = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.  
24 (6)  $Q_t$  =  $Q_w + Q_o$  and is the actual total heat input to combination or combined emission source(s) in  
25 Btu/hr.

26  
27 *History Note:* *Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the*  
28 *permanent rule is effective, whichever is sooner;*  
29 *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
30 *Eff. February 1, 1976;*  
31 *Amended Eff. April 1, 1999; July 1, 1994; August 1, 1991; June 1, 1985; February 1, 1983; 1983;*  
32 *Readopted Eff. September 1, 2020.*  
33

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0504

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(3), change "which" to "that"*

*In (c), line 30, change "preceding table" to "the table set forth in this Paragraph"*

*Capitalize "rule" in "this Rule" on lines 5 and 7, page 2.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0504 is readopted with changes as published in 34:14 NCR 1451 as follows:

2  
3 **15A NCAC 02D .0504 PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS**

4 (a) This Rule applies to fuel burning equipment that burns one hundred percent wood. All other fuel burning  
5 equipment that burns both wood and other fuels in combination shall be subject to 15A NCAC 02D .0503. For the  
6 purpose of this ~~Rule~~ Rule, the following definitions shall apply:

- 7 (1) "Functionally dependent" means that structures, buildings or equipment are interconnected through  
8 common process streams, supply lines, flues, or stacks.  
9 (2) "Indirect heat exchanger" means any equipment used for the alteration of the temperature of one  
10 fluid by the use of another fluid in which the two fluids are separated by an impervious surface such  
11 that there is no mixing of the two fluids.  
12 (3) "Plant site" means any single or collection of structures, buildings, facilities, equipment,  
13 installations, or operations which:  
14 (A) are located on one or more adjacent properties;  
15 (B) are under [in] common legal control; and  
16 (C) are functionally dependent in their operations.

17 (b) The definition contained in Subparagraph (a)(3) of this Rule does not affect the calculation of the allowable  
18 emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

19 (c) Emissions of particulate matter from the combustion of wood shall not exceed:

20  
21

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

28  
29

30 For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of  
31 particulate matter shall be calculated by the equation  ~~$E = 1.1698 (Q \text{ to the } 0.2230 \text{ power.})$~~   $E = 1.1698 * Q^{.2230}$   
32  $E = 1.1698 * Q^{.2230}$ . E= "E" equals the allowable emission limit for particulate matter in lb/million Btu. Q= "Q" equals  
33 the Maximum heat input in million Btu/hour.

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

36 (e) For the purpose of this Rule, the heat content of wood shall be 8,000 Btu per pound (dry-weight basis). The ~~total~~  
37 sum of maximum heat inputs of all wood burning indirect heat exchangers at a plant site that are in operation, under  
38 construction, or permitted pursuant to 15A NCAC [02D] 02Q, ~~with a permit shall be used to determine~~ shall be  
39 considered as the total heat input for the purpose of determining the allowable emission limit ~~of a~~ for particulate matter  
40 for each 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. The removal of a wood burning indirect heat exchanger shall not change the allowable emission limit of any wood burning indirect heat exchanger subject to this Rule whose allowable emission limit has previously been established. However, for any wood burning indirect heat exchanger subject to this rule constructed after, or in conjunction with, the removal of another wood burning indirect heat exchanger at the plant site, the maximum heat input of the removed wood burning indirect heat exchanger shall no longer be considered in the determination of the allowable emission limit of any wood burning indirect heat exchanger subject to this rule constructed after or in conjunction with the removal. For facilities or institutions, such as military and educational, whose primary wood burning capacity is for comfort heat, only those wood burning indirect heat exchangers subject to this Rule 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 combination basis shall be calculated by the procedure described in Paragraph (f) of Rule .0503 of this Section.~~

*History Note: Authority G.S. 143-213; 143-215.3(a)(1); 143-215.107(a)(5); 143-215.107(h)(1);  
Eff. February 1, 1976;  
Amended Eff. August 1, 2002; April 1, 1999; June 1, 1985; February 1, 1983; 1983-1983;  
Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0506

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (e), delete "elsewhere"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0506 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0506 PARTICULATES FROM HOT MIX ASPHALT PLANTS**

4 (a) The allowable emission rate for particulate matter resulting from the operation of a hot mix asphalt plant that are  
5 discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation  $E =$   
6  $4.9445(P)^{0.4376}$  calculated to three significant figures, for process rates less than 300 tons per hour, where "E" equals  
7 the maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process rate in tons  
8 per hour. The allowable emission rate shall be 60.0 pounds per hour for process rates equal to or greater than 300 tons  
9 per hour.

10 (b) Visible emissions from stacks or vents at a hot mix asphalt plant shall ~~be less than~~ not exceed 20 percent opacity  
11 when averaged over a six-minute period.

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

16 (d) Fugitive non-process dust emissions shall be controlled by ~~Rule .0540 of this Section.~~ 15A NCAC 02D .0540.

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

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

21  
22 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

23 *Eff. February 1, 1976;*

24 *Amended Eff. August 1, 2004; July 1, 1998; January 1, ~~1985-1985~~;*

25 *Readopted Eff. September 1, 2020.*

1 15A NCAC 02D .0507 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0507 PARTICULATES FROM CHEMICAL FERTILIZER MANUFACTURING**  
4 **PLANTS**

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

10  
11 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);

12 *Eff. February 1, 1976;*

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

14 *Readopted Eff. September 1, 2020.*  
15



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0508

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (b), do you still need this date? I'm guessing that you do as I'm assuming that there are kraft pulp recovery boilers established prior to July 1, 1971 still being used, but I wanted to be sure.*

*In (b), line 10, please consider deleting "However,"*

*Should lines 15-16 be Paragraph (c) or Is "this opacity limitation" specifically tied to (b)? In any event, please clarify what is meant by "this opacity limitation"?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0508 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0508 PARTICULATES FROM PULP AND PAPER MILLS**

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

- 6 (1) 3.0 pounds per equivalent ton of air dried pulp from a recovery furnace stack;  
7 (2) 0.6 pounds per equivalent ton of air dried pulp from a dissolving tank vent; and  
8 (3) 0.5 pounds per equivalent ton of air dried pulp from a lime kiln stack.

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

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

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

17  
18 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

19 *Eff. February 1, 1976;*

20 *Amended Eff. July 1, 1998; August 1, 1987; April 1, 1986; January 1, 1985; May 30, ~~1978~~ 1978;*

21 *Readopted Eff. September 1, 2020.*  
22

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0509

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Since the equations in (a) apply to several different categories, please consider breaking this into a list.*

*While generally I think lists make rules more clear, the list in Paragraph (c) is a bit unclear with the continuing language on lines 20-21. If you want to keep the list, please provide some sort of introduction to the Subparagraphs. Is there a reason why the language in (c) does not track that in either (a) or (b)? Please review and revise.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0509 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0509 PARTICULATES FROM MICA OR FELDSPAR PROCESSING PLANTS**

4 (a) The allowable emission rate for particulate matter resulting from the processing of mica or feldspar that are  
5 discharged from any chimney, stack, vent, or outlet into the atmosphere shall not exceed the level calculated with the  
6 equation  $E = 4(P)^{0.677}$  calculated to three significant figures for process rates less than or equal to 30 tons per hour.  
7 For process rates greater than 30 tons per hour but less than 1,000 tons per hour, the allowable emission rate for  
8 particulate matter shall not exceed the level calculated with the equation  $E = 20.421(P)^{0.1977}$  calculated to three  
9 significant figures. For process rates greater than or equal to 1,000 tons per hour but less than 3,000 tons per hour,  
10 the allowable emission rate for particulate matter shall not exceed the level calculated with the equation  $E =$   
11  $38.147(P)^{0.1072}$  calculated to three significant figures. The allowable emission rate shall be 90.0 pounds per hour for  
12 process weight rates equal to or greater than 3,000 tons per hour. For the purpose of these equations, "E" equals the  
13 maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process weight rate in  
14 tons per hour.

15 (b) Fugitive non-process dust emissions shall ~~be controlled by Rule .0540 of this Section.~~ meet the requirements of  
16 15A NCAC 02D .0540.

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

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

20 such that the applicable opacity standards in ~~Rule .0521 or .0524, of this Section.~~ 15A NCAC 02D .0521 or .0524 are  
21 not exceeded.

22  
23 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

24 *Eff. February 1, 1976;*

25 *Amended Eff. April 1, 2003; July 1, 1998; April 1, 1986; January 1, ~~1985~~, 1985;*

26 *Readopted Eff. September 1, 2020.*  
27

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0510

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Overall, what is the intent of (a)? What is meant by “without taking measures to reduce to a minimum any particulate matter...” What kind of “measures”? Can you provide some examples? Also, is this not an aspirational statement? Also, what are the “standards beyond the property line?*

*In (b), change “15A NCAC 02D .0540” to “.0540 of this Section” Please do the same for the Rule reference in (c).*

*While generally I think lists make rules more clear, the list in Paragraph (c) is a bit unclear with the continuing language on lines 14-15. If you want to keep the list, please provide some sort of introduction to the Subparagraphs. Is there a reason why the language in (c) does not track that in either (a) or (b)? Please review and revise.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0510 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0510 PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE**  
4 **OPERATIONS**

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

9 (b) Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled by ~~Rule~~  
10 ~~.0540 of this Section.~~ 15A NCAC 02D .0540.

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

12 (1) from crushers with wet suppression, and

13 (2) from conveyors, screens, and transfer points,

14 such that the applicable opacity standards in ~~Rule .0521 or .0524, of this Section~~ 15A NCAC 02D .0521 or .0524 are  
15 not exceeded.

16  
17 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

18 *Eff. February 1, 1976;*

19 *Amended Eff. July 1, 1998; January 1, ~~1985-1985~~;*

20 *Readopted. Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0511

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Overall, what is the intent of (a)? What is meant by “without taking measures to reduce to a minimum any particulate matter...” What kind of “measures”? Can you provide some examples? Also, is this not an aspirational statement? Also, what are the “standards beyond the property line?*

*While generally I think lists make rules more clear, the list in Paragraph (c) is a bit unclear with the continuing language on lines 13-14. If you want to keep the list, please provide some sort of introduction to the Subparagraphs. Is there a reason why the language in (c) does not track that in either (a) or (b)? Please review and revise.*

*In (d), what is considered “lightweight”? Is this known to your regulated public?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0511 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0511 PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES**

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

8 (b) Fugitive non-process dust emissions from lightweight aggregate processes subject to this Rule shall ~~be controlled~~  
9 ~~by Rule .0540 of this Section.~~ meet the requirement of 15A NCAC 02D .0540.

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

11 (1) from crushers with wet ~~suppression,~~suppression; and

12 (2) from conveyors, screens, and transfer points,

13 such that the applicable opacity standards in ~~Rule .0521 or .0524, of this Section~~ 15A NCAC 02D .0521 or .0524 are  
14 not exceeded.

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

18  
19 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

20 *Eff. February 1, 1976;*

21 *Amended Eff. July 1, 1998; October 1, 1989; January 1, 1985; April 1, ~~1977,~~1977;*

22 *Readopted Eff. September 1, 2020.*



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0512

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please delete or define "adequate" and "properly"*

*On line 6, how will it be determined whether a different device will be approved by the Commission? What factors will be used? How will it be requested?*

*Please make "in no case" a new sentence.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0512 is readopted as published in 34:16 NCR 1452 as follows:

2  
3 **15A NCAC 02D .0512 PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS**

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

9  
10 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
11 *Eff. February 1, 1976;*  
12 *Amended Eff. January 1, ~~1985-1985~~;*  
13 *Readopted Eff. September 1, 2020.*  
14

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0513

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (b), please add a comma after "vent"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0513 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0513 PARTICULATES FROM PORTLAND CEMENT PLANTS**

4 (a) Particulate matter from any Portland cement kiln shall:

- 5 (1) be reduced by at least 99.7 percent by weight before being discharged to the atmosphere; ~~the 99.7-~~  
6 ~~percent reduction shall be by air pollution control devices; and~~  
7 (2) not exceed 0.327 pounds per barrel.

8 (b) The emissions of particulate matter from any stacks, vent or outlets from all processes except Portland cement  
9 kilns shall be controlled ~~by Rule .0515 of this Section.~~ pursuant to 15A NCAC 02D .0515

10  
11 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
12 *Eff. February 1, 1976;*  
13 *Amended Eff. July 1, 1998; January 1, ~~1985~~1985;*  
14 *Readopted Eff. September 1, 2020.*  
15

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0514

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Would it make sense to break this Rule into two paragraphs?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0514 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0514 PARTICULATES FROM FERROUS JOBBING FOUNDRIES**

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

5  
6

Maximum Allowable	
Process Weight	Emission
In <del>Lb/Hr</del> lb/hr	Rate For Particulate In <del>Lb/Hr</del> lb/hr
<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

7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

24 Any foundry existing before January 2, 1972, having a capacity greater than shown in the table and any new foundry,  
25 regardless of size, shall comply with the particulate emission limits ~~specified in Paragraph (a) of Rule .0515 of this~~  
26 ~~Section~~ pursuant to 15A NCAC 02D .0515(a).

27  
28 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
29 *Eff. February 1, 1976;*  
30 *Amended Eff. July 1, 1998; April 1, 1986; January 1, ~~1985-1985~~;*  
31 *Readopted Eff. September 1, 2020.*  
32

1 15A NCAC 02D.0515 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D.0515 PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

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

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

18  
19 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
20 *Eff. February 1, 1976;*  
21 *Amended Eff. April 1, 2003; July 1, 1998; January 1, 1985; December 1, ~~1976~~1976;*  
22 *Readopted Eff. September 1, 2020.*  
23

1 15A NCAC 02D .0516 is readopted with changes as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0516 SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

4 (a) Emission of sulfur dioxide from any source of combustion ~~that is~~ discharged from any vent, stack, or chimney  
5 shall not exceed 2.3 pounds of sulfur dioxide per million BTU input. Sulfur dioxide formed by the combustion of  
6 sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.  
7 Sulfur dioxide formed or reduced as a result of treating flue gases with sulfur trioxide or other materials shall also be  
8 accounted for when determining compliance with this standard.

9 (b) ~~A source subject to an emission standard for sulfur dioxide in Rules .0524, .0527, .1110, .1111, .1205, .1206,~~  
10 ~~.1210, or .1211 of this Subchapter shall meet the standard in that particular rule instead of the standard in Paragraph~~  
11 ~~(a) of this Rule. The standard set forth in Paragraph (a) of this Rule shall not apply to sulfur dioxide emission sources~~  
12 already subject to an emission standard for sulfur dioxide in 15A NCAC 02D .0524, .0527, .1110, .1111, .1206, or  
13 .1210.

14  
15 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

16 *Eff. February 1, 1976;*

17 *Amended Eff. July 1, 2007; April 1, 2003; July 1, 1996; February 1, 1995; October 1, 1989; January*  
18 *1, 1985; April 1, ~~1977~~1977;*

19 *Readopted Eff. September 1, 2020.*  
20  
21



1 15A NCAC 02D .0517 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0517 EMISSIONS FROM PLANTS PRODUCING SULFURIC ACID**

4 Emissions of sulfur dioxide or sulfuric acid mist from the manufacture of sulfuric acid shall not exceed:

- 5 (1) 27 pounds of sulfur dioxide per ton of sulfuric acid produced; and  
6 (2) 0.5 pounds of acid ~~mist (expressed as sulfuric acid)~~ mist, expressed as sulfuric acid, per ton of  
7 sulfuric acid produced.

8  
9 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

10 *Eff. February 1, 1976;*

11 *Amended Eff. January 1, 1985.*

12 *Readopted Eff. September 1, 2020.*  
13  
14

1 15A NCAC 02D .0519 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0519 CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS**

4 (a) The emissions of nitrogen dioxide shall not exceed 5.8 pounds per ton of acid produced from any ~~sulfuric~~ nitric  
5 acid manufacturing plant.

6 (b) The emissions of nitrogen oxides shall not exceed:

7 (1) 0.8 pounds per million BTU of heat input from any oil or gas-fired boiler with a capacity of 250  
8 million BTU per hour or more; or

9 (2) 1.8 pounds per million BTU of heat input from any coal-fired boiler with a capacity of 250 million  
10 BTU per hour or more.

11 (c) The emission limit for a boiler ~~that burns both coal and oil or gas-burning coal, oil, or gas~~ in combination shall be  
12 calculated by the ~~equation  $E = [(E_c)(Q_c) + (E_o)(Q_o)] / Q_t$~~  equation:

13 
$$E = \frac{(E_c * Q_c) + (E_o * Q_o)}{Q_t}$$

14 (1) E = the emission limit for combination in pounds per million BTU.

15 (2) Ec = emission limit for coal only as determined by Paragraph (b) of this Rule in pounds per million  
16 BTU.

17 (3) Eo = emission limit for oil or gas as determined by Paragraph (b) of this Rule in pounds per million  
18 BTU.

19 (4) Qc = the actual coal heat input to the combination in BTU per hour.

20 (5) Qo = the actual oil and gas heat input to the combination in BTU per hour.

21 (6) Qt = Qc + Qo and is the actual total heat input to the combination in BTU per hour.

22 (d) ~~If a boiler is subject to an emission standard for nitrogen oxides under pursuant to Rule 15A NCAC 02D .0524~~  
23 ~~(New Source Performance Standards) or .1418 (New Generating Units, Large Boilers, and Large I/C Engines) of this~~  
24 ~~Subchapter, 15A NCAC 02D .1418, then the boiler shall meet the standard in that particular rule instead of the standard~~  
25 ~~in Paragraph (a)(b) of this Rule.~~

26  
27 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

28 *Eff. February 1, 1976;*

29 *Amended Eff. July 1, 2007; January 1, 2005; July 1, 1996; October 1, 1989; January 1, ~~1985~~.1985;*

30 *Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0521

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please consider deleting the introductions of "Purpose" in (a), "Scope" in (b), and "Exception from Opacity Standard in Paragraph (d) of this Rule" since you have not used similar language elsewhere in this Rule nor in the majority of the other Rules of this Section.*

*Is (a) necessary? It does not appear to provide any directives to your regulated public.*

*If (a) is necessary, add a comma after "abate"*

*In (a), delete "reasonably"*

*Please begin (c)(1) through (3); (d)(1) through (3); (e)(1) and (2); and (g)(1) and (2) with lower case letters.*

*In (f), are lines 35-36 ("The burden... following manner") necessary? It appears to be superfluous to the rest of the Paragraph. If you do need it, change "shall be approached in the following manner" to something like "in accordance with this Paragraph"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0521 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0521 CONTROL OF VISIBLE EMISSIONS**

4 (a) Purpose. The intent of this Rule is to prevent, abate and control emissions generated from fuel burning operations  
5 and industrial processes where an emission can reasonably be expected to occur, except during ~~startup, startups,~~  
6 shutdowns, and malfunctions approved according to procedures ~~set out in Rule .0535 of this Section.~~ 15A NCAC 02D  
7 .0535.

8 (b) Scope. This Rule shall apply to all fuel burning sources and to other industrial processes ~~that may have~~ having a  
9 visible ~~emission.~~ emission. Sources subject to a specific visible emission standard in ~~Rules~~ 15A NCAC 02D  
10 .0506, .0508, .0524, .0543, .0544, .1110, .1111, .1205, .1206, or .1210, .1210, .1211, or .1212 of this Subchapter shall  
11 meet that standard instead of the standard contained in this Rule. This Rule does not apply to engine maintenance,  
12 rebuild, and testing activities where controls are infeasible, ~~except~~ but it does apply to the testing of peak shaving and  
13 emergency generators. ~~(In In deciding if controls are infeasible, the Director shall consider emissions, capital cost of~~  
14 ~~compliance, annual incremental compliance cost, and environmental and health impacts.)~~ impacts.

15 (c) For sources manufactured as of July 1, 1971, visible emissions shall not be more than 40 percent opacity when  
16 averaged over a six-minute period. However, except for sources required to comply with Paragraph (g) of this Rule,  
17 six-minute averaging periods may exceed 40 percent opacity if:

- 18 (1) No six-minute period exceeds 90 percent opacity;  
19 (2) No more than one six-minute period exceeds 40 percent opacity in any hour; and  
20 (3) No more than four six-minute periods exceed 40 percent opacity in any 24-hour period.

21 (d) For sources manufactured after July 1, 1971, visible emissions shall not be more than 20 percent opacity when  
22 averaged over a six-minute period. ~~However, except~~ Except for sources required to comply with Paragraph (g) of this  
23 Rule, six-minute averaging periods may exceed 20 percent opacity if:

- 24 (1) No six-minute period exceeds 87 percent opacity;  
25 (2) No more than one six-minute period exceeds 20 percent opacity in any hour; and  
26 (3) No more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

27 (e) Where the presence of uncombined water ~~is the only reason for~~ contributes solely to the failure of an emission to  
28 meet the limitations of Paragraph (c) or (d) of this Rule, those requirements shall not apply.

29 (f) Exception from Opacity Standard in Paragraph (d) of this Rule. Sources subject to Paragraph (d) of this Rule shall  
30 be allowed to comply with Paragraph (c) of this Rule if:

- 31 (1) The owner or operator of the source demonstrates compliance with applicable particulate mass  
32 emissions standards; and  
33 (2) The owner or operator of the source submits data ~~necessary~~ to show that emissions up to those  
34 allowed by Paragraph (c) of this Rule shall not violate any national ambient air quality standard.

35 The burden of proving these conditions shall be on the owner or operator of the source and shall be approached in the  
36 following manner. The owner or operator of a source seeking an exception shall apply to the Director requesting this  
37 modification in its permit. The applicant shall submit the results of a source test within 90 days of application. Source

1 testing shall be by the appropriate procedure as designated by rules in this Subchapter. During this 90-day period the  
2 applicant shall submit data necessary to show that emissions up to those allowed by Paragraph (c) of this Rule will  
3 not contravene ambient air quality standards. This evidence shall include an inventory of past and projected emissions  
4 from the facility. In its review of ambient air quality, the Division may require additional information that it considers  
5 necessary to assess the resulting ambient air quality. If the applicant can thus show that it will be in compliance both  
6 with particulate mass emissions standards and ambient air quality standards, the Director shall modify the permit to  
7 allow emissions up to those allowed by Paragraph (c) of this Rule.

8 (g) For sources required to install, operate, and maintain continuous opacity monitoring systems (COMS), compliance  
9 with the numerical opacity limits in this Rule shall be determined as follows excluding startups, shutdowns,  
10 maintenance periods when fuel is not being combusted, and malfunctions approved as such according to procedures  
11 approved under ~~Rule 15A NCAC 02D .0535~~ of this Section:

- 12 (1) No more than four six-minute periods shall exceed the opacity standard in any one day; and
- 13 (2) The percent of excess emissions (~~defined, defined~~ as the percentage of monitored operating time in  
14 a calendar quarter above the opacity ~~limit~~) limit, shall not exceed 0.8 percent of the total operating  
15 hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess  
16 emissions shall be calculated by including hours operated immediately ~~previous~~ prior to this quarter  
17 until 500 operational hours are obtained.

18 In no instance shall excess emissions exempted ~~under~~ pursuant to this Paragraph cause or contribute to a violation of  
19 any emission standard in this Subchapter or 40 CFR Part 60, 61, or 63 or any ambient air quality standard in ~~Section~~  
20 15A NCAC 02D .0400 or 40 CFR Part 50.

21  
22 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

23 *Eff. February 1, 1976;*

24 *Amended Eff. January 1, 2009; July 1, 2007; January 1, 2005; June 1, 2004; April 1, 2003; April*  
25 *1, 2001; July 1, 1998; July 1, 1996; December 1, 1992; August 1, 1987; January 1, 1985; May 30,*  
26 *~~1978-1978;~~*

27 *Readopted Eff. September 1, 2020.*  
28  
29

## REQUEST FOR TECHNICAL CHANGE

-  
AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0524

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*I assume that the intent here is to incorporate 40 CFR 60 by reference, except for those set forth in Paragraph (b)? If so, please do so in accordance with G.S. 150B-21.6 and provide the required information.*

*In (a), change "which" to "that" in "which would be"*

*What is the intent of (c)? I'm not sure that I understand. I am reading this to say that the Director may enforce a standard even if it is not adopted in compliance with the APA? Is that correct?*

*Please remove G.S. 150B-21.6 from your History Note.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0524 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0524 NEW SOURCE PERFORMANCE STANDARDS**

4 (a) With the exception of Paragraph (b) and (c) of this Rule, sources subject to new source performance standards  
5 promulgated in 40 CFR Part 60 shall comply with emission standards, monitoring and reporting requirements,  
6 maintenance requirements, notification and record keeping requirements, performance test requirements, test method  
7 and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable  
8 rule in this Section which would be in conflict therewith.

9 (b) The following ~~is~~are not included ~~under~~pursuant to this Rule:

- 10 (1) 40 CFR Part 60, Subpart ~~AAA (new residential wood heaters);AAA;~~  
11 (2) 40 CFR Part 60, Subpart ~~B (adoption and submittal of state plans for designated facilities);B;~~  
12 (3) 40 CFR Part 60, Subpart ~~C (emission guidelines and compliance times);C;~~  
13 (4) 40 CFR Part 60, Subpart ~~Cb (guidelines for municipal waste combustors constructed on or before~~  
14 ~~September 20, 1994);Cb;~~  
15 (5) 40 CFR Part 60, Subpart ~~Cc (guidelines for municipal solid waste landfills);Cc;~~  
16 (6) 40 CFR Part 60, Subpart ~~Cd (guidelines for sulfuric acid production units);Cd;~~  
17 (7) 40 CFR Part 60, Subpart ~~Ce (guidelines for hospital, medical, infectious waste incinerators);Ce;~~  
18 (8) 40 CFR Part 60, Subpart ~~BBBB (guidelines for small municipal waste combustion units constructed~~  
19 ~~on or before August 30, 1999);BBBB;~~  
20 (9) 40 CFR Part 60, Subpart ~~DDDD (guidelines for commercial and industrial solid waste incinerators~~  
21 ~~constructed on or before November 30, 1999);DDDD;~~  
22 (10) 40 CFR Part 60, Subpart ~~FFFF (guidelines for other solid waste incinerators constructed on or before~~  
23 ~~December 9, 2004);FFFF; or~~  
24 (11) 40 CFR Part 60, Subpart ~~HHHH (guidelines for coal-fired electric steam generating units);HHHH.~~

25 (c) Along with the notice appearing in the North Carolina Register for a public hearing to amend this Rule to exclude  
26 a standard from this Rule, the Director shall state whether or not the new source performance standards promulgated  
27 under 40 CFR Part 60, or part thereof, shall be enforced. If the Environmental Management Commission does not  
28 adopt the amendment to this Rule to exclude or amend the standard within 12 months after the close of the comment  
29 period on the proposed amendment, the Director shall begin enforcing that standard when 12 months has elapsed after  
30 the end of the comment period on the proposed amendment.

31 (d) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as  
32 nonattainment for ozone or an area identified in accordance with 15A NCAC 02D .0902 as being in violation of the  
33 ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 60 ~~that~~ are not excluded by  
34 this Rule, as well as with any applicable requirements in ~~Section .0900 of this Subchapter.~~ 15A NCAC 02D .0900.

35 (e) All requests, reports, applications, submittals, and other communications to the administrator required under  
36 Paragraph (a) of this Rule shall be submitted to the Director ~~of the Division of Air Quality~~ rather than to the  
37 Environmental Protection Agency.

1 (f) In the application of this Rule, definitions contained in 40 CFR Part 60 shall apply rather than those of Section  
2 ~~.0100 of this Subchapter, in 15A NCAC 02D .0100.~~

3 (g) With the exceptions allowed ~~under~~ in 15A NCAC 02Q .0102, Activities Exempted from Permit Requirements,  
4 the owner or operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500.

5  
6 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 150B-21.6;*

7 *Eff. June 18, 1976;*

8 *Temporary Amendment Eff. January 3, 1988, for a period of 180 days to expire on June 30, 1988;*

9 *Amended Eff. December 1, 1992; July 1, 1992;*

10 *Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent rule is*  
11 *effective, whichever is sooner;*

12 *Amended Eff. July 1, 2007; January 1, 2007; July 1, 2000; April 1, 1997; July 1, 1996; July 1,*  
13 *~~1994-1994;~~*

14 *Readopted Eff. September 1, 2020.*



1 15A NCAC 02D .0527 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0527 EMISSIONS FROM SPODUMENE ORE ROASTING**

4 Emission of sulfur dioxide and sulfuric acid mist from any one kiln used for the roasting of spodumene ore shall not  
5 exceed:

- 6 (1) 9.7 pounds of sulfur dioxide per ton of ore ~~roasted~~ roasted; and  
7 (2) 1.0 pound of sulfuric acid mist, expressed as ~~H(2)SO(4)~~ H<sub>2</sub>SO<sub>4</sub>, per ton ~~or~~ of ore roasted.

8  
9 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
10 *Eff. March 15, 1978;*  
11 *Amended Eff. January 1, ~~1985~~ 1985;*  
12 *Readopted Eff. September 1, 2020.*  
13

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0528

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(1), change "which" to "that" in "which enter"*

*In (a)(4), remove the comma after "white liquor"*

*In (a)(4), add a comma at the end of "chip steamers"*

*In (a)(5), change "which" to "that" in "which leaves"*

*In (a)(6) and (9), would it not make sense to define "cooking"? It appears as though you have essentially defined the term here. Why not pull it out and make it its own Paragraph? You would then delete the "industry term for digesting"*

*In (a)(7), remove the comma after "lime mud" and change "which" to "that" in "which consists"*

*In (a)(8), would it not make sense to define "black liquor"? It appears as though you have essentially defined the term here. Why not pull it out and make it its own Paragraph?*

*In (a)(9), add a comma after "also called grinding the wood pulp"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0528 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0528 TOTAL REDUCED SULFUR FROM KRAFT PULP MILLS**

4 (a) ~~For the purpose of this Regulation, the following definitions apply:~~

- 5 (1) ~~"Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl~~  
6 ~~mercaptain, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping~~  
7 ~~operation.~~
- 8 (2) ~~"Kraft pulp mill" means any facility that produces pulp from wood by cooking (digesting) wood~~  
9 ~~chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature~~  
10 ~~and pressure. Regeneration of cooking chemicals through a recovery process is also considered part~~  
11 ~~of the kraft pulp mill.~~
- 12 (3) ~~"Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace and~~  
13 ~~includes the direct contact evaporator for a direct contact furnace.~~
- 14 (4) ~~"Cross recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium~~  
15 ~~and sulfur compounds by burning black liquor which on a quarterly basis contains more than seven~~  
16 ~~percent by weight of the total pulp solids from the neutral sulfite semichemical process and has a~~  
17 ~~green liquor sulfidity of more than 28 percent.~~
- 18 (5) ~~"Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of~~  
19 ~~sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven~~  
20 ~~percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or~~  
21 ~~has green liquor sulfidity of 28 percent or less.~~
- 22 (6) ~~"Old design recovery furnace" means a straight kraft recovery furnace that does not have membrane~~  
23 ~~wall or welded wall construction or emission control designed air systems.~~
- 24 (7) ~~"New design recovery furnace" means a straight kraft recovery furnace that has both membrane wall~~  
25 ~~or welded wall construction and emission control designed air systems.~~
- 26 (8) ~~"Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced~~  
27 ~~from wood by cooking (digesting) wood chips in a solution of sodium sulfite and sodium~~  
28 ~~bicarbonate, followed by mechanical defibrating (grinding).~~
- 29 (9) ~~"Digester system" means each continuous digester or each batch digester used for the cooking of~~  
30 ~~wood in white liquor, and associated flash tanks, blow tanks, chip steamers and condensers.~~
- 31 (10) ~~"Multiple effect evaporator system" means the multiple effect evaporators and associated~~  
32 ~~condensers and hot wells used to concentrate the spent cooking liquid that is separated from the pulp~~  
33 ~~(black liquor).~~
- 34 (11) ~~"Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate,~~  
35 ~~into quicklime, which is calcium oxide.~~

1       ~~(12) "Condensate stripper system" means a column, and associated condensers, used to strip, with air or~~  
2       ~~steam, total reduced sulfur compounds from condensate streams from various processes within a~~  
3       ~~kraft pulp mill.~~

4       ~~(13) "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery~~  
5       ~~furnace.~~

6       ~~(14) "Black liquor solids" means the dry weight of the solids which enter the recovery furnace in the~~  
7       ~~black liquor.~~

8       ~~(15) "Green liquor sulfidity" means the sulfidity of the liquor which leaves the smelt dissolving tank.~~

9       (a) For the purpose of this Rule, the following definitions apply:

10       (1) "Black liquor solids" means the dry weight of the solids which enter the recovery furnace in the  
11       black liquor.

12       (2) "Condensate stripper system" means a column, and associated condensers, used to strip, with air or  
13       steam, total reduced sulfur compounds from condensate streams from various processes within a  
14       kraft pulp mill.

15       (3) "Cross recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium  
16       and sulfur compounds by burning black liquor which on a quarterly basis contains more than seven  
17       percent by weight of the total pulp solids from the neutral sulfite semichemical process and has a  
18       green liquor sulfidity of more than 28 percent.

19       (4) "Digester system" means each continuous digester or each batch digester used for the cooking of  
20       wood in white liquor, and associated flash tanks, blow tanks, chip steamers and condensers.

21       (5) "Green liquor sulfidity" means the sulfidity of the liquor which leaves the smelt dissolving tank.

22       (6) "Kraft pulp mill" means any facility that produces pulp from wood by "cooking", industry term for  
23       digesting, wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at  
24       high temperature and pressure. Regeneration of cooking chemicals through a recovery process is  
25       also considered part of the kraft pulp mill.

26       (7) "Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate,  
27       into quicklime, which is calcium oxide.

28       (8) "Multiple-effect evaporator system" means the multiple-effect evaporators and associated  
29       condensers and hot wells used to concentrate the spent cooking liquid that is separated from the  
30       pulp, known in the industry as "black liquor".

31       (9) "Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced  
32       from wood by "cooking", industry term for digesting, wood chips in a solution of sodium sulfite  
33       and sodium bicarbonate, followed by mechanical defibrating, also called grinding the wood pulp to  
34       separate into its fibrous constituents.

35       (10) "New design recovery furnace" means a straight kraft recovery furnace that has both membrane wall  
36       or welded wall construction and emission control designed air systems.

(11) "Old design recovery furnace" means a straight kraft recovery furnace that does not have membrane wall or welded wall construction or emission control designed air systems.

(12) "Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace and includes the direct-contact evaporator for a direct-contact furnace.

(13) "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery furnace.

(14) "Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or has green liquor sulfidity of 28 percent or less.

(15) "Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation.

(b) This ~~Regulation~~ Rule shall apply to recovery furnaces, digester systems, multiple-effect evaporator systems, lime kilns, smelt dissolving tanks, and condensate stripping systems of kraft pulp mills not subject to ~~Regulation .0524 of this Section.~~ 15A NCAC 02D .0524.

(c) Emissions of total reduced sulfur from any kraft pulp mill subject to this ~~Regulation~~ Rule shall not exceed:

- (1) 20 parts per million from any old design recovery furnace;
- (2) five parts per million from any new design recovery furnace;
- (3) 25 parts per million from any cross recovery furnace;
- (4) five parts per million from any digester system;
- (5) five parts per million from any multiple-effect evaporator system;
- (6) 20 parts per million from any lime kiln;
- (7) five parts per million from any condensate stripping system; and
- (8) 0.032 pounds per ton of black liquor solids (dry weight) from any smelt dissolving tank.

(d) The emission limitations given in Subparagraphs (c)(1) through (c)(7) of this Rule are measured as hydrogen sulfide on a dry gas basis and are averages of discrete contiguous 12-hour time periods. The emission limitations given in Subparagraphs (c)(1) through (c)(3) of this Rule are corrected to eight percent oxygen by volume. The emission limitations given in Subparagraph (c)(6) of this Rule is corrected to ~~40~~ ten percent oxygen by volume.

(e) One percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitations given in Subparagraphs (c)(1) through (c)(3) of this Rule, in the absence of start-ups, shut-downs and malfunctions, shall not be considered in violation. Two percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitation given in Subparagraph (c)(6) of this Rule, in the absence of start-ups, shut-downs, and malfunctions, shall not be considered in violation.

*History Note:* Authority *G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
*Eff. June 1, 1980;*

1                    *Amended Eff. July 1, 1988; July 1, 1987; January 1, 1985; November 1, ~~1982~~1982;*  
2                    *Readopted Eff. September 1, 2020.*  
3

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0529

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(1), how is it determined whether something is "an equivalent method"? How will the director make this determination? What factors will be used?*

*In (d)(1), what is considered to be "good repair"?*

*In (d)(3), I assume that "high hood exhaust rate" and "normal exhaust rate" are terms of art, are known by your regulated public, and specified by the manufacturer?*

*In (d)(4), how is "as soon as practical" determined?*

*In (d)(5), change "which" to "that" in "which return"*

*In (d)(5), what is considered to be "good repair"? Also, delete or define "properly." Here, I assume you mean something like "in accordance with the manufacturer's specifications?"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0529 is readopted as published in 34:16 NCR 1453 as follows:

2  
3 **15A NCAC 02D .0529 FLUORIDE EMISSIONS FROM PRIMARY ALUMINUM REDUCTION PLANTS**

4 (a) For the purpose of this Rule, the following definitions apply:

5 (1) "Fluoride" means elemental fluorine and all fluoride compounds as measured by the methods  
6 specified in 15A NCAC 02D .2616 or by other equivalent or alternative methods approved by the  
7 Director or his delegate, Director. The Director may approve equivalent or alternative methods on  
8 an individual basis for sources or pollutants if equivalent or alternative methods can be demonstrated  
9 to determine compliance of permitted emission sources or pollutants.

10 (2) "Prebake cell" is an aluminum reduction pot ~~which uses~~ using carbon anodes ~~that are~~ formed,  
11 pressed, and baked prior to their placement in the pot.

12 (3) "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic  
13 reduction.

14 (b) This Rule shall apply to prebake cells at all primary aluminum reduction plants not subject to ~~Rule .0524 of this~~  
15 ~~Section.~~ 15A NCAC 02D .0524.

16 (c) An owner or operator of a primary aluminum reduction plant subject to this Rule shall not cause, allow, or permit  
17 the use of the ~~rebake~~ prebake cells unless:

18 (1) 95 percent of the fluoride emissions are captured; and

19 (2) 98.5 percent of the captured fluoride emissions are removed before the exhaust gas is discharged  
20 into the atmosphere.

21 (d) The owner or operator of a primary aluminum reduction plant subject to this Rule shall:

22 (1) ensure ~~that~~ hood covers are in good repair and positioned over the prebake cells;

23 (2) minimize the amount of time ~~that~~ hood covers are removed during pot working operations;

24 (3) if the hooding system is equipped with a dual low and high hood exhaust rate, use the high rate  
25 whenever hood covers are removed and return to the normal exhaust rate when the hood covers are  
26 replaced;

27 (4) minimize the occurrence of fuming pots and correct the cause of a fuming pot as soon as practical;  
28 and

29 (5) if the tapping crucibles are equipped with hoses which return aspirator air under the hood, ensure  
30 ~~that~~ the hoses are in good repair and ~~that~~ the air return system is functioning properly.

31  
32 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

33 *Eff. June 1, 1981;*

34 *Amended Eff. June 1, 2008; July 1, 1988; January 1, ~~1985~~ 1985;*

35 *Readopted Eff. September 1, 2020.*  
36  
37



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0531

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(1), please provide some sort of introductory language to (a)(1)(A) such as "as follows:"*

*Please consider deleting the introductions of "Redesignation in Attainment" in (e) and "applicability" in (f) since you have not used similar language elsewhere in this Rule nor in the majority of the other Rules of this Section.*

*Given Paragraph (r), do you need (f)?*

*In (i)(2), that the EPA has authority pursuant to what? CFR?*

*In (m), delete or define "significantly." As it is used here, is it a term of art? How is this determined?*

*In (q), do you want to say (a)(6) and (7) are not incorporated by reference?*

*Change "will" to "shall" on line 32, page 5.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0531 is readopted with changes as published in 34:16 NCR 1456 as follows:

2  
3 **15A NCAC 02D .0531 SOURCES IN NONATTAINMENT AREAS**

4 (a) ~~For the purpose of this Rule, The purpose of this Rule is to implement a program for new source review in~~  
5 ~~nonattainment areas as required by 40 CFR 51.165, [and] the The~~ definitions contained in 40 CFR 51.165(a)(1) and  
6 40 CFR 51.301 shall apply, except the ~~definition of "baseline actual emissions."~~ For the purposes of this Rule:  
7 following:

8 (1) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source  
9 review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this  
10 Subparagraph. ~~Subparagraph. [Subparagraphs] [(2)] [through] [(4)] [of this Paragraph;]~~

11 (A)~~[(2)]~~ For an existing emissions unit, baseline actual emissions means the average rate, in tons  
12 per year, at which the emissions unit actually emitted the pollutant during any consecutive  
13 24-month period selected by the owner or operator within the five year period immediately  
14 preceding the date that a complete permit application is received by the Division for a  
15 permit required under this Rule. The Director shall allow a different time period, not to  
16 exceed 10 years immediately preceding the date that a complete permit application is  
17 received by the Division, if the owner or operator demonstrates that it is more  
18 representative of normal source operation. For the purpose of determining baseline actual  
19 emissions, the following apply:

20 (i)~~[(A)]~~ The average rate shall include fugitive emissions to the extent quantifiable, and  
21 emissions associated with startups, shutdowns, and malfunctions;

22 (ii)~~[(B)]~~ The average rate shall be adjusted downward to exclude any non-compliant  
23 emissions that occurred while the source was operating above any emission  
24 limitation that was legally enforceable during the consecutive 24-month period;

25 (iii)~~[(C)]~~ For an existing emission unit (other than an electric utility steam generating unit),  
26 the average rate shall be adjusted downward to exclude any emissions that would  
27 have exceeded an emission limitation with which the major stationary source must  
28 currently comply. However, if the State has taken credit in an attainment  
29 demonstration or maintenance plan consistent with the requirements of 40 CFR  
30 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum  
31 achievable control technology standard that the Administrator proposed or  
32 promulgated under Part 63 in Title 40 of the Code of Federal Regulations, the  
33 baseline actual emissions shall be adjusted to account for such emission  
34 reductions;

35 (iv)~~[(D)]~~ For an electric utility steam generating unit, the average rate shall be adjusted  
36 downward to reflect any emissions reductions under G.S. 143-215.107D and for  
37 which cost recovery is sought pursuant to G.S. 62-133.6;

1 ~~(v)(E)~~ For a regulated NSR pollutant, when a project involves multiple emissions units,  
2 only one consecutive 24-month period shall be used to determine the baseline  
3 actual emissions for all the emissions units being changed. A different consecutive  
4 24-month period can be used for each regulated NSR pollutant; and

5 ~~(vi)(F)~~ The average rate shall not be based on any consecutive 24-month period for which  
6 there is inadequate information for determining annual emissions, in tons per year,  
7 and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;

8 ~~(B)(3)~~ For a new emissions unit, the baseline actual emissions for purposes of determining the emissions  
9 increase that will result from the initial construction and operation of such unit shall equal zero; and  
10 thereafter, for all other purposes, shall equal the unit's potential to emit; and

11 ~~(C)(4)~~ For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall  
12 be calculated for existing emissions units in accordance with the procedures contained in Part (A)  
13 of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in  
14 Part (B) of this Subparagraph;

15 ~~(2)(b)~~ In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.165(a)(1)(vi)(C)(1)  
16 is seven ~~years; and years.~~

17 ~~(3)(c)~~ ~~Particulate matter~~ ~~PM<sub>2.5</sub>~~ PM<sub>2.5</sub> significant levels in 40 CFR 51.165(a)(1)(x)(A) are incorporated by reference  
18 except as otherwise provided in this Rule. Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) are precursors to ~~PM<sub>2.5</sub>~~  
19 PM<sub>2.5</sub> in all nonattainment areas. Volatile organic compounds and ammonia are not significant precursors to ~~PM<sub>2.5</sub>~~  
20 PM<sub>2.5</sub>.

21 (d) In 40 CFR 51.165(a)(1)(xxxvii)(D), starting January 1, 2011, in addition to PM10 and PM2.5, for particulate  
22 matter (PM), condensable particulate matter shall be accounted for in applicability determinations and in establishing  
23 emission limitations for each of these regulated NSR pollutants in nonattainment major NSR permits.

24 ~~(b)(c)~~ Redesignation to Attainment. If any county or part of a county to which this Rule applies is later designated in  
25 40 CFR 81.334 as attainment, all sources in that county subject to this Rule before the redesignation date shall continue  
26 to comply with this Rule.

27 ~~(e)(f)~~ Applicability. 40 CFR 51.165(a)(2) is incorporated by reference. This Rule applies to areas designated as  
28 nonattainment in 40 CFR 81.334, including any subsequent amendments or editions.

29 ~~(d)(g)~~ This Rule is not applicable to:

30 (1) ~~complex sources of air pollution regulated only under Section .0800 of this Subchapter and not~~  
31 ~~under any other rule in this Subchapter;~~

32 ~~(2)(1)~~ emission of pollutants at the new major stationary source or major modification located in the  
33 nonattainment area that are pollutants other than the pollutant or pollutants for which the area is  
34 nonattainment. ~~(A A major stationary source or major modification that is major for volatile organic~~  
35 ~~compounds or nitrogen oxides is also major for~~ ~~ozone; ozone;~~

36 ~~(3)(2)~~ emission of pollutants for which the source or modification is not major;

1       ~~(4)~~(3) a new source or modification that qualifies for exemption under the provision of 40 CFR  
2       51.165(a)(4); or  
3       ~~(5)~~(4) emission of compounds listed under 40 CFR 51.100(s) as having been determined to have negligible  
4       photochemical reactivity except carbon monoxide.  
5       ~~(e)~~(h) 15A NCAC 02Q .0102 ~~and .0302~~ ~~are~~ is not applicable to any source to which this Rule applies. The owner or  
6       operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500.  
7       ~~(f)~~(i) To issue a permit to a source to which this Rule applies, the Director shall determine that the source meets the  
8       following requirements:  
9           (1)       The new major stationary source or major modification will emit the nonattainment pollutant at a  
10           rate no more than the lowest achievable emission rate;  
11           (2)       The owner or operator of the proposed new major stationary source or major modification has  
12           demonstrated that all major stationary sources in the State that are owned or operated by this person  
13           (or any entity controlling, controlled by, or under common control with this person) are subject to  
14           emission limitations and are in compliance, or on a schedule for compliance that is federally  
15           enforceable or contained in a court decree, with all applicable emission limitations and standards of  
16           this Subchapter that EPA has authority to approve as elements of the North Carolina State  
17           Implementation Plan for Air Quality;  
18           (3)       The owner or operator of the proposed new major stationary source or major modification will  
19           obtain sufficient emission reductions of the nonattainment pollutant from other sources in the  
20           nonattainment area so that the emissions from the new major source and any associated new minor  
21           sources will be less than the emissions reductions by a ratio of at least 1.00 to 1.15 for volatile  
22           organic compounds and nitrogen oxides and by a ratio of less than one to one for carbon monoxide.  
23           The baseline for this emission offset shall be the actual emissions of the source from which offset  
24           credit is obtained. Emission reductions shall not include any reductions resulting from compliance  
25           (or scheduled compliance) with applicable rules in effect before the application. The difference  
26           between the emissions from the new major source and associated new minor sources of carbon  
27           monoxide and the emission reductions shall be sufficient to represent reasonable further progress  
28           toward attaining the National Ambient Air Quality Standards. The emissions reduction credits shall  
29           also conform to the provisions of 40 CFR 51.165(a)(3)(ii)(A) through (G) and (J); and  
30           (4)       The North Carolina State Implementation Plan for Air Quality is being carried out for the  
31           nonattainment area in which the proposed source is located.  
32       ~~(g)~~(j) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-  
33       133.6 shall install lowest achievable emission rate technology for NO<sub>x</sub> and SO<sub>2</sub>, regardless of the applicability of the  
34       rest of this Rule.  
35       ~~(h)~~(k) For the purposes of this Rule, 40 CFR 51.165(f) is incorporated by reference except that 40 CFR  
36       51.165(f)(10)(iv)(A) reads: "If the emissions level calculated in accordance with Paragraph (f)(6) of this Section is

equal to or greater than 80 percent of the PAL level, the Director shall renew the PAL at the same level." 40 CFR 51.165(f)(10)(iv)(B) is not incorporated by reference.

~~(j)(l)~~ When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

~~(j)(m)~~ To issue a permit to a source of a nonattainment pollutant, the Director shall determine, in accordance with Section 173(a)(5) of the Clean Air Act and in addition to the other requirements of this Rule, that an analysis (produced by the permit applicant) of alternative sites, sizes, production processes, and environmental control techniques for the source demonstrates that the benefits of the source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

~~(k)(n)~~ For the purposes of this Rule, the provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except that the term "Administrator" is replaced with "Director."

~~(l)(o)~~ Approval of an application regarding the requirements of this Rule does not relieve the owner or operator of the responsibility to comply with applicable provisions of other rules of this Chapter and any other requirements ~~under~~ in local, ~~state~~, State, or federal law.

~~(m)(p)~~ Except as provided in 40 CFR 52.28(c)(6), for a source or modification subject to this Rule the following procedures shall be followed:

- (1) Notwithstanding any other provisions of this Paragraph, the Director shall, no later than 60 days after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior and U.S. Department of Agriculture of an application from a source or modification subject to this Rule;
- (2) The owner or operator of the source shall provide an analysis of the impairment to visibility that would occur because of the source or modification and general commercial, industrial and other growth associated with the source or modification;
- (3) When a source or modification may affect the visibility of a Class I area, the Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be given at least 30 days before the publication of the notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application, including an analysis provided by the source of the potential impact of the proposed source on visibility;
- (4) The Director shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director finds that the analysis of the Federal Land Manager fails to demonstrate to the Director's satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall follow the public hearing

process described in 40 CFR 51.307(a)(3) on the application and include an explanation of the Director's decision or notice where the explanation can be obtained;

- (5) The Director shall issue permits only to those sources whose emissions will be consistent with making reasonable progress, as defined in Section 169A of the Clean Air Act, toward the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I areas when the impairment results from manmade air pollution. In making the decision to issue a permit, the Director shall consider the cost of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source; and

- (6) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

The requirements of this Paragraph do not apply to nonprofit health or nonprofit educational institutions.

~~(n)(q)~~ In lieu of the requirements in 40 CFR 51.165(a)(6) and (7), the following shall apply. If the owner or operator of a source is using projected actual emissions to ~~determine avoid~~ applicability ~~of with~~ nonattainment new source ~~review, review requirements,~~ the owner or operator shall ~~notify [submit an application to]~~ the Director of the modification before beginning actual construction. The notification shall include:

- (1) a description of the project;
- (2) identification of sources whose emissions could be affected by the project;
- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.165(a)(1)(xxviii)(B)(3);
- (4) the calculated baseline actual emissions in Subparagraph (a)(1) of this Rule and an explanation of how the baseline actual emissions were calculated; and
- (5) any netting calculations, if applicable.

If upon reviewing the ~~notification, [application,]~~ the Director finds that the project will ~~cause require~~ a nonattainment new source review evaluation, the Director shall notify the owner or operator of his or her ~~findings. The findings and~~ the owner or operator shall not make the modification until ~~it has received~~ a nonattainment new source review permit ~~has been~~ issued pursuant to this Rule. ~~If a permit revision is not required pursuant to this Rule, If the Director finds that the project will not require a nonattainment new source review evaluation and the projected actual emissions, calculated pursuant to 40 CFR 51.165(a)(1)(xxviii)(B)(1) and (2) minus the baseline actual emissions is 50 percent or greater of the amount that is a significant emissions increase, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant, then, the Director will require a permit application to include a permit condition for the monitoring, recordkeeping, and reporting of the~~ the owner or operator shall maintain records of annual emissions related to the project in tons per years, ~~on a calendar year basis related to the modifications~~ for 10 years, years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit for the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall

1 submit a report to the Director within 60 days after the end of each year during which these records must be generated.  
2 The report shall contain the items listed in 40 CFR 51.165(a)(6)(v)(A) through (C). The owner or operator shall make  
3 the information documented and maintained under this Paragraph available to the Director and the general public  
4 pursuant to the requirements in 40 CFR 70.4(b)(3)(viii). The monitoring, recordkeeping, and reporting requirements  
5 in this Paragraph shall not apply if the projected actual emissions calculated pursuant to 40 CFR  
6 51.165(a)(1)(xxviii)(B)(1) and (2), minus the baseline actual emissions, is less than 50 percent of the amount that is a  
7 significant emissions increase, without reference to the amount that is a significant net emissions increase, for the  
8 regulated NSR pollutant.  
9 ~~(e)(r)~~ The reference to Portions of the regulations in the Code of Federal Regulations (CFR) that are referred to in  
10 this Rule are incorporated by reference unless a specific reference states otherwise. Except for 40 CFR 81.334, the  
11 The version of the CFR incorporated in this Rule Rule, with respect to 40 CFR 51.165, is that as of May 16, 2008 July  
12 1, \_\_\_\_\_ 2019, \_\_\_\_\_ at \_\_\_\_\_ ~~http://www.gpo.gov/fdsys/pkg/FR-2008-05-16/pdf/E8-10768.pdf~~  
13 ~~https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-sec51-165.pdf~~ and does  
14 not include any subsequent amendments or editions to the referenced material. editions. Federal regulations referenced  
15 in 40 CFR 51.165 shall include subsequent amendments and editions. The publication may be accessed free of charge.

16  
17 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b);  
18 Eff. June 1, 1981;  
19 Amended Eff. December 1, 1993; December 1, 1992; August 1, 1991; December 1, 1989; October  
20 1, 1989; July 1, 1988; October 1, 1987; June 1, 1985; January 1, 1985; February 1, 1983;  
21 Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is  
22 effective, whichever is sooner;  
23 Amended Eff. September 1, 2013; January 2, 2011; September 1, 2010; May 1, 2008; May 1, 2005;  
24 July 1, 1998; July 1, 1996; July 1, 1995; July 1, ~~1994~~1994;  
25 Readopted Eff. September 1, 2020.  
26  
27

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0532

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Is 40 CFR 51 incorporated by reference elsewhere in your Rules in accordance with G.S. 150B-21.6? Was that the intent of Paragraph (g)?*

*In (e), by "the Director shall determine", do you mean "the Source shall meet the following conditions:"?*

*End (e)(1) and (2) with semi-colons and an "and" at the end of (e)(2).*

*In (e)(2), change "which" to "that" on line 8, page 2.*

*In (e)(2), who is "this person"*

*In (e)(3)(B), line 23, page 2, do you mean "shall be partially waived" rather than "may"? Also, what is "partially waived"?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020



1 15A NCAC 02D .0532 is readopted with changes as published in 34:16 NCR 1456 as follows:

2  
3 **15A NCAC 02D .0532 SOURCES CONTRIBUTING TO AN AMBIENT VIOLATION**

4 (a) This Rule applies to new major stationary sources and major modifications to which ~~Rule .0531 of this Section~~  
5 15A NCAC 02D .0531 does not apply and which would contribute to a violation of a national ambient air quality  
6 standard but which would not cause a new violation.

7 (b) For the purpose of this Rule the definitions contained in Section II.A. of Appendix S of 40 CFR Part 51 shall  
8 apply.

9 (c) The Rule is not applicable to:

10 ~~(1) complex sources of air pollution that are regulated only under Section .0800 of this Subchapter and~~  
11 ~~not under any other rule of this Subchapter;~~

12 ~~(2)~~(1) emission of pollutants for which the area in which the new or modified source is located is  
13 designated as nonattainment;

14 ~~(3)~~(2) emission of pollutants for which the source or modification is not major;

15 ~~(4)~~(3) emission of pollutants other than sulfur dioxide, ~~total suspended particulates~~, nitrogen oxides, and  
16 carbon monoxide;

17 ~~(5)~~(4) a new or modified source whose impact will not increase ~~not~~ more than:

18 (A) ~~1.0 ug/m<sup>3</sup> of SO<sub>2</sub> on an annual basis;~~ 1.0 ug/m<sup>3</sup> of SO<sub>2</sub> on an annual basis;

19 (B) ~~5 ug/m<sup>3</sup> of SO<sub>2</sub> on a 24 hour basis;~~ 5 ug/m<sup>3</sup> of SO<sub>2</sub> on a 24-hour basis;

20 (C) ~~25 ug/m<sup>3</sup> of SO<sub>2</sub> on a 3-hour basis;~~ 25 ug/m<sup>3</sup> of SO<sub>2</sub> on a 3-hour basis;

21 (D) ~~1.0 ug/m<sup>3</sup> of total suspended particulates on an annual basis;~~ 0.3 ug/m<sup>3</sup> of PM<sub>2.5</sub> on an  
22 annual basis;

23 (E) ~~5 ug/m<sup>3</sup> of total suspended particulates on a 24 hour basis;~~ 1.2 ug/m<sup>3</sup> of PM<sub>2.5</sub> on a 24-  
24 hour basis;

25 (F) ~~1.0 ug/m<sup>3</sup> of NO<sub>2</sub> on an annual basis;~~ 1.0 ug/m<sup>3</sup> of NO<sub>2</sub> on an annual basis;

26 (G) ~~0.5 mg/m<sup>3</sup> of carbon monoxide on an 8-hour basis;~~ 0.5 mg/m<sup>3</sup> of carbon monoxide on an 8-  
27 hour basis;

28 (H) ~~2 mg/m<sup>3</sup> of carbon monoxide on a one-hour basis;~~ 2 mg/m<sup>3</sup> of carbon monoxide on a one-  
29 hour basis;

30 (I) ~~1.0 ug/m<sup>3</sup> of PM<sub>10</sub> on an annual basis;~~ 1.0 ug/m<sup>3</sup> of PM<sub>10</sub> on an annual basis; or

31 (J) ~~5 ug/m<sup>3</sup> of PM<sub>10</sub> on a 24 hour basis;~~ 5 ug/m<sup>3</sup> of PM<sub>10</sub> on a 24-hour basis

32 at any locality that does not meet a national ambient air quality standard;

33 ~~(6)~~(5) sources which are not major unless secondary emissions are included in calculating the potential to  
34 emit;

35 ~~(7)~~(6) sources which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;

36 ~~(8)~~(7) temporary emission sources which will be relocated within two years; and

37 ~~(9)~~(8) emissions resulting from the construction phase of the source.

(d) 15A NCAC ~~2Q.02Q .0102 and .0302~~ is not applicable to any source to which this Rule applies. The owner or operator of the source shall apply for and receive a permit as required in 15A NCAC ~~2Q.02Q .0300 or .0500~~.

(e) To issue a permit to a new or modified source to which this Rule applies, the Director shall determine that the source will meet the following conditions:

(1) The sources will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate.

(2) The owner or operator of the proposed new or modified source has demonstrated that all major stationary sources in the State which are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance which is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Subchapter which EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality.

(3) The source will satisfy one of the following conditions:

(A) The source will comply with ~~Subparagraph (e)(3) of Rule .0531 of this Section~~ 15A NCAC 02D .0531 (e)(3)(i) when the source is evaluated as if it were in the nonattainment area; or

(B) The source will have an air quality offset, i.e., the applicant will have caused an air quality improvement in the locality where the national ambient air quality standard is not met by causing reductions in impacts of other sources greater than any additional impact caused by the source for which the application is being made. The emissions reductions creating the air quality offset shall be placed as a condition in the permit for the source reducing emissions. The requirements of this Part may be partially waived if the source is a resource recovery facility burning municipal solid waste, the source must switch fuels due to lack of adequate fuel supplies, or the source is required to be modified as a result of EPA regulations and no exemption from such regulations is available and if:

- (i) the permit applicant demonstrates that it made its best efforts to obtain sufficient air quality offsets to comply with this Part;
- (ii) the applicant has secured all available air quality offsets; and
- (iii) the applicant will continue to seek the necessary air quality offsets and apply them when they become available.

(f) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(g) The version of the Code of Federal Regulations incorporated in this Rule is that as of ~~January 1, 1989~~ July 1, 2019, at <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-part51-appS.pdf>

1 and does not include any subsequent amendments or editions to the referenced material. The publication may be  
2 accessed free of charge.

3  
4 *History Note:* *Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the*  
5 *permanent rule becomes effective, whichever is sooner;*  
6 *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b); 150B-21.6;*  
7 *Eff. June 1, 1981;*  
8 *Amended Eff. July 1, 1994; December 1, 1993; December 1, 1992; October 1, ~~1989~~ 1989;*  
9 *Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0533

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(1)(B), delete or define "substantial"*

*In (a)(2), please say "Dispersion technique" means as follows: In any event, change the semi-colon to a colon.*

*End (a)(2)(A)(i) and (ii) with semi-colons instead of commas.*

*In (a)(2)(A)(i), change "which" to "that" in "which exceeds"*

*Begin (a)(2)(B)(iii)(I) through (III) and (a)(2)(B)(iv) and (v) with lower case letters.*

*Do you still need (a)(2)(B)(iii)(II) and (III)? If so in (III), what is "sound economic or engineering reasons"?*

*In (a)(2)(B)(III), delete or define "significantly"*

*What is your authority to establish this presumption?*

*In (a)(3), what is a local air quality program? Also, certified by the Commission in accordance with what? Is there a cross-reference available?*

*In (a)(4)(B)(ii), how is the director to determine the actual presence of a local nuisance?*

*In (a)(4)(C) and (5)(C), when would the Director require the use of a field study or fluid model?*

*In (a)(4)(C), delete or define "adequately" on line 12.*

*In (a)(5)(B), delete or define "actually"*

*In (a)(5)(D), is additional information regarding the approval of the Director provided elsewhere in rule, statute, or CFR? Please provide the cross-reference.*

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

*In (a)(5)(D), delete or define “excessive.” As used here, is it a term of art?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0533 is readopted with changes as published in 34:16 NCR 1457 as follows:

2  
3 **15A NCAC 02D .0533 STACK HEIGHT**

4 (a) For the purpose of this Rule, the following definition shall apply:

5 ~~(1) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including~~  
6 ~~a pipe or duct but not including flares.~~

7 ~~(1)(2)~~ "A stack in existence" means that the owner or operator had:

8 (A) begun, or caused to begin, a continuous program of physical on-site construction of the  
9 stack; or

10 (B) entered into binding agreements or contractual obligations, which could not be canceled or  
11 modified without substantial loss to the owner or operator, to undertake a program of  
12 construction of the stack to be completed in the time that is normally required to construct  
13 such a stack.

14 ~~(2)(3) "Dispersion technique" "Dispersion technique";~~

15 (A) "Dispersion technique" means any technique which attempts to affect the concentration of  
16 a pollutant in the ambient air by:

17 (i) using that portion of a stack which exceeds good engineering practice stack  
18 height,

19 (ii) varying the rate of emission of a pollutant according to atmospheric conditions or  
20 ambient concentrations of that pollutant, or

21 (iii) increasing final exhaust gas plume rise by manipulating source process  
22 parameters, exhaust gas parameters, stack parameters, or combining exhaust gases  
23 from several existing stacks into one stack; or other selective handling of exhaust  
24 gas streams so as to increase the exhaust gas plume rise.

25 (B) "Dispersion technique" does not include:

26 (i) the reheating of a gas stream, following use of a pollution control system, for the  
27 purpose of returning the gas to the temperature at which it was originally  
28 discharged from the facility generating the gas stream;

29 (ii) the using of smoke management in agricultural or silvicultural prescribed burning  
30 programs;

31 (iii) the merging of exhaust gas streams where:

32 (I) The facility owner or operator demonstrates that the source was  
33 originally designed and constructed with such merged gas streams;

34 (II) After July 8, 1985, such merging is part of a change in operation at the  
35 facility that includes the installation of pollution controls and is  
36 accompanied by a net reduction in the allowable emissions of a pollutant.

37 This exclusion from the definition of "dispersion techniques" shall apply

- only to the emission limitation for the pollutant affected by such change in operation; or
- (III) Before July 8, 1985, such merging was part of a change in operation at the source that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Director shall deny credit for the effects of such merging in calculating the allowable emissions for the source;
- (iv) Episodic restrictions on residential woodburning and open burning; or
- (v) Techniques ~~under~~ pursuant to Subpart (A)(iii) of this Subparagraph which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
- (4) ~~"Good engineering practice (GEP) stack height" means the greater of:~~
- (A) ~~65 meters measured from the ground level elevation at the base of the stack;~~
- (B) ~~2.5 times the height of nearby structure(s) measured from the ground level elevation at the base of the stack for stacks in existence on January 12, 1979 and for which the owner or operator had obtained all applicable permit or approvals required under 15A NCAC 2Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;~~
- (C) ~~for stacks not covered under Part (B) of this Subparagraph, the height of nearby structures measured from the ground level elevation at the base of the stack plus 1.5 times the lesser dimension (height or projected width) of nearby structure(s) provided that the Director may require the use of a field study or fluid model to verify GEP stack height for the source; or~~
- (D) ~~the height demonstrated by a fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.~~
- (5) ~~"Nearby" means, for a specific structure or terrain feature:~~
- (A) ~~under Parts (4)(B) and (C) of this Paragraph, that distance up to five times the lesser of the height or the width dimension of a structure but not greater than one half mile. The height of the structure is measured from the ground level elevation at the base of the stack.~~

(B) ~~under Part (4)(D) of this Paragraph, not greater than one half mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height [Ht] of the feature, not to exceed two miles if such feature achieves a height [ht] one half mile from the stack that is at least 40 percent of the GEP stack height determined by Part (4)(C) of this Paragraph or 26 meters, whichever is greater, as measured from the ground level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground level elevation at the base of the stack.~~

(3) "Emission limitation" means a requirement established by this Subchapter or a local air quality program certified by the Commission that limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

~~(4)(6)~~ "Excessive concentrations" means, for the purpose of determining good engineering practice stack height ~~under in~~ Part ~~(4)(D)(5)(D)~~ of this Paragraph:

(A) for sources seeking credit for stack height exceeding that established ~~under in~~ Part ~~(4)(B)(5)(B)~~ or (C) of this Paragraph, a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to ~~Rule .0530 of this Section, 15A NCAC 02D .0530~~, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations ~~under in~~ this Part shall be prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Director, an alternative emission rate shall be established in consultation with the source owner or operator;

(B) for sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established ~~under in Part (4)(B) or (C) of this Paragraph; 15A NCAC 02D .0533 (a)(5)(B) or (C);~~



- (i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided in Part (A) of this Subparagraph, except that the emission rate specified by any applicable Rule in this Subchapter (or, in the absence of such a limit, the actual emission rate) shall be ~~used, or used; or~~
- (ii) the actual presence of a local nuisance (odor, visibility impairment, or pollutant concentration) caused by the existing stack, as determined by the Director; and
- (C) for sources seeking credit after January 12, 1979, for a stack height determined ~~under by Part (4)(B) or (C) of this Paragraph, 15A NCAC 02D .0533 (a)(5)(B) or [(e)],(C)~~ where the Director requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by ~~Part (4)(B) or (C) of this Paragraph, 15A NCAC 02D .0533 (a)(5)(B) or [(e)],(C)~~ a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.
- ~~(7) "Emission limitation" means a requirement established by this Subchapter or a local air quality program certified by the Commission that limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.~~
- (5) "Good engineering practice (GEP) stack height" means the greater of:
- (A) 65 meters measured from the ground-level elevation at the base of the stack;
- (B) 2.5 times the height of nearby structure(s) measured from the ground-level elevation at the base of the stack for stacks in existence on January 12, 1979 and for which the owner or operator had obtained all applicable permit or approvals required pursuant to 15A NCAC 02Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;
- (C) for stacks not covered by Part (B) of this Subparagraph, the height of nearby structures measured from the ground-level elevation at the base of the stack plus 1.5 times the lesser dimension (height or projected width) of nearby structure(s) provided that the Director ~~may~~ ~~requires~~ require the use of a field study or fluid model to verify GEP stack height for the source; or
- (D) the height demonstrated by a fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

(6) "Nearby" means, for a specific structure or terrain feature:

(A) in Parts (5)(B) and (C) of this Subparagraph, that distance up to five times the lesser of the height or the width dimension of a structure but not greater than one-half mile. The height of the structure is measured from the ground-level elevation at the base of the Stack;

~~for~~ and

(B) in Part (5)(D) of this Subparagraph, not greater than one-half mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height [ht] of the feature, not to exceed two miles if such feature achieves a height [ht] one-half mile from the stack that is at least 40 percent of the GEP stack height determined by Part (5)(C) of this Subparagraph or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(7) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

(b) With the exception stated in Paragraphs (c) and (d) of this Rule, the degree of emission limitations required by any rule in this Subchapter shall not be affected by:

(1) that amount of a stack height that exceeds good engineering practice; or

(2) any other dispersion technique.

(c) Paragraph (b) shall not apply to:

(1) stack heights in existence or dispersion techniques implemented before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in ~~Rules 15A NCAC 02D .0530 (b) and .0531 (b) of this Section~~ were carried out after December 31, 1970; or

(2) coal-fired steam electric generating units, subject to provisions of Section 118 of the federal Clean Air Act, which began operation before July 1, 1957, and whose stacks were constructed ~~under~~ by a construction contract awarded before February 8, 1974.

However, these exemptions shall not apply to a new stack that replaces a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph. These exemptions shall not apply to a new source using a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph.

(d) This Rule shall not restrict the actual stack height of any source.

*History Note: Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;*

*Authority G.S. 143-215.3(a)(1);*

*Eff. November 1, 1982;*

*Amended Eff. July 1, 1994; July 1, 1987; April 1, ~~1986~~ 1986;*



1 15A NCAC 02D .0534 is readopted as published in 34:16 NCR 1457 as follows:

2  
3 **15A NCAC 02D .0534 FLUORIDE EMISSIONS FROM PHOSPHATE FERTILIZER INDUSTRY**

4 (a) Emissions of total fluorides shall not exceed:

- 5 (1) 0.020 pounds per ton of phosphorus-bearing material fed to any wet-process phosphoric acid plant;
- 6 (2) 0.010 pounds per ton of phosphorus-bearing material fed to any superphosphoric acid plant;
- 7 (3) 0.40 pounds per ton of phosphorus-bearing material fed to any granular diammonium phosphate
- 8 plant;
- 9 (4) 0.20 pounds per ton of phosphorus-bearing material fed to any run-of-pile triple superphosphate
- 10 plant including curing and storing process;
- 11 (5) 0.20 pounds per ton of phosphorus-bearing material fed to any granular triple superphosphate plant
- 12 that began operating after December 31, 1969;
- 13 (6) 0.40 pounds per ton of phosphorus-bearing material fed to any granular triple superphosphate plant
- 14 that began operating before January 1, 1970; and
- 15 (7) 0.00050 pounds per hour per ton of phosphorus-bearing material cured or stored at any curing or
- 16 storage facility associated with a granular triple ~~superphosphate~~ superphosphate plant.

17 (b) The phosphorus-bearing material mentioned in Paragraph (a) of this ~~Regulation~~ Rule shall be expressed as

18 phosphorus pentoxide.

19  
20 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

21 *Eff. November 1, ~~1982~~, 1982;*

22 *Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0535

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(2), what is considered "normal and usual manner"?*

*In (a)(2), delete or define "poor" and "careless"*

*In (c), what is the appropriate rule? Those listed in (b)?*

*Please begin (c)(1) through (7) with lower case letters.*

*In (c)(1), delete or define "to the maximum extent practicable" and "good practice"*

*In (c)(2), delete or define "expeditiously"*

*In (c)(3), what is meant by "the maximum extent practicable"?*

*In (c)(4), what are considered "practical steps"?*

*In (c)(5), when would a recurring pattern be "indicative of inadequate design, operation, or maintenance"? Can you end the sentence after "recurring pattern"? Also, what is considered to be a recurring pattern?*

*In (c)(7), when would a source be required to have a malfunction abatement plan? Is there a cross-reference available? Is this in accordance with Paragraph (d)?*

*In (c)(7), how will the director determine whether to require records?*

*In (d), how will the Director determine whether he or she will require an abatement plan?*

*(d) says that "if the Director requires a malfunction abatement plan... the owner or operator... shall submit... within 60 days", but (e) says "within 6 months." Which is it? Please review and clarify.*

*In (d)(1), delete "complete"*

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

*In (d)(3), delete or define "orderly"*

*In (d)(3), I don't understand lines 26-28. When are they required to correct the issue? Is the bottom line "within 15 days"?*

*End (f)(1)(A) through (d) with semi-colons. Please do the same for (f)(3)(A) through (F).*

*In (f)(2), delete or define "immediately"*

*In (g), delete "Start-up and shut-down" since you've not used similar introductory language elsewhere.*

*In (g), what is the "appropriate rule"*

*In (g), how will the Director determine whether to specify and also what factors will he or she use in determining the specific requirements?*

*In (g), delete "to the extent practicable"*

*In (g), what are the "best practicable air pollution control practices"?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0535 is readopted as published in 34:16 NCR 1457 as follows:

2  
3 **15A NCAC 02D .0535 EXCESS EMISSIONS REPORTING AND MALFUNCTIONS**

4 (a) For this Rule the following definitions apply:

5 (1) "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or  
6 standard allowed by any rule in ~~Sections 15A NCAC 02D .0500, .0900, .1200, or .1400 of this~~  
7 ~~Subchapter, 1400~~; or by a permit condition; or that exceeds an emission limit established in a permit  
8 issued ~~under~~ pursuant to 15A NCAC 02Q .0700.

9 (2) "Malfunction" means any unavoidable failure of air pollution control equipment, process equipment,  
10 or process to operate in a normal and usual manner that results in excess emissions. Excess  
11 emissions during periods of routine start-up and shut-down of process equipment are not considered  
12 a malfunction. Failures caused entirely or in part by poor maintenance, careless operations or any  
13 other upset condition within the control of the emission source are not considered a malfunction.

14 (3) "Start-up" means the commencement of operation of any source that has shut-down or ceased  
15 operation for a period sufficient to cause temperature, pressure, process, chemical, or a pollution  
16 control device imbalance that would result in excess emission.

17 (4) "Shut-down" means the cessation of the operation of any source for any purpose.

18 (b) This Rule does not apply to sources to which Rules .0524, .1110, or .1111 of this Subchapter applies unless excess  
19 emissions exceed an emission limit established in a permit issued under 15A NCAC 02Q .0700 that is more stringent  
20 than the emission limit set by Rules .0524, .1110 or .1111 of this Subchapter.

21 (c) Any excess emissions that do not occur during start-up or shut-down are considered a violation of the appropriate  
22 rule unless the owner or operator of the source of excess emissions demonstrates to the Director, that the excess  
23 emissions are the result of a malfunction. To determine if the excess emissions are the result of a malfunction, the  
24 Director shall consider, along with any other pertinent information, the following:

25 (1) The air cleaning device, process equipment, or process has been maintained and operated, to the  
26 maximum extent practicable, consistent with good practice for minimizing emissions;

27 (2) Repairs have been made expeditiously when the emission limits have been exceeded;

28 (3) The amount and duration of the excess emissions, including any bypass, have been minimized to  
29 the maximum extent practicable;

30 (4) All practical steps have been taken to minimize the impact of the excess emissions on ambient air  
31 quality;

32 (5) The excess emissions are not part of a recurring pattern indicative of inadequate design, operation,  
33 or maintenance;

34 (6) The requirements of Paragraph (f) of this Rule have been met; and

35 (7) If the source is required to have a malfunction abatement plan, it has followed that plan. All  
36 malfunctions shall be repaired as expeditiously as practicable. However, the Director shall not  
37 excuse excess emissions caused by malfunctions from a source for more than 15 percent of the

1 operating time during each calendar year. The Director may require the owner or operator of a  
2 facility to maintain records of the time that a source operates when it or its air pollution control  
3 equipment is malfunctioning or otherwise has excess emissions.

4 (d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the  
5 requirements of Subparagraphs (1) through (3) of this Paragraph. In addition, the Director may require any other  
6 source to have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs  
7 (1) through (3) of this Paragraph. If the Director requires a malfunction abatement plan for a source other than an  
8 electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days  
9 after receipt of the Director's request. The malfunction plans of electric utility boiler units and of other sources  
10 required to have them shall be implemented when a malfunction or other breakdown occurs. The purpose of the  
11 malfunction abatement plan is to prevent, detect, and correct malfunctions or equipment failures that could result in  
12 excess emissions. A malfunction abatement plan shall contain:

- 13 (1) a complete preventive maintenance program including:
  - 14 (A) the identification of individuals or positions responsible for inspecting, maintaining and  
15 repairing air cleaning devices;
  - 16 (B) a description of the items or conditions that will be inspected and maintained;
  - 17 (C) the frequency of the inspection, maintenance services, and repairs; and
  - 18 (D) an identification and quantities of the replacement parts that shall be maintained in  
19 inventory for quick replacement;
- 20 (2) an identification of the source and air cleaning operating variables and outlet variables, such as  
21 opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction  
22 or failure; the normal operating range of these variables and a description of the method of  
23 monitoring or surveillance procedures and of informing operating personnel of any malfunctions,  
24 including alarm systems, lights or other indicators; and
- 25 (3) a description of the corrective procedures that the owner or operator will take in case of a  
26 malfunction or failure to achieve compliance with the applicable rule as expeditiously as practicable  
27 but no longer than the next boiler or process outage that would provide for an orderly repair or  
28 correction of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates  
29 that the malfunction would continue for more than 15 days, a case-by-case repair schedule shall be  
30 established by the Director with the source. The owner or operator shall maintain logs to show that  
31 the operation and maintenance parts of the malfunction abatement plan are implemented. These  
32 logs are subject to inspection by the Director or his designee upon request during business hours.

33 (e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit  
34 a malfunction abatement plan to the Director within six months after it has been required by the Director. The  
35 malfunction abatement plan and any amendment to it shall be reviewed by the Director or his designee. If the plan  
36 carries out the objectives described by Paragraph (d) of this Rule, the Director shall approve it. If the plan does not  
37 carry out the objectives described by Paragraph (d) of this Rule, the Director shall disapprove the plan. The Director



1 shall state his reasons for his disapproval. The person who submits the plan shall submit an amendment to the plan to  
2 satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director's notification of disapproval.  
3 Any person having an approved malfunction abatement plan shall submit to the Director for his approval amendments  
4 reflecting changes in any element of the plan required by Paragraph (d) of this Rule or amendments when requested  
5 by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon  
6 receipt of written notice of approval.

7 (f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a  
8 malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

9 (1) notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's  
10 next business day of becoming aware of the occurrence and describe:

11 (A) name and location of the facility,

12 (B) the nature and cause of the malfunction or breakdown,

13 (C) the time when the malfunction or breakdown is first observed,

14 (D) the expected duration, and

15 (E) an estimated rate of emissions;

16 (2) notify the Director or his designee immediately when the corrective measures have been  
17 accomplished;

18 (3) submit to the Director within 15 days after the request a written report that includes:

19 (A) name and location of the facility,

20 (B) identification or description of the processes and control devices involved in the  
21 malfunction or breakdown,

22 (C) the cause and nature of the event,

23 (D) time and duration of the violation or the expected duration of the excess emission if the  
24 malfunction or breakdown has not been fixed,

25 (E) estimated quantity of pollutant emitted,

26 (F) steps taken to control the emissions and to prevent recurrences and if the malfunction or  
27 breakdown has not been fixed, steps planned to be taken, and

28 (G) any other pertinent information requested by the Director. After the malfunction or  
29 breakdown has been corrected, the Director may require the owner or operator of the source  
30 to test the source in accordance with Section .2600 of this Subchapter to demonstrate  
31 compliance.

32 (g) Start-up and shut-down. Excess emissions during start-up and shut-down are considered a violation of the  
33 appropriate rule if the owner or operator cannot demonstrate that the excess emissions are unavoidable. To determine  
34 if excess emissions are unavoidable during startup or shutdown the Director shall consider the items listed in  
35 ~~Paragraphs~~ Subparagraphs (c)(1), (c)(3), (c)(4), (c)(5), and (c)(7) of this Rule along with any other pertinent  
36 information. The Director may specify for a particular source the amount, time, and duration of emissions allowed  
37 during start-up or shut-down. The owner or operator shall, to the extent practicable, operate the source and any

1 associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air  
2 pollution control practices to minimize emissions during start-up and shut-down.

3  
4 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4); 143-215.107(a)(5);

5 *Eff. March 1, 1983;*

6 *Amended Eff. June 1, 2008; April 1, 2001; July 1, 1998; July 1, 1996; October 1, 1991; May 1,*  
7 *1990; April 1, 1986; July 1, 1984.*

8 *Readopted Eff. September 1, 2020.*

1 15A NCAC 02D .0536 is repealed through readoption as published in 34:16 NCR 1457 as follows:

2  
3 **15A NCAC 02D .0536 PARTICULATE EMISSIONS FROM ELECTRIC UTILITY BOILERS**

4  
5 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*

6 *Eff. March 1, 1983;*

7 *Amended Eff. June 1, 2008; April 1, 2001; August 1, 1991; August 1, 1987; February 1, ~~1986~~.1986;*

8 *Repealed Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0537

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (a)(2), please consider removing the parenthesis and saying something like "... emissions, including stacks, ducts, vents, openings, and fugitives" Also, delete the "etc." if you use this language.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0537 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0537 CONTROL OF MERCURY EMISSIONS**

4 (a) For the purpose of this Rule, the following definitions shall apply:

- 5 (1) "Mercury" means the element mercury, excluding any associated elements, and includes mercury  
6 in particulates, vapors, aerosols, and compounds.  
7 (2) "Stationary source" means the total plant site. This includes all emissions (stacks, ducts, vents,  
8 openings, fugitives, etc.) to the atmosphere within the property boundary.

9 (b) This Rule shall apply to all new and existing stationary sources engaged in the handling or processing of mercury  
10 and not subject to standards on emissions for mercury ~~in Rule .0530, .1110, or .1111 of this Subchapter, in 15A NCAC~~  
11 02D .0530, .1110, or .1111.

12 (c) An owner or operator of a stationary source engaged in the handling or processing of mercury shall not cause,  
13 allow, or permit particulate or gaseous mercury emissions ~~in excess of~~ more than 2300 grams per day into the ~~outdoor~~  
14 atmosphere.

15  
16 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*  
17 *Eff. June 1, 1985;*  
18 *Amended Eff. July 1, ~~1996~~ 1996;*  
19 *Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0538

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

***PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.***

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please consider revising (b) to say "This Rule applies to emissions at facilities for which construction began after August 31, 1992 of ethylene oxide..." and delete the language on line 11.*

*In (e), submitted to whom and how? Also, how will it be determined whether ethylene oxide can be reduced or eliminated?*

*In (f), how is "proper operation" determined? Is this "operation is accordance with the manufacturer's specifications"?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0538 is readopted as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0538 CONTROL OF ETHYLENE OXIDE EMISSIONS**

4 (a) For purposes of this Rule, "medical devices" means instruments, apparatus, implements, machines, implants, in  
5 vitro reagents, ~~contrivances~~, or other similar or related articles including their components, parts, and accessories,  
6 intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or  
7 intended to affect the structure or any function of the body of man or other animals.

8 (b) This Rule applies to emissions of ethylene oxide resulting from use as a sterilant in:

- 9 (1) the production and subsequent storage of medical devices; or  
10 (2) the packaging and subsequent storage of medical devices for sale;

11 at facilities for which construction began after August 31, 1992.

12 (c) This Rule does not apply to hospital or medical facilities.

13 (d) Facilities subject to this Rule shall comply with the following standards:

- 14 (1) ~~For~~for sterilization chamber evacuation, a closed loop liquid ring vacuum pump, or equipment  
15 demonstrated to be as effective at reducing emissions of ethylene oxide shall be used;  
16 (2) ~~For~~for sterilizer exhaust, a reduction in the weight of uncontrolled emissions of ethylene oxide of  
17 at least 99.8 percent by weight shall be achieved;  
18 (3) ~~For~~for sterilizer unload and backdraft valve ~~exhaust, a reduction:~~ exhaust:  
19 (A) a reduction in uncontrolled emissions of ethylene oxide of at least 99 percent by weight  
20 shall be achieved; or  
21 (B) ~~to a concentration of~~ a concentration of no more than one part per million by volume of ethylene oxide shall  
22 be achieved;  
23 (4) ~~Sterilized~~sterilized product ethylene oxide residual emissions shall be reduced by:  
24 (A) a heated degassing room to aerate the products after removal from the sterilization  
25 ~~chamber;~~chamber. ~~the~~The temperature of the degassing room shall be maintained at a  
26 minimum of 95 degrees Fahrenheit during the degassing ~~cycle,~~cycle and product hold time  
27 in the aeration room shall be at least 24 hours; or  
28 (B) a process demonstrated to be as effective as Part (d)(4)(A) of this Rule.  
29 (5) ~~Emissions~~emissions of ethylene oxide from the degassing area ~~(or or equivalent process)~~ process  
30 shall be vented to a control device capable of reducing uncontrolled ethylene oxide emissions by at  
31 least 99 percent by weight or to no more than one part per million by volume of ethylene ~~oxide.~~  
32 oxide. The product aeration room and the product transfer area shall be maintained under a negative  
33 pressure.

34 (e) Before installation of the controls required by Paragraph (d) of this Rule, and annually thereafter, a written  
35 description of waste reduction, elimination, or recycling plan shall be submitted ~~[as specified in G.S. 143-215.108(g)]~~  
36 to determine if ethylene oxide use can be reduced or eliminated through alternative sterilization methods or process  
37 modifications.

1 (f) The owner or operator of the facility shall conduct a performance test to verify initial efficiency of the control  
2 devices. The owner or operator shall maintain temperature records to demonstrate proper operation of the degassing  
3 room. Such records shall be retained for a period of at least two calendar years and shall be made available for  
4 inspection by Division personnel.

5 (g) If the owner or operator of a facility subject to the Rule demonstrates, using the procedures in ~~Rule .1106 of this~~  
6 ~~Section, 15A NCAC 02D .1106,~~ that the emissions of ethylene oxide from all sources at the facility do not cause the  
7 acceptable ambient level of ethylene oxide in ~~Rule .1104 of this Section 15A NCAC 02D .1104~~ to be exceeded, then  
8 the requirements of Paragraphs (d) through (e) of this Rule shall not apply. This demonstration shall be at the option  
9 of the owner or operator of the facility. If this option is chosen, the Director shall write the facility's permit to satisfy  
10 the requirements of ~~Rule .1104(a) of this Section. 15A NCAC 02D .1104(a).~~

11  
12 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5); 143-215.108(c);*  
13 *Eff. September 1, 1992;*  
14 *Amended Eff. June 1, 2004; August 1, ~~2002~~, 2002;*  
15 *Readopted Eff. September 1, 2020.*  
16  
17



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0539

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please consider deleting the introductions of "Applicability" in (a) and "Measurement and Recording Requirements" in (d) since you have not used similar language elsewhere in this Rule nor in the majority of the other Rules of this Section.*

*In (b), delete "however" and "continue to" so that it just reads "Those facilities shall control..."*

*In (c), what is meant by "equally effective manner"? How is this determined and by whom? I'm not sure that I understand what requirements another method has to meet.*

*In (d), what is considered "good working order"? Do you mean something like "in accordance with the manufacturer's specifications"?*

*In (d)(1), how are they to "demonstrate"?*

*In (d)(2), when are they to "describe"?*

*In (d)(3), I assume that the Director will approve the quality assurance program if it meets the requirements of (d)(3)?*

*Reading (d) as a whole, it appears as though there is an approval process for this and that in order to gain approval, the owner or operator must do (d)(1) and (2)? Alternatively, do they just have to keep a written record of a demonstration (whatever that is) and a description as eluded to on line 34? I don't think that the actual requirement is clear here.*

*In (e), please delete or define "properly"*

*In (f)(1), delete or define "properly" and "effective"*

*End (g)(1) with a semi-colon and "and"*

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0539 is readopted as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0539 ODOR CONTROL OF FEED INGREDIENT MANUFACTURING PLANTS**

4 (a) Applicability. The requirements of this Rule apply to any facility that produces feed-grade animal proteins or feed-  
5 grade animal fats and oils, but do not apply to any portions of such facilities ~~that are~~ engaged exclusively in the  
6 processing of food for human consumption.

7 (b) This Rule does not apply to those facilities solely engaged in the processing of marine byproducts. Those facilities,  
8 however, shall continue to control their odorous emissions ~~in accordance with Rule .1806 of this Subchapter.~~ pursuant  
9 to 15A NCAC 02D .1806.

10 (c) A person shall not allow, cause, or permit the operation or use of any device, machine, equipment, or other  
11 contrivance to process material to be used in the production of feed-grade animal proteins or feed-grade animal fats  
12 and oils unless all gases, vapors, and gas-entrained effluents from these processes are passed through condensers to  
13 remove all steam and other condensible materials. All noncondensibles passing through the condensers shall then be  
14 incinerated at 1200 degrees Fahrenheit for a period of not less than 0.3 seconds, or treated in an equally effective  
15 manner.

16 (d) Measurement and Recording Requirements. Any person processing or incinerating gases, vapors, or gas-entrained  
17 matter as required by Paragraph (c) of this Rule shall install, operate, and maintain in good working order and  
18 calibration continuous measuring and recording devices for equipment operational parameters to document equipment  
19 operation in accordance with this Rule. In addition, the owner or operator of the facility shall:

- 20 (1) demonstrate ~~that~~ the measuring and recording devices are capable of verifying the compliance status  
21 of the equipment on a continuous basis;
- 22 (2) describe the parameters to be used to determine the compliance status and how these parameters:
- 23 (A) are to be measured;
- 24 (B) are to be used to determine compliance status; and
- 25 (3) provide a quality assurance program approved by the Director for all monitoring devices and  
26 systems that includes:
- 27 (A) procedures and frequencies for calibration;
- 28 (B) standards traceability;
- 29 (C) ~~operational checks,~~ checks;
- 30 (D) maintenance schedules and procedures;
- 31 (E) auditing schedules and procedures;
- 32 (F) data validation; and
- 33 (G) schedule for implementing the quality assurance program.

34 These data shall be available to the Director upon request.

35 (e) A person shall not allow, cause, or permit the installation or operation of expeller units unless they are properly  
36 hooded and all exhaust gases are collected or ducted to odor control equipment.

(f) A person subject to this Rule shall not cause or permit any raw material to be handled, transported, or stored, or to undertake the preparation of any raw material without taking reasonable precautions to prevent odors from being discharged. For the purpose of this Rule, such raw material is in "storage" after it has been unloaded at a facility or after it has been located at the facility for at least 36 hours. Reasonable precautions shall include the following:

- (1) storage of all raw material before or in the process of preparation, in properly enclosed and vented equipment or areas, together with the use of effective devices and methods to prevent the discharge of odor bearing gases;
- (2) use of covered vehicles or containers of watertight construction for the handling and transporting of any raw material; and
- (3) use of hoods and fans to enclose and vent the storage, handling, preparation, and conveying of any odorous materials together with effective devices or methods, or both, to prevent emissions of odors or odor bearing gases.

(g) A vehicle or container holding raw material, which has not been unloaded inside or parked inside an odor controlled area within the facility, shall be unloaded for processing of the raw material prior to the expiration of the following time limits:

- (1) for feathers with only trace amounts of blood, such as those obtained from slaughtering houses that separate blood from offal and feathers, no later than 48 hours after being weighed upon arrival at the facility.
- (2) for used cooking oil in sealed tankers, no later than 96 hours after being weighed upon arrival at the facility.

(h) The owner or operator shall notify the regional supervisor of the appropriate regional office within two business days after the provisions of Paragraph (g) of this Rule are not met and the conditions that are encountered that cause or may cause release of excessive and malodorous gases or vapors.

~~(i) Compliance Schedule. The owner or operator of a facility subject to this Rule that begins construction or is in operation before July 1, 1996, shall adhere to the following increments of progress and schedules:~~

- ~~(1) documentation that the facility complies with this Rule or an air permit application containing plans to bring the facility into compliance and a schedule shall be submitted by January 1, 1997;~~
- ~~(2) the compliance schedule shall contain the following increments of progress:~~
  - ~~(A) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;~~
  - ~~(B) a date by which on site construction or installation of the emission control and process equipment shall begin;~~
  - ~~(C) a date by which on site construction or installation of the emission control and process equipment shall be completed; and~~
  - ~~(D) a date by which final compliance shall be achieved.~~
- ~~(3) The final compliance date under Subparagraph (2)(D) of this Paragraph shall be no later than July 1, 2001.~~

1 ~~The owner or operator shall certify to the Director within five days after the deadline, for each increment of progress,~~  
2 ~~whether the required increment of progress has been met.~~

3 (j)(i) The owner or operator of a facility that begins construction after June 30, 1996, shall be in compliance with this  
4 Rule before beginning operation.

5  
6 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5);  
7 Eff. July 1, 1996;  
8 Amended Eff. June 1, 2018; April 1, ~~2001~~, 2001;  
9 Readopted Eff. September 1, 2020.

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0541

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*What is considered to be an "abrasive blasting material"? Can you provide a definition or some examples?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0541 is readopted as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0541 CONTROL OF EMISSIONS FROM ABRASIVE BLASTING**

4 (a) For the purpose of this Rule, the following definitions apply:

5 (1) "Abrasives" means any material used in abrasive blasting operations.

6 (2) "Abrasive blasting" means the operation of cleaning or preparing a surface by forcibly propelling a  
7 stream of abrasive material against the surface. Sandblasting is one form of abrasive blasting.

8 (3) "Abrasive blasting equipment" means any equipment used in abrasive blasting operations.

9 ~~(4) "Fugitive dust emissions" means emissions of particulate matter into the outdoor atmosphere that is~~  
10 ~~not vented or captured by a stack or chimney.~~

11 ~~(4)(5) "Building" means a structure with four or more sides and a roof that is used, in whole or in part, to~~  
12 ~~house or contain abrasive blasting.~~

13 (5) "Fugitive dust emissions" means emissions of particulate matter into the outdoor atmosphere that is  
14 not vented or captured by a stack or chimney.

15 (b) The owner or operator shall ensure that any abrasive blasting operation conducted outside a building or conducted  
16 indoors and vented to the atmosphere is performed in accordance with the requirements set forth in 15A NCAC ~~2D~~  
17 02D .0521, Control of Visible Emissions. For the purposes of this Rule, the visible emissions reading for abrasive  
18 blasting performed outside a building shall be taken at a spot approximately one meter above the point of abrasive  
19 blasting with a viewing distance of approximately five meters.

20 (c) Except as provided in Paragraph (d) of this Rule, all abrasive blasting operations shall be conducted within a  
21 building.

22 (d) An abrasive blasting operation conducted under one or more of the following conditions is not required to be  
23 conducted within a building:

24 (1) when the item to be blasted exceeds eight feet in any dimension;

25 (2) when the surface being blasted is situated at its permanent location or not further away from its  
26 permanent location than is necessary to allow the surface to be blasted; or

27 (3) when the abrasive blasting operation is conducted at a private residence or farm and the visible  
28 emissions created by this abrasive blasting operation do not migrate beyond the property boundary  
29 of the private residence or farm on which the abrasive blasting operation is being conducted.

30 (e) The owner or operator of any abrasive blasting operation conducted in accordance with Subparagraphs (d)(1) and  
31 (d)(2) of this Rule, outside a building, shall take appropriate measures to ensure that the fugitive dust emissions created  
32 by the abrasive blasting operation do not migrate beyond the property boundaries in which the abrasive blasting  
33 operation is being conducted. Appropriate measures include the following:

34 (1) the addition of a suppressant to the abrasive blasting material;

35 (2) wet abrasive blasting;

36 (3) hydroblasting;

37 (4) vacuum blasting;

- 1           (5)     shrouded blasting; or
- 2           (6)     shrouded hydroblasting.

3

4   *History Note:*    *Authority G.S. 143-215.3(a)(1); 143-215.108(c)(7); 143-215.108(d)(1);*  
5                    *Eff. July 1, ~~2000~~2000;*  
6                    *Readopted Eff. September 1, 2020.*

7

8



## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0542

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE:** *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please consider deleting the introductory phrases at the beginning of the Paragraphs and some Subparagraphs since you've not done this elsewhere in the majority of the Rules of this Section.*

*In (f), delete "To ensure optimum control efficiency is maintained"*

*In (g), change "as follows" to "in accordance with this Paragraph."*

*In (g)(1)(B), please change "trash stacker/trash composting system" to "trash stacker and composting system" (assuming that's correct)*

*Please correct the formatting in (g)(1)(B). Please remember the smallest unit to be stricken is an entire word.*

*In (g)(4), what is considered "clean" I note that (g)(3) uses this word, but provides some explanation as to the meaning.*

*In (j)(1), delete or define "properly"*

*Delete the first sentence of (j)(2). How is this applicable now?*

*Please confirm the CFR referenced in (j)(2)(B) is incorporated by reference in accordance with G.S. 150B-21.6 elsewhere in your rule?*

*In (j)(5), delete or define "normal and proper"*

*In (j)(6), delete or define "proper"*

*Begin (k)(1) through (5) with lower case letters.*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0542 is readopted as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0542 CONTROL OF PARTICULATE EMISSIONS FROM COTTON GINNING**  
4 **OPERATIONS**

5 (a) Purpose. The purpose of this Rule is to establish control requirements for particulate emissions from cotton ginning  
6 operations.

7 (b) Definitions. For the purposes of this Rule, the following definitions apply:

8 (1) "1D-3D cyclone" means any cyclone-type collector of the 1D-3D configuration. This designation  
9 refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A  
10 1D-3D cyclone has a cylinder length of 1xD and a cone length of 3xD.

11 (2) "2D-2D cyclone" means any cyclone-type collector of the 2D-2D configuration. This designation  
12 refers to the ratio of the cylinder to cone length, where D is the diameter of the cylinder portion. A  
13 2D-2D cyclone has a cylinder length of 2xD and a cone length of 2xD.

14 (3) "Bale" means a compressed and bound package of cotton lint, ~~nominally~~approximately weighing  
15 500 pounds.

16 (4) "Existing facility" means a cotton ginning operation ~~that operated~~ site operating prior to July 1,  
17 2002.

18 (5) "Ginning operation" means any facility or plant ~~that removes~~ removing seed, lint, ~~and~~ trash, ~~or one~~  
19 ~~or more~~ any combination of these from raw cotton or bales of lint cotton.

20 (6) "Ginning season" means the period of time during which the gin is in operation, which is generally  
21 from September of the current year through January of the following year.

22 (7) "High pressure exhausts" means the exhaust air systems at a cotton gin ~~that are~~ not defined as "low  
23 pressure exhausts."

24 (8) "Low pressure exhausts" means the exhaust cotton handling systems located at a cotton gin that  
25 handle air from the cotton lint handling system and battery condenser.

26 (c) Applicability. This rule applies to all ~~existing, new, new, existing,~~ and modified cotton ginning operations. Existing  
27 facilities with a maximum rated capacity of less than 20 bales per hour that do not have cyclones on lint cleaners and  
28 battery condensers as of July 1, 2002 are not ~~be~~ required to add:

29 (1) the emission control devices in ~~Paragraph Subparagraph~~ (d)(1) of this Rule to lint cleaning exhausts  
30 if emissions from the lint cleaning are controlled by fine mesh screens; and

31 (2) the emission control devices in ~~Paragraph Subparagraph~~ (d)(2) of this Rule to battery condenser  
32 exhausts if the emissions from the battery condenser are controlled by fine mesh screens.

33 (d) Emission Control Requirements. The owner or operator of each cotton ginning operation shall control particulate  
34 emissions from the facility by controlling:

35 (1) all high pressure exhausts and lint cleaning exhausts with an emission control system ~~that~~  
36 ~~includes~~ including:

37 (A) one or more 1D-3D or 2D-2D cyclones to achieve 95 percent efficiency; or

- (B) a device with a minimum of 95 percent efficiency.
- (2) low pressure exhausts, except lint cleaning exhausts, by an emission control system ~~that includes:~~including:
- (A) one or more 1D-3D or 2D-2D cyclones to achieve 90 percent efficiency; or
- (B) a device with at least a 90 percent efficiency.
- Efficiency is based on the removal of particulate matter between the cyclone's inlet and outlet; it is measured using test methods in ~~Section 2600 of this Subchapter.~~ 15A NCAC 02D .2600.
- (e) ~~Raincaps-Exhaust Rain Caps.~~ Exhausts from emission points or control devices shall not be equipped with ~~raincaps exhaust rain caps~~ or other devices that deflect the emissions downward or outward.
- (f) Operation and Maintenance. To ensure ~~that~~ optimum control efficiency is maintained, the owner or operator shall establish, based on manufacturers recommendations, an inspection and maintenance schedule for the control devices, other emission processing equipment, and monitoring devices ~~that are~~ used pursuant to this Rule. The inspection and maintenance schedule shall be followed throughout the ginning season. The results of the inspections and any maintenance performed on the control equipment, emission processing equipment, or monitoring devices shall be recorded in the log book required in Paragraph (k) of this Rule.
- (g) Fugitive Emissions. The owner or operator shall minimize fugitive emissions from cotton ginning operations as follows.
- (1) The owner or operator of a
- (A) trash stacker shall:
- (i) install, maintain, and operate a three sided enclosure with a roof whose sides are high enough above the opening of the dumping device to prevent wind from dispersing dust or debris; or
- (ii) install, maintain, and operate a device to provide wet suppression at the dump area of the trash cyclone and minimize free fall distance of waste material exiting the ~~trash cyclone; or cyclone.~~
- (B) trash stacker/trash composting system shall: install, maintain, and operate a wet suppression system providing dust suppression in the auger box assembly and at the dump area of the trash stacker system. The owner or operator shall keep the trash material wet and compost it in place until the material is removed from the dump area for additional composting or disposal.
- (2) Gin Yard. The owner or operator shall clean and dispose of accumulations of trash or lint on the non-storage areas of the gin yard daily.
- (3) Traffic areas. The owner or operator shall clean paved roadways, parking, and other traffic areas at the facility as necessary to prevent re-entrainment of dust or debris. The owner or operator shall treat unpaved roadways, parking, and other traffic areas at the facility with wet or chemical dust suppressant as necessary to prevent dust from leaving the facility's property and shall install and

maintain signs limiting vehicle speed to 10 miles per hour where chemical suppression is used and to 15 miles per hour where wet suppression is used.

- (4) Transport of Trash Material. The owner or operator shall ensure ~~that~~ all trucks transporting gin trash material are covered and ~~that~~ the trucks are cleaned of over-spill material before trucks leave the trash hopper dump area. The dump area shall be cleaned daily.

(h) Alternative Control Measures. The owner or operator of a ginning operation may petition for use of alternative control measures to those specified in this Rule. The petition shall include:

- (1) the name and address of the petitioner;
- (2) the location and description of the ginning operation;
- (3) a description of the alternative control measure;
- (4) a demonstration ~~that the alternative control measure is at least as effective as~~ measure's effectiveness is equal to or greater than the control device or method specified in this Rule.

(i) Approval of Alternative Control Measure. The Director shall approve the alternative control measure if he or she ~~finds that:~~ finds:

- (1) all the information required by Paragraph (h) of this Rule has been submitted; and
- (2) the alternative control ~~measure is at least as effective as~~ measure's effectiveness is equal to or greater than the control device or method specified in this Rule.

(j) Monitoring.

- (1) The owner or operator of each ginning operation shall install, maintain, and calibrate monitoring devices ~~that measure~~ measuring pressures, rates of flow, and other operating conditions necessary to determine if the control devices ~~are functioning~~ function properly.
- (2) Before or during the first week of operation of the 2002-2003 ginning season, the owner or operator of each gin shall conduct a baseline study of the entire dust collection system, without cotton being processed, to ensure air flows ~~are stay~~ within the design range for each collection device. For 2D-2D cyclones the air flow design range is 2600 to 3600 feet per minute. For 1D-3D cyclones the design range is 2800 to 3600 feet per minute. For other control devices the air flow design range is that found in the manufacturer's specifications. Gins constructed after the 2002-2003 ginning season shall conduct the baseline study before or during the first week of operation of the first ginning season following construction. During the baseline study the owner or operator shall measure or determine according to the methods specified in this Paragraph and record in a logbook:
  - (A) the calculated inlet velocity for each control device; and
  - (B) the pressure drop across each control device.

The owner or operator shall use Method 1 and Method 2 of 40 CFR Part 60 Appendix A to measure flow and static pressure and determine inlet velocity or the USDA method for determining duct velocity and static pressure in Agricultural Handbook Number 503, *Cotton Ginners Handbook*, dated December 1994. The Cotton Ginners Handbook method shall only be used where test holes are located a minimum of eight and one-half pipe diameters downstream and one and one-half pipe

diameters upstream from elbows, valves, dampers, changes in duct diameter or any other flow disturbances. Where Method 2 is used a standard pitot tube may be used in lieu of the s-pitot specified in Method 2 subject to the conditions specified in Paragraph 2.1 of Method 2.

(3) On a monthly basis following the baseline study, the owner or operator shall measure and record in the logbook the static pressure at each port where the static pressure was measured in the baseline study. Measurements shall be made using a manometer, a Magnahelic® gauge, or other device ~~that~~ the Director ~~has approved~~ approves as being equivalent to a manometer. If the owner or operator measures a change in static pressure of 20 percent or more from that measured in the baseline study, the owner or operator shall initiate corrective action. Corrective action shall be recorded in the logbook. If corrective action will take more than 48 hours to complete, the owner or operator shall notify the regional supervisor of the region in which the ginning operation is located as soon as possible, but by no later than the end of the day such static pressure is measured.

(4) When any design changes to the dust control system are made, the owner or operator shall conduct a new baseline study for that portion of the system and shall record the new values in the logbook required in Paragraph (k) of this Rule. Thereafter monthly static pressure readings for that portion of the system shall be compared to the new values.

(5) During the ginning season, the owner or operator shall daily inspect for structural integrity of the control devices and other emissions processing systems and shall ensure that the control devices and emission processing systems conform to normal and proper operation of the gin. If a problem is found, corrective action shall be taken and recorded in the logbook required in Paragraph (k) of this Rule.

(6) At the conclusion of the ginning season, the owner or operator shall conduct an inspection of the facility to identify all scheduled maintenance activities and repairs needed relating to the maintenance and proper operation of the air pollution control devices for the next season. Any deficiencies identified through the inspection shall be corrected before beginning operation of the gin for the next season.

(k) Recordkeeping. The owner operator shall establish and maintain on-site a logbook documenting the following items:

- (1) Results of the baseline study as specified in ~~Paragraph Subparagraph~~ (j)(2) of this Rule;
- (2) Results of new baseline studies as specified in ~~Paragraph Subparagraph~~ (j)(4) of this Rule;
- (3) Results of monthly static pressure checks and any corrective action taken as specified in ~~Paragraph~~ Subparagraph (j)(3) of this Rule;
- (4) Observations from daily inspections of the facility and any resulting corrective actions taken as required in ~~Paragraph Subparagraph~~ (j)(5) of this Rule; and
- (5) A copy of the manufacturer's specifications for each type of control device installed.

The logbook shall be maintained on site and made available to Division representatives upon request.

(l) Reporting. The owner or operator shall submit by March 1 of each year a report containing the following:

- (1) the name and location of the cotton gin;
- (2) the number of bales of cotton produced during the previous ginning season;
- (3) a maintenance and repair schedule based on inspection of the facility at the conclusion of the previous cotton ginning season required in ~~Paragraph Subparagraph~~ (j)(6) of this Rule; and
- (4) signature of the ~~appropriate~~ responsible official as identified in 15A NCAC 02Q ~~.0304(j)~~, certifying as to the truth and accuracy of the report. .0303.

(m) Compliance Schedule. Existing sources shall comply as specified in Paragraph (d) of this Rule. New and modified sources shall be in compliance upon start-up.

(n) Record retention. The owner or operator shall retain all records required to be kept by this Rule for three years from the date of recording.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);  
Eff. August 1, 2002;  
Amended Eff. June 1, ~~2008~~, 2008;  
Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0543

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*Please confirm that the CFRs referenced in this Rule have been incorporated by reference in accordance with G.S. 150B-21.6 elsewhere in your Rules.*

*In (c), what is meant by "the Director shall have the maximum flexibility allowed pursuant..."? Flexibility for what? I have a potential clarity concern regarding this Paragraph.*

*In (d), capitalize "rule" in "this Rule"*

*In (h), please add a space in between "February" and "6"*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0543 is readopted as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0543 BEST AVAILABLE RETROFIT TECHNOLOGY**

4 (a) For the purposes of this Rule, the definitions at 40 CFR 51.301 shall apply.

5 (b) Mandatory Class I Federal areas are identified in 40 CFR Part 81, Subpart D.

6 (c) The Director shall have the maximum flexibility allowed ~~under~~ pursuant to 40 CFR 51.308 or 40 CFR Part 51,  
7 Appendix Y.

8 (d) This rule applies to BART-eligible sources ~~as determined using 40~~ meeting the requirements of 40 CFR Part 51,  
9 Appendix Y ~~that cause or contribute causing or contributing~~ to any visibility impairment in a mandatory Class I  
10 Federal area as determined ~~by~~ using 40 CFR Part 51, Subpart P.

11 (e) Unless exempted ~~under~~ pursuant to 40 CFR 51.303, the owner or operator of a BART-eligible emission unit  
12 subject to this Rule shall perform a best available retrofit technology (BART) ~~evaluation for that emission unit.~~  
13 evaluation. Pursuant to 40 CFR 51.308, the evaluation shall include:

14 (1) the technology ~~available,~~ available;

15 (2) the cost of ~~compliance,~~ compliance;

16 (3) the energy and non-air quality environmental impacts of ~~compliance,~~ compliance;

17 (4) any pollution control equipment in use at ~~source,~~ the source;

18 (5) the remaining useful life of the ~~source,~~ source; and

19 (6) the degree of improvement in visibility ~~that may reasonably be~~ anticipated to result from the use of  
20 such technology.

21 (f) The owner or operator of a BART-subject emission unit shall install, operate, and maintain BART as approved by  
22 the Director after considering the ~~six items~~ factors listed in Paragraph (e) of this Rule and incorporated in the unit's  
23 permit issued ~~under~~ pursuant to 15A NCAC 02Q.

24 ~~(g) The owner or operators of a BART-eligible source required to install BART under this Rule shall submit permit~~  
25 ~~applications for the installation and operation of BART by September 1, 2006. The Director shall extend the deadline~~  
26 ~~for submitting a permit application if additional time is needed to complete the evaluation required under Paragraph~~  
27 ~~(e) of this Rule.~~

28 ~~(h)(g)~~ BART shall be determined using "Guidelines for Determining Best Available Retrofit Technology for Coal-  
29 fired Power Plants and Other Existing Stationary Facilities" (1980), 40 CFR 51.308(e)(1)(ii), and 40 CFR Part 51,  
30 Appendix Y. ~~Electric generating units covered under and complying with 15A NCAC 02D .2400, Clean Air Interstate~~  
31 ~~Rules, are considered to be in compliance with the BART requirements for nitrogen oxides and sulfur dioxide under~~  
32 ~~this Rule.~~

33 ~~(i) The owner or operator of a BART-eligible source required to install BART under this Rule shall have installed~~  
34 ~~and begun operation of the BART controls by December 31, 2012.~~

35 ~~(j)(h)~~ "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other  
36 Existing Stationary Facilities" is incorporated by reference, exclusive of appendix E, and shall include any later  
37 amendments or editions. This document, which was published in the Federal Register on February 6, 1980 (45 FR



8210), is EPA publication No. 450/3-80-009b and can be obtained from the National Service Center for Environmental Publications (NSCEP) available for free through their online publication search tool at: <https://www.epa.gov/nscep>. The document is also available through the U.S. Department of Commerce, National Technical Information Service located at 5301 Shawnee Road Alexandria, VA 22312. ~~5285 Port Royal Road, Springfield, Virginia 22161 for eighty four dollars (\$84.00). It is also available for inspection at the National Archives and Records Administration (NARA). Information on the availability of this material at NARA may be found at: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).~~

*History Note: Authority G.S.143-215.3(a)(1); 143-215.107(a)(5),(10);  
Eff. September 1, 2006;  
Amended Eff. May 1, 2007-2007;  
Readopted Eff. September 1, 2020.*

## REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0544

**DEADLINE FOR RECEIPT: Friday, August 14, 2020**

**PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.**

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends the following technical changes be made:

*In (b)(1)(B), what is meant by "legally enforceable"*

*In (b)(1)(C), can you delete "currently"? I'm not sure that I understand its use here.*

*In (d), was the intent here to incorporate this Table by reference? If so, please do so in accordance with G.S. 150B-21.6 and include the cost and where this can be found (assuming it's not already been done elsewhere in your rules.)*

*In (n), please revise your first sentence to say something like "This Paragraph shall apply to (whatever it is applying to) in lieu of the requirements in 40 CFR 51.166(r)(6) and (7).*

*In (n), please change "will" to "shall" on page 4, line 14.*

*In (n), page 4, line 15, you have "the annual emissions related" twice. I'm assuming that you only need it once?*

*In (o), please provide the cost (I assume it's "at no cost" or "for free")*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May  
Commission Counsel  
Date submitted to agency: July 31, 2020

1 15A NCAC 02D .0544 is readopted with changes as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0544 PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS FOR**  
4 **GREENHOUSE GASES**

5 (a) The purpose of this Rule is to implement a program for the prevention of significant deterioration of air quality  
6 for greenhouse gases as required by 40 CFR 51.166. ~~[Wherever the language of the portions of 40 CFR 51.166~~  
7 ~~referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which~~  
8 ~~they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this~~  
9 ~~Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those~~  
10 ~~exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However, this provision shall~~  
11 ~~not be interpreted so as to limit information that may be requested from the owner or operator by the Director as~~  
12 ~~specified in 40 CFR 51.166(n)(2).]~~ The minimum requirements described in the portions of 40 CFR 51.166 are hereby  
13 adopted as requirements under this Rule, except as otherwise provided in this Rule. Wherever the language of the  
14 portions of 40 CFR 51.166 adopted in this Rule speaks of the "plan," the requirements described therein shall apply  
15 to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR  
16 51.166 adopted in this Rule provide that the State plan may exempt or not apply certain requirements in certain  
17 circumstances, those exemptions and provisions of non-applicability are also hereby adopted under this Rule.  
18 However, this provision shall not be interpreted so as to limit information that may be requested from the owner or  
19 operator by the Director as specified in 40 CFR 51.166(n)(2). For purposes of greenhouse gases, the provisions of  
20 this Rule shall apply rather than the provisions of ~~Rule .0530 of this Section, in 15A NCAC 02D .0530.~~ For all other  
21 regulated new source review (NSR) pollutants, the provisions in 15A NCAC 02D .0530 shall apply. A major  
22 stationary source or major modification shall not be required to obtain a prevention of significant deterioration (PSD)  
23 permit on the sole basis of its greenhouse gases emissions. ~~For all other regulated new source review (NSR) pollutants,~~  
24 ~~the provisions of Rule .0530 of this Section [in 15A NCAC 02D .0530 shall] apply.~~

25 (b) For the purposes of this Rule, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply except  
26 the definition of "baseline actual emissions." "Baseline actual emissions" means the rate of emissions, in tons per year,  
27 of a regulated NSR pollutant, as determined in accordance with Subparagraphs (1) through (3) of this Paragraph:

- 28 (1) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at  
29 which the emissions unit emitted the pollutant during any consecutive 24-month period selected by  
30 the owner or operator within the 5-year period preceding the date that a complete permit application  
31 is received by the Division for a permit required under this Rule. The Director shall allow a different  
32 time period, not to exceed 10 years preceding the date that a complete permit application is received  
33 by the Division, if the owner or operator demonstrates that it is more representative of normal source  
34 operation. For the purpose of determining baseline actual emissions, the following shall apply:
- 35 (A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions  
36 associated with startups, shutdowns, and malfunctions;

- (B) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;
- (C) For an existing emission ~~unit (other unit, other~~ than an electric utility steam generating ~~unit), unit,~~ the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source shall currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;
- (D) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G.S. 143-215.107D and for which cost recovery is sought pursuant to G.S. 62-133.6;
- (E) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and
- (F) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Parts (B) and (C) of this Subparagraph;
- (2) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and
- (3) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Subparagraph (1) of this Paragraph and for a new emissions unit in accordance with the procedures contained in Subparagraph (2) of this Paragraph.
- (c) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be seven years.
- (d) In the definition of "subject to regulation", a greenhouse gas's global warming potential is the global warming potential published at Table A-1 of Subpart A of 40 CFR Part 98 and shall include subsequent amendments and editions.
- (e) The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply.
- (f) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through ~~(e)(r)~~ and (w). ~~The transition provisions allowed~~

1 by 40 CFR 52.21 (i)(1)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum  
2 requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the  
3 requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the  
4 portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall  
5 apply to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR  
6 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain  
7 circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However,  
8 this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by  
9 the Director as specified in 40 CFR 51.166(n)(2).

10 (g) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: "If the emissions level calculated in accordance with Paragraph  
11 (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limit] level, the  
12 Director shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

13 (h) 15A NCAC 02Q .0102 and .0302 are is not applicable to any source to which this Rule applies. The owner or  
14 operator of the sources to which this Rule applies shall apply for and receive a permit as required in 15A NCAC 02Q  
15 .0300 or .0500.

16 (i) When a particular source or modification becomes a major stationary source or major modification solely by virtue  
17 of a relaxation in any enforceable limitation that was established after August 7, 1980, on the capacity of the source  
18 or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall  
19 apply to the source or modification as though construction had not yet begun on the source or modification.

20 (j) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by  
21 reference except that the term "Administrator" is replaced with "Director".

22 (k) Permits may be issued based on innovative control technology as set forth in 40 CFR 51.166(s)(1) if the  
23 requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the  
24 allowance set forth in 40 CFR 51.166(s)(4).

25 (l) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements  
26 of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is  
27 complete as to initial information submitted. Commencement of construction before full prevention of significant  
28 deterioration approval is obtained constitutes a violation of this Rule.

29 (m) Approval of an application with regard to the requirements of this Rule shall not relieve the owner or operator of  
30 the responsibility to comply with applicable provisions of other rules of this Subchapter or Subchapter 02Q of this  
31 Title and any other requirements under local, ~~state~~, State, or federal law.

32 (n) In the lieu of the requirements in 40 CFR 51.166(r)(6) and (7), the following shall apply. If the owner or operator  
33 of a source is using projected actual emissions to ~~avoid determine~~ applicability ~~of with~~ prevention of significant  
34 deterioration requirements, the owner or operator shall ~~notify [submit an application to]~~ the Director of the  
35 modification before beginning actual construction. The ~~notification [application]~~ shall include:

- 36 (1) a description of the project;
- 37 (2) identification of sources whose emissions could be affected by the project;

- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
- (4) the calculated baseline actual emissions in Subparagraph (b)(1) of this Rule an explanation of how the baseline actual emissions were calculated; and
- (5) any netting calculations, if applicable.

If upon reviewing the notification, [application,] the Director finds that the project will cause-require a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his or her findings, findings and the The owner or operator shall not make the modification until a prevention of significant deterioration permit has been the owner or operator has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this Rule, the If the Director finds that the project will not require a prevention of significant deterioration evaluation and the projected actual emissions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus the baseline actual emissions, is 50 percent or greater of the amount that is a significant emissions increase, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant, then, the Director will require a permit application to include a permit condition for the monitoring, recordkeeping, and reporting of the annual emissions related The owner or operator shall maintain records of the annual emissions related to the project in tons per year, on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit for the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii). The monitoring, recordkeeping, and reporting requirements in this Paragraph shall not apply if the projected actual emissions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus the baseline actual emissions, is less than 50 percent of the amount that is a significant emissions increase, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant.

(o) The references to Portions of the regulations in the Code of Federal Regulations (CFR) that are referred to in this Rule are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this ~~Rule~~ Rule, with respect to 40 CFR 51.166, is that as of ~~July 20, 2011~~ July 1, 2019 ~~as set forth here~~ <http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol2/pdf/CFR-2011-title40-vol2-sec51-166.pdf>, <http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol3/pdf/CFR-2011-title40-vol3-sec52-21.pdf>, ~~and with the amendment set forth on 76 FR 43507 at~~ <http://www.gpo.gov/fdsys/pkg/FR-2011-07-20/pdf/2011-17256.pdf> at <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-sec51-166.pdf> and does not include any subsequent amendments or ~~editions to the referenced material.~~ editions. Federal regulations referenced in 40 CFR 51.166 shall include subsequent amendments and editions. This Rule is applicable in accordance with 40 CFR 51.166(b)(48) and (b)(49)(iv) and (v).

1 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(5); 143-215.107(a)(7); 143-  
2 215.108(b); 150B-21.6;  
3 Eff. January 28, 2011 pursuant to E.O. 81, Beverly E. Perdue;  
4 Pursuant to G.S. 150B-21.3(c), a bill was not ratified by the General Assembly to disapprove this  
5 rule;  
6 Temporary Amendment Eff. December 23, 2011;  
7 Amended Eff. July 1, 2012;  
8 Temporary Amendment Eff. December 2, 2014;  
9 Amended Eff. September 1, ~~2015~~; 2015;  
10 Readopted Eff. September 1, 2020.  
11  
12

1 15A NCAC 02D .0615 is repealed through readoption as published in 34:16 NCR 1460 as follows:

2  
3 **15A NCAC 02D .0615 DELEGATION**

4  
5 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4);*

6 *Eff. April 1, ~~1999~~-1999;*

7 *Repealed Eff. September 1, 2020.*