AGENCY: Environmental Management Commission

RULE CITATION: All Rules

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0403

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

1	15A NCAC 02D	0.0403 is readopted as published in 34:16 NCR 1451 as follows:
2		
3	15A NCAC 02E	0.0403 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 an	nd analysis shall be in accordance with procedures in Appendix B of 40 C.F.R Part 50 40 CFR Part
9	<u>50, Appendix B</u>	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<u>1981;</u>
14		<u>Readopted Eff. September 1, 2020.</u>
15		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0501

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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	
2	

3 4

SECTION .0500 - EMISSION CONTROL STANDARDS

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

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

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 <u>are more stringent than those</u> 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.

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

18 (1)

19

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

- 20(A)Sources <u>pursuant to which Rules_15A NCAC 02D</u>.0524, .0530, .0531, .1110 or .1111 of21this Subchapter, 1111, the federal New Source Performance Standards (NSPS), the federal22National Emission Standards for Hazardous Air Pollutants (NESHAPS), (NESHAP),23regulations established pursuant to Section-111 (d) 111(d) of the federal Clean Air Act, or24state or federal Prevention of Significant Deterioration (PSD) requirements apply, shall25have 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 unclassified27area or in an area that has been demonstrated to be attainment by the statutory deadlines28(with reasonable further progress toward attainment) with reasonable further progress29toward 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 <u>owners(s) owners</u> or <u>operators(s)operators</u> of the facility<u>(facilities) or facilities</u> shall 36 demonstrate to the satisfaction of the Director that the alternative mix of controls is equivalent in

1	tota	l allowed emissions, reliability, enforceability, and environmental impact to the aggregate of the				
2	othe	erwise applicable individual emission standards; and				
3	(A) that the alternative mix approach does not interfere with <u>the attainment and</u>					
4		of the ambient air quality standards and does not interfere with the PSD program; program,				
5		which this demonstration shall include modeled calculations of the amount, if any, of PSD				
6		increment consumed or created;				
7	(B)	that the alternative mix approach conforms with reasonable further progress requirements				
8		in any nonattainment area;				
9	(C)	that the emissions under pursuant to the alternative mix approach are in fact quantifiable,				
10		and trades among them are even; equivalent; and				
11	(D)	that the pollutants controlled under pursuant to the alternative mix approach are of the same				
12		criteria pollutant categories, except that emissions of some criteria pollutants used in				
13		alternative emission control strategies are subject to the limitations as defined in 44 FR				
14		71784 (December 11, 1979), Subdivision D.1.c.ii. The Federal Register referenced in this				
15		Part is hereby incorporated by reference and does not include subsequent amendments or				
16		editions.				
17	The demonstrations of equivalence shall be performed with at least the same level of detail as The					
18	Nor	th Carolina State Implementation Plan for Air Quality demonstration of attainment for the area				
19	in c	in question. Moreover, if the facility involves another facility in the alternative strategy, it shall				
20	com	complete a modeling demonstration to ensure that air quality is protected. Demonstrations of				
21	equ	equivalency shall also take into account differences in the level of reliability of the control measures				
22	or o	other uncertainties.				
23	(3) The	e emission rate limitations or control techniques of each source within the facility or (facilities)				
24	faci	lities subjected to the alternative mix of controls shall be specified in the facility's (facilities')				
25	peri	mits(s). permit or facilities' permits.				
26	(4) Cor	npliance schedules and enforcement actions shall not be affected because an application for an				
27	alte	rnative mix of controls is being prepared or is being reviewed.				
28	(5) The	e Director may waive or reduce requirements in this Paragraph up to the extent allowed by the				
29	Em	issions Trading Policy Statement published in the Federal Register of April 7, 1982, pages				
30	150	76-15086, provided that the analysis required by Paragraph (e) of this Rule supports any waiver				
31	or r	reduction of requirements. The Federal Register referenced in this Paragraph-Subparagraph is				
32	here	eby incorporated by reference and does not include subsequent amendments or editions.				
33	(e) In a permit applic	eation for an alternative mix of controls under pursuant to Paragraph (d) of this Rule, the owner				
34	or operator of the fac	ility shall demonstrate to the satisfaction of the Director that the proposal is equivalent to the				
35	existing requirements	of the SIP in total allowed emissions, enforceability, reliability, and environmental impact. The				
36	Director shall provide	e for public notice with an opportunity for a request for public hearing following the procedures				
37	under-pursuant to 15A	A NCAC 02Q .0300 or .0500, as applicable.				

1	(1)	If and when a permit containing these conditions is issued under-pursuant to 15A NCAC 02Q .0300
2		(non-Title V permits), .0300, it shall become a part of the state implementation plan (SIP) as an
3		appendix available for inspection at the department's regional offices. Until the U.S. Environmental
4		Protection Agency (EPA) approves the SIP revision embodying the permit containing an alternative
5		mix of controls, the facility shall continue to meet the otherwise applicable existing SIP
6		requirements.
7	(2)	If and when a permit containing these conditions is issued under pursuant to 15A NCAC 02Q .0500
8		(Title V permits), it shall be available for inspection at the department's regional offices. Until the
9		EPA approves the Title V permit containing an alternative mix of controls, the facility shall continue
10		to meet the otherwise applicable existing SIP requirements.
11	The revision sh	all be submitted for approved approval by the EPA on the basis of the revision's consistency with
12	EPA's "Policy fe	or Alternative Emission Reduction Options Within State Implementation Plans" as promulgated in the
13	Federal Register	r of December 11, 1989, pages 71780-71788, and subsequent rulings.
14	If owner or oper	rator of any combustion and non-combustion source or control equipment subject to the requirements
15	of this Section	is required to demonstrate compliance with a rule in this Section, the source testing procedures of
16	Section .2600 o	f this Subchapter shall be used.
17	(f) If the owne	r or operator of any combustion and non-combustion source or control equipment subject to the
18	requirements of	this Section is required to demonstrate compliance with a rule in this Section, [the] source testing
19	procedures purs	uant to 15A NCAC 02D .2600 shall be used.
20		
21	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
22		Eff. February 1, 1976;
23		Amended Eff. August 1, 1991; October 1, 1989;
24		Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is
25		effective, whichever is sooner;
26		Amended Eff. June 1, 2008; April 1, 2001; April 1, 1999; July 1, 1996; February 1, 1995; July 1,
27		1994.<u>1994;</u>
28		Readonted Fff Sentember 1, 2020

28 <u>Readopted Eff. September 1, 2020.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0502

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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?

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

3 15A NCAC 02D .0502 PURPOSE

2

The purpose of the emission control standards set out in this Section is to establish maximum limits on the rate of
emission of air contaminants into the atmosphere. All sources shall be provided with the maximum feasible control. *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); *Eff. February 1, 1976; Amended Eff. June 1, 1981, 1981;*<u>Readopted Eff. September 1, 2020.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0503

DEADLINE FOR RECEIPT: Friday, August 14, 2020

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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"

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 <u>Rule Rule</u>, 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 Allowable Emission Limit 21 For Particulate Matter Maximum Heat Input In 22 Million Btu/Hour In Lb/Million Btu 23 24 Up to and Including 10 0.60 25 100 0.33 26 1.000 0.18 27 10.000 and Greater 0.10 28 29 For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of 30 particulate matter shall be calculated by the equation E = 1.090 times Q to the -0.2594 power. $E = 1.090 \text{ kg}^{-0.2594}$. $E = 1.090 \text{ kg}^{-0.2594}$. 31 <u>"E" equals the allowable emission limit for particulate matter in lb/million Btu. Q = "Q" equals the maximum heat</u> 32 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 construction, or permitted pursuant to 15A NCAC 2Q, 15A NCAC [02D] 02Q, shall be considered as the total heat 40 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 an	y fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another					
6	fuel burning ind	irect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect					
7	heat exchanger s	shall no longer be considered in the determination of the allowable emission limit of any fuel burning					
8	indirect heat exe	changer constructed after or in conjunction with the removal. For the purposes of this Paragraph,					
9	refuse not burne	ed as a fuel and wood shall not be considered a fuel. For residential facilities or institutions (such					
10	institutions, suc	h as military and educational)educational, whose primary fuel burning capacity is for comfort heat,					
11	only those fuel b	purning 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 to	tal heat input.					
14	(f) The emission	n limit for fuel burning equipment that burns both wood and other fuels in combination, or for wood					
15	and other fuel b	burning equipment that is operated such that emissions are measured on a combined basis, shall be					
16	calculated by the	e equation $Ec = [(EW)(Qw) + (Eo)(Qo)]/Qt.$					
17	(1)	Ec = the emission limit for combination or combined emission source(s) in lb/million Btu.					
18	(2)	Ew = 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)	Eo = 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)	Qw = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.					
23	(5)	Qo = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.					
24	(6)	Qt = Qw + Qo and is the actual total heat input to combination or combined emission source(s) in					
25		Btu/hr.					
26	TT • , N T ,						
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 20		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.<u>1983</u>; Bondented Eff. Sortember 1, 2020					
32		<u>Readopted Eff. September 1, 2020.</u>					
33							

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0504

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

1

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

2							
3	15A NCAC 02E	0.0504 PARTICULATES FR	OM WOOD BURNING INDIRECT HEAT EXCHANGERS				
4	(a) <u>This Rule</u>	applies to fuel burning equipme	nt 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	s that structures, buildings or equipment are interconnected through				
8		common process streams, suppl	y lines, flues, or stacks.				
9	(2)	"Indirect heat exchanger" mean	s 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 tw	ro fluids.				
12	(3)	"Plant site" means any singl	e or collection of structures, buildings, facilities, equipment,				
13		installations, or operations whic	h:				
14		(A) are located on one or m	nore adjacent properties;				
15		(B) are under [in] common	legal control; and				
16		(C) are functionally depend	dent in their operations.				
17	(b) The definit	ion contained in Subparagraph (a	a)(3) of this Rule does not affect the calculation of the allowable				
18	emission rate of	any indirect heat exchanger perm	itted prior to April 1, 1999.				
19	(c) Emissions o	f particulate matter from the comb	pustion of wood shall not exceed:				
20							
21		II	Allowable Emission Limit				
22 23		um Heat Input In 1 Btu/Hour	For Particulate Matter In Lb lb /Million Btu				
24	Lin to a	nd Inchading 10					
25 26	100 Up to a	nd Including 10	0.70 0.41				
27	1,000		0.25				
28 29	10,000	and Greater	0.15				
30	For a heat input	between any two consecutive he	eat inputs stated in the preceding table, the allowable emissions of				
31	particulate matt	er shall be calculated by the equ	uation $E = 1.1698$ (Q to the 0.2230 power.) [E=1.1698*Q ^{.2230} .]				
32	$E=1.1698*Q^{223}$	⁰ . <u>E = "E" equals the</u> allowable er	nission limit for particulate matter in lb/million Btu. $Q = $ <u>"Q" equals</u>				
33	<u>the</u> Maximum h	eat 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 tran	nsfer.					
36	(e) For the purp	ose 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 NCA	<u>AC [02D] 02Q, with a permit shall be used to determine shall be</u>				
39	considered as the	e total heat input for the purpose of	f 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						

1 February 1, 1983, shall not change the allowable emission limit of any wood burning indirect heat exchanger whose 2 allowable emission limit has previously been set. The removal of a wood burning indirect heat exchanger shall not 3 change the allowable emission limit of any wood burning indirect heat exchanger subject to this Rule whose allowable 4 emission limit has previously been established. However, for any wood burning indirect heat exchanger subject to this 5 rule constructed after, or in conjunction with, the removal of another wood burning indirect heat exchanger at the plant 6 site, the maximum heat input of the removed wood burning indirect heat exchanger shall no longer be considered in 7 the determination of the allowable emission limit of any wood burning indirect heat exchanger subject to this rule 8 constructed after or in conjunction with the removal. For facilities or institutions, such as military and educational, 9 whose primary wood burning capacity is for comfort heat, only those wood burning indirect heat exchangers subject 10 to this Rule located in the same power plant or building or otherwise physically interconnected, such as common flues, 11 steam, or power distribution line shall be used to determine the total heat input. 12 (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 13 14 calculated by the procedure described in Paragraph (f) of Rule .0503 of this Section. 15 Authority G.S. 143-213; 143-215.3(a)(1); 143-215.107(a)(5); 143-215.107(h)(1); 16 History Note: 17 Eff. February 1, 1976; 18 Amended Eff. August 1, 2002; April 1, 1999; June 1, 1985; February 1, 1983.1983; 19 Readopted Eff. September 1, 2020. 20

16

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0506

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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"

1 2 15A NCAC 02D .0506 is readopted as published in 34:16 NCR 1452 as follows:

- 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
- per hour. The allowable emission rate shall be 60.0 pounds per hour for process rates equal to or greater than 300 tons
 per hour.
- (b) Visible emissions from stacks or vents at a hot mix asphalt plant shall be less than not exceed 20 percent opacity
 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 <u>under by</u> this Rule and shall not
- 18 exceed 20 percent opacity averaged over six minutes.
- (f) Any asphalt batch plant that was subject to the 40 percent opacity standard before August 1, 2004 shall be in
 compliance with the 20 percent opacity standard by January 1, 2005.
- 21
- 22 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
- 23 *Eff. February 1, 1976;*
 - Amended Eff. August 1, 2004; July 1, 1998; January 1, 1985.<u>1</u>985;
- 25 <u>Readopted Eff. September 1, 2020.</u>
- 26

24

1	15A NCAC 02D	.0507 is readopted	as published in 34	:16 NCR 1452 as follows:
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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 atmosphere shall not exceed the level calculated with the equation $E = 9.377(P)^{0.3067}$ calculated to three significant 7 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 Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 11 History Note: 12

Eff. February 1, 1976;

2

13

15

- Amended Eff. April 1, 2003; July 1, 1998; January 1, 1985. 1985;
- 14 Readopted Eff. September 1, 2020.

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0508

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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"?

1	15A NCAC 02E	0.0508 is readopted as published in 34:16 NCR 1452 as follows:
2		
3	15A NCAC 02I	0.0508 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	e 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 f	from any kraft pulp recovery boiler established after July 1, 1971, shall not exceed an opacity of 35
10	percent when av	veraged 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 prese	ence of uncombined water vapor is the only reason for failure to meet this opacity limitation, this
16	opacity limitation	n 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.<u>1</u>978;
21		<u>Readopted Eff. September 1, 2020.</u>
22		

1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0509

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

- 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 discharged from any chimney, stack, vent, or outlet into the atmosphere shall not exceed the level calculated with the 5 equation $E = 4(P)^{0.677}$ calculated to three significant figures for process rates less than or equal to 30 tons per hour. 6 For process rates greater than 30 tons per hour but less than 1,000 tons per hour, the allowable emission rate for 7 particulate matter shall not exceed the level calculated with the equation $E = 20.421(P)^{0.1977}$ calculated to three 8 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 =38.147(P)^{0.1072} calculated to three significant figures. The allowable emission rate shall be 90.0 pounds per hour for 11 process weight rates equal to or greater than 3,000 tons per hour. For the purpose of these equations, "E" equals the 12 maximum allowable emission rate for particulate matter in pounds per hour and "P" equals the process weight rate in 13 14 tons per hour. 15 (b) Fugitive non-process dust emissions shall be controlled by Rule .0540 of this Section. meet the requirements of 15A NCAC 02D .0540. 16 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 Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); History Note: 24 *Eff. February 1, 1976;* 25 Amended Eff. April 1, 2003; July 1, 1998; April 1, 1986; January 1, 1985; 1985; Readopted Eff. September 1, 2020. 26 27

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0510

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

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

2									
3	15A NCAC 02	D .0510	PARTICULATES	FROM	SAND,	GRAVEL,	OR	CRUSHED	STONE
4			OPERATIONS						
5	(a) The owner	or operato	or of a sand, gravel, or	crushed sto	one operatio	on shall not cau	ise, allo	ow, or permit an	ny material
6	to be produced,	handled,	transported or stockp	iled withou	t taking me	easures to redu	ce to a	minimum any	particulate
7	matter from bee	coming ai	rborne to prevent exce	eeding the	ambient air	quality standa	ards be	yond the prope	rty line for
8	particulate matt	er, both P	M10 and total suspend	led particul	ates.				
9	(b) Fugitive no	n-process	s dust emissions from	sand, grave	el, or crush	ed stone opera	tions sl	hall be controll	ed by Rule
10	.0540 of this Se	etion. 15A	A NCAC 02D .0540.						
11	(c) The owner	or operato	or of any sand, gravel,	or crushed	stone opera	ation shall cont	rol pro	cess-generated	emissions:
12	(1)	from cr	rushers with wet suppr	ession, and					
13	(2)	from co	onveyors, screens, and	transfer po	ints,				
14	such that the ap	plicable o	pacity standards in Ru	ı le .0521 or	· .0524, of t	his Section 15.	A NCA	C 02D .0521 o	<u>r .0524</u> are
15	not exceeded.								
16									
17	History Note:	Authori	ity G.S. 143-215.3(a)(.	1); 143-215	5.107(a)(5),				
18		Eff. Fel	bruary 1, 1976;						
19		Amende	ed Eff. July 1, 1998; Ja	anuary 1, 1	985.<u>19</u>85;				
20		<u>Readop</u>	oted. Eff. September 1,	2020.					

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0511

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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?

1

23

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, such that the applicable opacity standards in Rule .0521 or .0524, of this Section 15A NCAC 02D .0521 or .0524 are 13 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 Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); History Note: 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.

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0512

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

- 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 Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); *History Note: Eff. February 1, 1976;* 11

12 Amended Eff. January 1, 1985.<u>1985</u>;

13 <u>Readopted Eff. September 1, 2020.</u>

14

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0513

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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"

1	15A NCAC 02I	0.0513 is readopted as published in 34:16 NCR 1453 as follows:
2		
3	15A NCAC 02I	D.0513 PARTICULATES FROM PORTLAND CEMENT PLANTS
4	(a) Particulate r	natter 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 emission	ons of particulate matter from any stacks, vent or outlets from all processes except Portland cement
9	kilns shall be co	ntrolled 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.<u>1985;</u>
14		<u>Readopted Eff. September 1, 2020.</u>
15		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0514

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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?

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			
5 6			Maximum Allowable
7		Process Weight	Emission
8		In Lb/Hour lb/hr	Rate For Particulate In Lb/Hr lb/hr
9		III Electrour <u>techn</u>	
10		1,000	3.05
11		2,000	4.70
12		3,000	6.35
13		4,000	8.00
14		5,000	9.65
15		6,000	11.30
16		7,000	12.90
17		8,000	14.30
18		9,000	15.50
19		10,000	16.65
20		12,000	18.70
21		16,000	21.60
22		18,000	23.40
23	A	20,000	25.10
24	Any foundry ex	listing before January	2, 1972, having a capacity greater than shown in the table and any new foundry,
25	regardless of si	ze, shall comply with	n the particulate emission limits specified in Paragraph (a) of Rule .0515 of this
26	Section. pursua	nt to 15A NCAC 02I	D.0515(a).
27			
28	History Note:	Authority G.S. 143	2-215.3(a)(1); 143-215.107(a)(5);
29		Eff. February 1, 1	976;
30		Amended Eff. July	1, 1998; April 1, 1986; January 1, 1985.<u>1</u>985;
31		<u>Readopted Eff. Sep</u>	<u>otember 1, 2020.</u>
32			

- 1 15A NCAC 02D.0515 is readopted as published in 34:16 NCR 1453 as follows:
- 2

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

3 4 (a) The allowable emission rates for particulate matter from any stack, vent, or outlet, resulting from any industrial process for which no other emission control standards are applicable, shall not exceed the level calculated with the 5 equation $E = 4.10(P)^{0.67}$ calculated to three significant figures for process rates less than or equal to 30 tons per hour. 6 For process rates greater than 30 tons per hour, the allowable emission rates for particulate matter shall not exceed the 7 level calculated with the equation $E = 55.0(P)^{0.11}$ - 40 calculated to three significant figures. For the purpose of these 8 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 Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); History Note: 20 *Eff. February 1, 1976;*

- Amended Eff. April 1, 2003; July 1, 1998; January 1, 1985; December 1, 1976.1976;
- 22 Readopted Eff. September 1, 2020.
- 23

21

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 <u>.1210.</u>
- 14

16

15	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
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- 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.<u>1977;</u>*
- 19 <u>Readopted Eff. September 1, 2020.</u>
- 20
- 21

1	15A NCAC 02D .0517 is readopted as published in 34:16 NCR 1453 as follows:		
2			
3	15A NCAC 021	D .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		<u>Readopted Eff. September 1, 2020.</u>	
13			
14			

1	15A NCAC 02E	0.0519 is readopted as published in 34:16 NCR 1453 as follows:
2		
3	15A NCAC 02I	D .0519 CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS
4	(a) The emission	ons of nitrogen dioxide shall not exceed 5.8 pounds per ton of acid produced from any sulfurie nitric
5	acid manufactur	ring plant.
6	(b) The emissio	ons 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 <u>; or</u>
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 emissio	n limit for a boiler that burns both coal and oil or gas <u>burning coal, oil, or gas</u> in combination shall be
12	calculated by the	e-equation E = [(Ec) (Qc) + (Eo) (Qo)] / Qt. equation:
13		$\underline{E} = \frac{(E_c * Q_c) + (E_o * Q_o)}{Q_t}$
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) <u>AIf a</u> boiler	is subject to an emission standard for nitrogen oxides under pursuant to Rule 15A NCAC 02D .0524
23	(New Source Pe	erformance 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)	(<u>b)</u> 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.<u>1985;</u>
30		<u>Readopted Eff. September 1, 2020.</u>
31		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0521

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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"

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

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

- and industrial processes where an emission can reasonably be expected to occur, except during startup, startups,
 shutdowns, and malfunctions approved according to procedures set out in Rule .0535 of this Section. 15A NCAC 02D
 .0535.
- 8 (b) Scope. This Rule shall apply to all fuel burning sources and to other <u>industrial</u> processes that may have <u>having</u> 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, <u>or .1210</u> .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, exceptbut it does apply to the testing of peak shaving and

13 emergency generators. <u>(In In</u> 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.

- (d) For sources manufactured after July 1, 1971, visible emissions shall not be more than 20 percent opacity when
 averaged over a six-minute period. However, except Except for sources required to comply with Paragraph (g) of this
 Rule, six-minute averaging periods may exceed 20 percent opacity if:
- 24
- (1) No six-minute period exceeds 87 percent opacity;
- 25

26

(2) No more than one six-minute period exceeds 20 percent opacity in any hour; and

(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 <u>for</u>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:

(1)

31 32 The owner or operator of the source demonstrates compliance with applicable particulate mass emissions standards; and

33 34 (2) The owner or operator of the source submits data necessary to show that emissions up to those 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 in14a calendar quarter above the opacity-limit, limit, shall not exceed 0.8 percent of the total operating15hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess16emissions shall be calculated by including hours operated immediately previous prior to this quarter17until 500 operational hours are obtained.

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

- 21
- History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
 Eff. February 1, 1976;
 Amended Eff. January 1, 2009; July 1, 2007; January 1, 2005; June 1, 2004; April 1, 2003; April 1, 2001; July 1, 1998; July 1, 1996; December 1, 1992; August 1, 1987; January 1, 1985; May 30, 1978.1978.
 Readopted Eff. September 1, 2020.
- 29

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0524

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

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

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, maintenance requirements, notification and record keeping requirements, performance test requirements, test method 6 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 40 CFR Part 60, Subpart Cb (guidelines for municipal waste combustors constructed on or before (4) 14 September 20, 1994);Cb; 15 (5) 40 CFR Part 60, Subpart Cc (guidelines for municipal solid waste landfills); Cc; 40 CFR Part 60, Subpart Cd (guidelines for sulfuric acid production units);Cd; 16 (6) 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 constructed on or before November 30, 1999);DDDD; 21 22 (10)40 CFR Part 60, Subpart FFFF (guidelines for other solid waste incinerators constructed on or before December 9, 2004);FFFF; or 23 24 40 CFR Part 60, Subpart HHHH (guidelines for coal-fired electric steam generating units.HHHH. (11)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 Paragraph (a) of this Rule shall be submitted to the Director of the Division of Air Quality rather than to the 36 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-<u>under in</u> 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.<u>1</u>994;
14		<u>Readopted Eff. September 1, 2020.</u>
15		

16

1	15A NCAC 02I	D.0527 is readopted as published in 34:16 NCR 1453 as follows:
2		
3	15A NCAC 02	D .0527 EMISSIONS FROM SPODUMENE ORE ROASTING
4	Emission of sul	fur 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 $\frac{H(2) \text{ SO}(4)}{H_2 \text{ SO}(4)}$, $H_2 \text{ SO}_4$, 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.<u>1985;</u>
12		<u>Readopted Eff. September 1, 2020.</u>
13		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0528

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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"

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

2		
3	15A NCAC 02	D .0528 TOTAL REDUCED SULFUR FROM KRAFT PULP MILLS
4	(a) For the purp	pose 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)	
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)	
9	(a) For the purp	bose of this Rule, the following definitions apply:
10	<u>(1)</u>	"Black liquor solids" means the dry weight of the solids which enter the recovery furnace in the
11		black liquor.
12	<u>(2)</u>	"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		<u>kraft pulp mill.</u>
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	<u>(7)</u>	"Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate,
27		into quicklime, which is calcium oxide.
28	<u>(8)</u>	"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	<u>(9)</u>	"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	<u>(10)</u>	"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.

1	<u>(11)</u>	"Old design recovery furnace" means a straight kraft recovery furnace that does not have membrane
2		wall or welded wall construction or emission control designed air systems.
3	(12)	"Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace and
4		includes the direct-contact evaporator for a direct-contact furnace.
5	<u>(13)</u>	"Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery
6		furnace.
7	(14)	"Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of
8		sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven
9		percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or
10		has green liquor sulfidity of 28 percent or less.
11	<u>(15)</u>	"Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl
12		mercaptain, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping
13		operation.
14	(b) This Regula	tion-Rule shall apply to recovery furnaces, digester systems, multiple-effect evaporator systems, lime
15	kilns, smelt diss	olving tanks, and condensate stripping systems of kraft pulp mills not subject to Regulation .0524 of
16	this Section. 15/	A NCAC 02D .0524.
17	(c) Emissions o	f total reduced sulfur from any kraft pulp mill subject to this Regulation-Rule shall not exceed:
18	(1)	20 parts per million from any old design recovery furnace;
19	(2)	five parts per million from any new design recovery furnace;
20	(3)	25 parts per million from any cross recovery furnace;
21	(4)	five parts per million from any digester system;
22	(5)	five parts per million from any multiple-effect evaporator system;
23	(6)	20 parts per million from any lime kiln;
24	(7)	five parts per million from any condensate stripping system; and
25	(8)	0.032 pounds per ton of black liquor solids (dry weight) from any smelt dissolving tank.
26	(d) The emission	on limitations given in Subparagraphs (c)(1) through (c)(7) of this Rule are measured as hydrogen
27	sulfide on a dry	gas basis and are averages of discrete contiguous 12-hour time periods. The emission limitations
28	given in Subpar	ragraphs (c)(1) through (c)(3) of this Rule are corrected to eight percent oxygen by volume. The
29	emission limitat	ions given in Subparagraph (c)(6) of this Rule is corrected to <u>10 ten</u> percent oxygen by volume.
30	(e) One percen	t of all 12-hour total reduced sulfur averages per quarter year in excess of the limitations given in
31		(c)(1) through (c)(3) of this Rule, in the absence of start-ups, shut-downs and malfunctions, shall not
32		violation. Two percent of all 12-hour total reduced sulfur averages per quarter year in excess of the
33	-	in Subparagraph (c)(6) of this Rule, in the absence of start-ups, shut-downs, and malfunctions, shall
34	not be considere	d in violation.
35		
36	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
37		Eff. June 1, 1980;

1	Amended Eff. July 1, 1988; July 1, 1987; January 1, 1985; November 1, 1982.<u>1982</u>;
2	<u>Readopted Eff. September 1, 2020.</u>
3	

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0529

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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?

1	15A NCAC 02D	0.0529 is readopted as published in 34:16 NCR 1453 as follows:
2		
3	15A NCAC 02I	
4	(a) For the purp	ose 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 13	(3)	"Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic reduction.
14	(b) This Rule sl	nall apply to prebake cells at all primary aluminum reduction plants not subject to Rule .0524 of this
15	Section.15A NC	
16		operator of a primary aluminum reduction plant subject to this Rule shall not cause, allow, or permit
17		bakeprebake 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 of	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.<u>1985;</u>
35		<u>Readopted Eff. September 1, 2020.</u>
36		
37		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0530

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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 (u), change "the following shall apply" to "this Paragraph shall apply" (assuming that's what you mean"

Change "will" to "shall" on line 32, page 5.

15A NCAC 02D .0530 is readopted with changes as published in 34:16 NCR 1453 as follows:

2

3 15A NCAC 02D .0530 PREVENTION OF SIGNIFICANT DETERIORATION

- 4 (a) The purpose of the Rule is to implement a program for the prevention of significant deterioration of air quality as 5 required by 40 CFR 51.166. The minimum requirements described in the portions of 40 CFR 51.166 are hereby 6 adopted as requirements under this Rule, except as otherwise provided in this Rule. Wherever the language of the 7 portions of 40 CFR 51.166 adopted in this Rule speaks of the "plan," the requirements described therein shall apply 8 to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 9 51.166 adopted in this Rule provide that the State plan may exempt or not apply certain requirements in certain 10 circumstances, those exemptions and provisions of non-applicability are also hereby adopted under this Rule. 11 However, this provision shall not be interpreted so as to limit information that may be requested from the owner or 12 operator by the Director as specified in 40 CFR 51.166(n)(2). 13 (b) For the purposes of this Rule, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply, 14 except the definition of "baseline actual emissions." For the purposes of this Rule: following: 15 "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source (1)review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this 16 17 Subparagraph: 18 (A) For an existing emissions unit, baseline actual emissions means the average rate, in tons 19 per year, at which the emissions unit actually emitted the pollutant during any consecutive 20 24-month period selected by the owner or operator within the five year period immediately 21 preceding the date that a complete permit application is received by the Division for a 22 permit required under this Rule. The Director shall allow a different time period, not to 23 exceed 10 years immediately preceding the date that a complete permit application is 24 received by the Division, if the owner or operator demonstrates that it is more 25 representative of normal source operation. For the purpose of determining baseline actual 26 emissions, the following apply:
- 27 (i) The average rate shall include fugitive emissions to the extent quantifiable and
 28 emissions associated with startups, shutdowns, and malfunctions;
- (ii) 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;
- (iii) For an existing emission unit (other than an electric utility steam generating 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 must
 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

1		achievable control technology standard that the Administrator proposed or
2		promulgated under Part 63 in Title 40 of the Code of Federal Regulations, the
3		baseline actual emissions shall be adjusted to account for such emission
4		reductions;
5		(iv) For an electric utility steam generating unit, the average rate shall be adjusted
6		downward to reflect any emissions reductions under G.S. 143-215.107D and for
7		which cost recovery is sought pursuant to G.S. 62-133.6;
8		(v) For a regulated NSR pollutant, if a project involves multiple emissions units, only
9		one consecutive 24-month period shall be used to determine the baseline actual
10		emissions for all the emissions units being changed. A different consecutive 24-
11		month period for each regulated NSR pollutant may be used for each regulated
12		NSR pollutant; and
13		(vi) The average rate shall not be based on any consecutive 24-month period for which
14		there is inadequate information for determining annual emissions, in tons per year,
15		and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;
16		(B) For a new emissions unit, the baseline actual emissions for purposes of determining the
17		emissions increase that will result from the initial construction and operation of such unit
18		shall equal zero and thereafter, for all other purposes, shall equal the unit's potential to
19		emit; and
20		(C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual
21		emissions shall be calculated for existing emissions units in accordance with the procedures
22		contained in Part (A) of this Subparagraph and, for a new emissions unit, in accordance
23		with the procedures contained in Part (B) of this Subparagraph;
24	(2)	In the definition of "net emissions increase," the reasonable period specified in 40 CFR
25		51.166(b)(3)(ii) shall be seven years;
26	(3)	The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply; and
27	(4)	Particulate matter PM _{2.5} PM2.5 significant levels set forth in 40 CFR 51.166(b)(23)(i) are
28		incorporated by reference except as otherwise provided in this Rule.reference. Sulfur dioxide (SO ₂)
29		and nitrogen oxides (NO _x) are precursors to $\frac{PM_{2.5}PM2.5}{PM2.5}$ in all attainment and unclassifiable areas.
30		Volatile organic compounds and ammonia are not significant precursors to PM _{2.5} - PM2.5; and
31	(5)	In 40 CFR 51.166(b)(49)(i)(a), starting January 1, 2011, in addition to PM10 and PM2.5, for
32	<u>.</u>	particulate matter (PM), condensable particulate matter shall be accounted for in applicability
33		determinations and in establishing emissions limitations for each of these regulated NSR pollutants
34		in PSD permits.
35	(c) All areas of	f the State are classified as Class II, except the following areas, which are designated as Class I:
36	(c) / III ureus of (1)	Great Smoky Mountains National Park;
37	(1) (2)	Joyce Kilmer Slickrock National Wilderness Area;
51	(2)	so to the shortow futional winderness rifed,

- 1 (3) Linville Gorge National Wilderness Area;
- 2 (4) Shining Rock National Wilderness Area; and
- 3 (5) Swanquarter National Wilderness Area.
- 4 (d) Redesignations of areas to Class I or II may be submitted as state proposals to the Administrator of the
- 5 Environmental Protection Agency (EPA) if the requirements of 40 CFR 51.166(g)(2) are met. Areas may be proposed
- 6 to be redesignated as Class III if the requirements of 40 CFR 51.166(g)(3) are met. Redesignations may not, however,
- 7 be proposed which would violate the restrictions of 40 CFR 51.166(e). Lands within the boundaries of Indian
- 8 Reservations may be redesignated only by the appropriate Indian Governing Body.
- 9 (e) In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall
- 10 be limited to the values set forth in 40 CFR 51.166(c). However, concentration of the pollutant shall not exceed
- 11 standards set forth in 40 CFR 51.166(d).
- 12 (f) Concentrations attributable to the conditions described in 40 CFR 51.166(f)(1) shall be excluded in determining

13 compliance with a maximum allowable increase. However, the exclusions referred to in 40 CFR 51.166(f)(1)(i) or (ii)

- 14 shall be limited to five years as described in 40 CFR 51.166(f)(2).
- 15 (g) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166
- 16 (a)(7) and (i) and in 40 CFR 51.166(j) through $\frac{(\mathbf{o})(\mathbf{r})}{(\mathbf{o})(\mathbf{r})}$ and (w). The transition provisions allowed by 40 CFR
- 17 52.21(i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum requirements
- 18 described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as requirements under
- 19 this Rule, except as otherwise provided in this Rule. Wherever the language of the portions of 40 CFR 51.166
- 20 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which
- 21 they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this
- 22 Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those
- 23 exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However, this provision shall
- 24 not be interpreted so as to limit information that may be requested from the owner or operator by the Director as
- 25 specified in 40 CFR 51.166(n)(2).
- 26 (h) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-
- 133.6 shall install best available control technology for NO_X and SO_2 , regardless of the applicability of the rest of this Rule.
- (i) For the purposes of this Rule, 40 CFR 51.166(w)(10)(iv)(a) shall read: "If the emissions level calculated in
 accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL level, the Director
- 31 shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.
- 32 (j) 15A NCAC 02Q .0102 shall not be applicable to any source to which this Rule applies. The owner or operator of
- the sources to which this Rule applies shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or.0500.
- 35 (k) When a particular source or modification becomes a major stationary source or major modification solely by
- 36 virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the

- 1 source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule
- 2 shall apply to the source or modification as though construction had not yet begun on the source or modification.
- 3 (1) For the purposes of this Rule, the provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to
- 4 construct are incorporated by reference except that the term "Administrator" shall be replaced with "Director".
- 5 (m) Volatile organic compounds exempted from coverage in 40 CFR 51.100(s) shall be exempted when calculating
- 6 source applicability and control requirements under this Rule.
- (n) The degree of emission limitation required for control of any air pollutant under this Rule shall not be affected
 by:
- 9 10

(1) that amount of a stack height, not in existence before December 31, 1970, that exceeds good engineering practice; or

11

(2) any other dispersion technique not implemented before December 31, 1970.

12 (o) A substitution or modification of a model as provided in 40 CFR 51.166(l) is subject to public comment procedures

13 in accordance with the requirements of 40 CFR 51.102.

14 (p) Permits may be issued on the basis of innovative control technology as set forth in 40 CFR 51.166(s)(1) if the

15 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

- 16 allowance set forth in 40 CFR 51.166(s)(4).
- 17 (q) If a source to which this Rule applies impacts an area designated Class I by requirements of 40 CFR 51.166(e),
- 18 notice to EPA shall be provided as set forth in 40 CFR 51.166(p)(1). If the Federal Land Manager presents a
- demonstration described in 40 CFR 51.166(p)(3) during the public comment period or public hearing to the Director
- and if the Director concurs with this demonstration, the permit application shall be denied. Permits may be issued on
- 21 the basis that the requirements for variances as set forth in 40 CFR 51.166(p)(4), (p)(5) and (p)(7), or (p)(6) and (p)(7)
- 22 have been satisfied.

23 (r) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements

of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is

- 25 complete as to the initial information submitted. Commencement of construction before full prevention of significant
- 26 deterioration approval is obtained shall constitute a violation of this Rule.
- 27 (s) Approval of an application with regard to the requirements of this Rule shall not relieve the owner or operator of
- the responsibility to comply with applicable provisions of other rules of this Subchapter, Subchapter 02Q of this Title,
- 29 or any other requirements under local, state, or federal law.
- 30 (t) When a source or modification is subject to this Rule the following procedures apply:
- (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;
- If a source or modification may affect 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

1		at least 30 days prior to the publication of notice for public comment on the application. The
2		notification shall include a copy of all information relevant to the permit application, including an
3		analysis provided by the source of the potential impact of the proposed source on visibility;
4	(3)	The Director shall consider any analysis concerning visibility impairment performed by the Federal
5		Land Manager if the analysis is received within 30 days of notification. If the Director finds that the
6		analysis of the Federal Land Manager fails to demonstrate that an adverse impact on visibility will
7		result in the Class I area, the Director shall follow the public hearing process described in 40 CFR
8		51.307(a)(3) on the application and include an explanation of the Director's decision or notice as to
9		where the explanation can be obtained; and
10	(4)	The Director may require monitoring of visibility in or around any Class I area by the proposed new
11		source or modification if the visibility impact analysis indicates possible visibility impairment,
12		pursuant to 40 CFR 51.307.
13	(u) <u>In lieu of th</u>	ne requirements in 40 CFR 51.166(r)(6) and (7), the following shall apply. If the owner or operator of
14	a source is usin	ng projected actual emissions to avoid applicability of determine applicability with prevention of
15	significant deter	rioration requirements, the owner or operator shall notify [submit an application to] the Director of the
16	modification be	fore beginning actual construction. The notification [application] shall include:
17	(1)	a description of the project;
18	(2)	identification of sources whose emissions could be affected by the project;
19	(3)	the calculated projected actual emissions and an explanation of how the projected actual emissions
20		were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
21	(4)	the calculated baseline actual emissions in Subparagraph (b)(1) of this Rule and an explanation of
22		how the baseline actual emissions were calculated; and
23	(5)	any netting calculations, if applicable.
24	If, upon review	ving the notification, [application,] the Director finds that the project will require a prevention of
25	significant deter	rioration evaluation, the Director shall notify the owner or operator of his or her findings. The findings
26	and the owner of	or operator shall not make the modification until a prevention of significant deterioration permit has
27	been issued pur	suant to this Rule. If a permit revision is not required pursuant to this Rule, If the Director finds that
28	the project wi	ill not require a prevention of significant deterioration evaluation and the projected actual
29	[emissions]emis	ssions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus baseline actual emissions
30	[,without exclu	ding any emissions calculated pursuant to 40 CFR 51.166(b)(40)(ii)(c), minus the baseline actual
31	emissions] is 5	0 percent or greater of the amount that is a significant emissions increase, without reference to the
32	amount that is a	a significant net emissions increase, for the regulated NSR pollutant, then the Director will require a
33	permit applicati	on to include a permit condition for monitoring, recordkeeping and reporting owner or operator shall
34	maintain record	s of <u>the</u> annual emissions <u>related to the project</u> in tons per year, on a calendar year basis related to the
35	modifications,	for 10 years following resumption of regular operations after the change if the project involves
36	increasing the e	missions unit's design capacity or its potential to emit for the regulated NSR pollutant; otherwise, these
37	records shall be	maintained for five years following resumption of regular operations after the change. The owner or

1	operator shall s	ubmit a report to the Director within 60 days after the end of each year during which these records
2	must be generat	ted. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or
3	operator shall n	nake the information documented and maintained under this Paragraph available to the Director and
4	the general pub	blic, pursuant to the requirements in 40 CFR 70.4(b)(3)(viii). The monitoring, recordkeeping and
5	reporting requir	ements in this Paragraph shall not apply if the projected actual emissions, calculated pursuant to 40
6	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
7	significant emis	ssions increase, without reference to the amount that is a significant net emissions increase, for the
8	regulated NSR r	collutant. [The reporting requirements in this Paragraph shall not apply if the projected actual emissions
9	,without exclud	ing any emissions calculated pursuant to 40 CFR 51.166(b)(40)(ii)(c), minus the baseline actual
10	emissions is less	than 50 percent of the amount that is a significant emissions increase ,without reference to the amount
11	that is a signific	ant net emissions increase, for the regulated NSR pollutant.]
12	(v) Portions o	f the regulations in the Code of Federal Regulations (CFR) that are referred to in this Rule are
13	incorporated by	reference unless a specific reference states otherwise. The version of the CFR incorporated in this
14	Rule, with resp	ect to 40 CFR 51.166, is that as of July 1, 2014-2019 at https://www.gpo.gov/fdsys/pkg/CFR 2014-
15	title40-vol2/pdf	//CFR_2014_title40_vol2_sec51_166.pdf https://www.govinfo.gov/content/pkg/CFR-2019-title40-
16	vol2/pdf/CFR-2	019-title40-vol2-sec51-166.pdf and does not include any subsequent amendments or editions to the
17	referenced mate	rial. editions. Federal regulations referenced in 40 CFR 51.166 shall include subsequent amendments
18	and editions. T	he publication may be accessed free of charge.
19		
20	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-
21		215.108(b);
22		Eff. June 1, 1981;
23		Amended Eff. December 1, 1992; August 1, 1991; October 1, 1989; July 1, 1988; October 1, 1987;
24		June 1, 1985; January 1, 1985; February 1, 1983;
25		Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent rule is
26		effective, whichever is sooner;
27		Amended Eff. September 1, 2017; September 1, 2013; January 2, 2011; September 1, 2010; May 1,
28		2008; July 28, 2006; July 1, 1997; February 1, 1995; July 1, 1994.
29		<u>Readopted Eff. September 1, 2020.</u>
30		
31		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0531

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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 "Redesgination 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.

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 _{2.5} PM2.5 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 ₂) and nitrogen oxides (NO _x) are precursors to $\frac{PM_{2.5}}{PM_{2.5}}$
19	PM2.5 in all nonattainment areas. Volatile organic compounds and ammonia are not significant precursors to PM2.5-
20	<u>PM2.5.</u>
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)(e) 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	(c)(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 emission of compounds listed under 40 CFR 51.100(s) as having been determined to have negligible (5)(4)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 operator of the source shall apply for and receive a permit as required in 15A NCAC 02Q .0300 or .0500. 6 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_X and SO_2 , 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

1 equal to or greater than 80 percent of the PAL level, the Director shall renew the PAL at the same level." 40 CFR

2 51.165(f)(10)(iv)(B) is not incorporated by reference.

3 (i)(1) When a particular source or modification becomes a major stationary source or major modification solely by

4 virtue of a relaxation in any enforceable limitation established after August7, 1980, on the capacity of the source or

5 modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply

6 to the source or modification as though construction had not yet begun on the source or modification.

7 (j)(m) To issue a permit to a source of a nonattainment pollutant, the Director shall determine, in accordance with

8 Section 173(a)(5) of the Clean Air Act and in addition to the other requirements of this Rule, that an analysis (produced

9 by the permit applicant) of alternative sites, sizes, production processes, and environmental control techniques for the

- 10 source demonstrates that the benefits of the source significantly outweigh the environmental and social costs imposed
- 11 as a result of its location, construction, or modification.

12 (k)(n) For the purposes of this Rule, the provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval

13 to construct are incorporated by reference except that the term "Administrator" is replaced with "Director."

14 (1)(o) Approval of an application regarding the requirements of this Rule does not relieve the owner or operator of

15 the responsibility to comply with applicable provisions of other rules of this Chapter and any other requirements under

16 <u>in local</u>, state, <u>State</u>, 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:

- 19(1)Notwithstanding any other provisions of this Paragraph, the Director shall, no later than 60 days20after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior21and U.S. Department of Agriculture of an application from a source or modification subject to this22Rule;
- (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;
- 33 (4) The Director shall consider any analysis concerning visibility impairment performed by the Federal
 34 Land Manager if the analysis is received within 30 days of notification. If the Director finds that
 35 the analysis of the Federal Land Manager fails to demonstrate to the Director's satisfaction that an
 36 adverse impact on visibility will result in the Class I area, the Director shall follow the public hearing

1		process described in 40 CFR 51.307(a)(3) on the application and include an explanation of the
2		Director's decision or notice where the explanation can be obtained;
3	(5)	The Director shall issue permits only to those sources whose emissions will be consistent with
4	(3)	making reasonable progress, as defined in Section 169A of the Clean Air Act, toward the national
5		goal of preventing any future, and remedying any existing, impairment of visibility in mandatory
6		Class I areas when the impairment results from manmade air pollution. In making the decision to
7		issue a permit, the Director shall consider the cost of compliance, the time necessary for compliance,
8		the energy and nonair quality environmental impacts of compliance, and the useful life of the source;
9		and
10	(6)	The Director may require monitoring of visibility in or around any Class I area by the proposed new
11		source or modification when the visibility impact analysis indicates possible visibility impairment.
12	-	ts of this Paragraph do not apply to nonprofit health or nonprofit educational institutions.
13		the requirements in 40 CFR 51.165(a)(6) and (7), the following shall apply. If the owner or operator
14		using projected actual emissions to determine avoid applicability of with nonattainment new source
15		requirements, the owner or operator shall notify [submit an application to] the Director of the
16		fore beginning actual construction. The notification shall include:
17	(1)	a description of the project;
18	(2)	identification of sources whose emissions could be affected by the project;
19	(3)	the calculated projected actual emissions and an explanation of how the projected actual emissions
20		were calculated, including identification of emissions excluded by 40 CFR
21		51.165(a)(1)(xxviii)(B)(3);
22	(4)	the calculated baseline actual emissions in Subparagraph (a)(1) of this Rule and an explanation of
23		how the baseline actual emissions were calculated; and
24	(5)	any netting calculations, if applicable.
25	If upon reviewing	ng the notification, [application,] the Director finds that the project will cause require a nonattainment
26	new source revi	ew evaluation, the Director shall notify the owner or operator of his or her findings. The findings and
27	<u>the</u> owner or op	erator shall not make the modification until it has received a nonattainment new source review permit
28	has been issued	pursuant to this Rule. If a permit revision is not required pursuant to this Rule, If the Director finds
29	that the project	will not require a nonattainment new source review evaluation and the projected actual emissions,
30	calculated pursu	ant to 40 CFR 51.165(a)(1)(xxviii)(B)(1) and (2) minus the baseline actual emissions is 50 percent or
31	greater of the ar	nount that is a significant emissions increase, without reference to the amount that is a significant net
32	emissions incre	ase, for the regulated NSR pollutant, then, the Director will require a permit application to include a
33	permit condition	n for the monitoring, recordkeeping, and reporting of the the owner or operator shall maintain records
34	of annual emiss	ions related to the project in tons per years, on a calendar year basis related to the modifications for 10
35	years,<u>y</u>ears follo	owing resumption of regular operations after the change if the project involves increasing the emissions
36	unit's design ca	apacity or its potential to emit for the regulated NSR pollutant; otherwise these records shall be
37	maintained for	five years following resumption of regular operations after the change. The owner or operator shall

1	submit a report t	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	<u>in this Paragr</u>	aph shall not apply if the projected actual emissions calculated pursuant to 40 CFR
6	51.165(a)(1)(xx	viii)(B)(1) and (2), minus the baseline actual emissions, is less than 50 percent of the amount that is a
7	significant emis	sions increase, without reference to the amount that is a significant net emissions increase, for the
8	regulated NSR p	pollutant.
9	(o)(r) The refer	ence to Portions of the regulations in the Code of Federal Regulations (CFR) that are referred to in
10	this Rule are in	corporated by reference unless a specific reference states otherwise. Except for 40 CFR 81.334, the
11	<u>The</u> version of t	he CFR incorporated in this Rule-Rule, with respect to 40 CFR 51.165, is that as of May 16, 2008 July
12	<u>1,</u>	<u>2019,</u> at <u>http://www.gpo.gov/fdsys/pkg/FR_2008_05_16/pdf/E8_10768.pdf</u>
13	https://www.gov	vinfo.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	<u>in 40 CFR 51.16</u>	55 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.<u>1994;</u>
25		<u>Readopted Eff. September 1, 2020.</u>
26		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0532

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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"?

1	15A NCAC 02E	0.0532	is readopted with changes as published in 34:16 NCR 1456 as follows:
2			
3	15A NCAC 02I	0.0532	SOURCES CONTRIBUTING TO AN AMBIENT VIOLATION
4	(a) This Rule a	pplies to	o new major stationary sources and major modifications to which Rule .0531 of this Section
5	<u>15A NCAC 021</u>	0.0531	_does not apply and which would contribute to a violation of a national ambient air quality
6	standard but wh	ich wou	ld not cause a new violation.
7	(b) For the pur	pose 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 app	licable to:
10	(1)	comp	lex sources of air pollution that are regulated only under Section .0800 of this Subchapter and
11		not ur	nder any other rule of this Subchapter;
12	(2)(1)	emiss	ion of pollutants for which the area in which the new or modified source is located is
13		design	nated as nonattainment;
14	(3)<u>(</u>2)	emiss	ion of pollutants for which the source or modification is not major;
15	<u>(4)(3)</u>	emiss	ion of pollutants other than sulfur dioxide, total suspended particulates, nitrogen oxides, and
16		carbo	n monoxide;
17	(5)<u>(</u>4)	a new	or modified source whose impact will <u>not</u> increase not more than:
18		(A)	1.0 ug/m3of SO2 on an annual basis, 1.0 μ g/m ³ of SO ₂ on an annual basis;
19		(B)	5 ug/m3of SO2 on a 24 hour basis, $5 \mu g/m^3$ of SO ₂ on a 24-hour basis;
20		(C)	25 ug/m3of SO2 on a 3-hour basis, 25μ g/m ³ of SO ₂ on a 3-hour basis;
21		(D)	1.0 ug/m3of total suspended particulates on an annual basis, 0.3 μ g/m ³ of PM2.5 on an
22			annual basis;
23		(E)	5 ug/m3of total suspended particulates on a 24 hour basis, 1.2 μ g/m ³ of PM2.5 on a 24-
24			hour basis:
25		(F)	1.0 ug/m3of NO2 on an annual basis, $1.0 \mu\text{g/m}^3$ of NO ₂ on an annual basis;
26		(G)	0.5 mg/m3of carbon monoxide on an 8-hour basis,0.5 mg/m ³ of carbon monoxide on an 8-
27			hour basis;
28		(H)	2 mg/m3of carbon monoxide on a one-hour basis, 2 mg/m3 of carbon monoxide on a one-
29			hour basis;
30		(I)	1.0 ug/m3of PM10 on an annual basis, or1.0 μg/m ³ of PM10 on an annual basis; or
31		(J)	5 ug/m3of PM10 on a 24 hour basis, 5 μg/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)<u>(5)</u>	source	es which are not major unless secondary emissions are included in calculating the potential to
34		emit;	
35	(7)<u>(6)</u>	source	es which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;
36	(8)<u>(</u>7)	temporary emission sources which will be relocated within two years; and	
37	(9) (8)	emiss	ions resulting from the construction phase of the source.

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

3 (e) To issue a permit to a new or modified source to which this Rule applies, the Director shall determine that the 4 source will meet the following conditions:

- 5 (1)The sources will emit the nonattainment pollutant at a rate no more than the lowest achievable 6 emission rate.
- 7 (2)The owner or operator of the proposed new or modified source has demonstrated that all major 8 stationary sources in the State which are owned or operated by this person (or any entity controlling, 9 controlled by, or under common control with this person) are subject to emission limitations and are 10 in compliance, or on a schedule for compliance which is federally enforceable or contained in a 11 court decree, with all applicable emission limitations and standards of this Subchapter which EPA 12 has authority to approve as elements of the North Carolina State Implementation Plan for Air 13 Quality.
- 14 (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
- 18 (B) The source will have an air quality offset, i.e., the applicant will have caused an air quality 19 improvement in the locality where the national ambient air quality standard is not met by 20 causing reductions in impacts of other sources greater than any additional impact caused 21 by the source for which the application is being made. The emissions reductions creating 22 the air quality offset shall be placed as a condition in the permit for the source reducing 23 emissions. The requirements of this Part may be partially waived if the source is a resource 24 recovery facility burning municipal solid waste, the source must switch fuels due to lack 25 of adequate fuel supplies, or the source is required to be modified as a result of EPA 26 regulations and no exemption from such regulations is available and if:
- 27 (i) the permit applicant demonstrates that it made its best efforts to obtain sufficient 28 air quality offsets to comply with this Part;

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- (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 31 when they become available.
- 32 (f) At such time that a particular source or modification becomes a major stationary source or major modification 33 solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the 34 source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule 35 shall apply to the source or modification as though construction had not yet begun on the source or modification.
- 36 (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 37

1 and does not include any subsequent amendments or editions to the referenced material. The publication may be

- 2 <u>accessed free of charge.</u>
- 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.<u>1989;</u>
9		<u>Readopted Eff. September 1, 2020.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0533

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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 "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including (1)a pipe or duct but not including flares. 6 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 entered into binding agreements or contractual obligations, which could not be canceled or 10 (B) 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 "Dispersion technique" "Dispersion technique"; <u>(2)(3)</u> "Dispersion technique" means any technique which attempts to affect the concentration of 15 (A) 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 the reheating of a gas stream, following use of a pollution control system, for the (i) 27 purpose of returning the gas to the temperature at which it was originally 28 discharged from the facility generating the gas stream; 29 the using of smoke management in agricultural or silvicultural prescribed burning (ii) 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; (II) After July 8, 1985, such merging is part of a change in operation at the 34 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

1			only to the emission limitation for the pollutant affected by such change
2			in operation; or
3		(III)	Before July 8, 1985, such merging was part of a change in operation at
4			the source that included the installation of emissions control equipment
5			or was carried out for sound economic or engineering reasons. Where
6			there was an increase in the emission limitation or in the event that no
7			emission limitation was in existence prior to the merging, an increase in
8			the quantity of pollutants actually emitted prior to the merging, the
9			Director shall presume that merging was significantly motivated by an
10			intent to gain emissions credit for greater dispersion. Absent a
11			demonstration by the source owner or operator that merging was not
12			significantly motivated by such intent, the Director shall deny credit for
13			the effects of such merging in calculating the allowable emissions for the
14			source;
15		(iv) Episodi	ic restrictions on residential woodburning and open burning; or
16		(v) Technic	ques under pursuant to Subpart (A)(iii) of this Subparagraph which
17		increase	e final exhaust gas plume rise where the resulting allowable emissions of
18		sulfur d	lioxide from the facility do not exceed 5,000 tons per year.
19	(4) "Good er	ngineering practi	ce (GEP) stack height" means the greater of:
20	(A)	65 meters measu	ared from the ground level elevation at the base of the stack;
21	(B)	2.5 times the hei	ght of nearby structure(s) measured from the ground level elevation at the
22		base of the stack	c for stacks in existence on January 12, 1979 and for which the owner or
23		operator had obt	tained all applicable permit or approvals required under 15A NCAC 2Q
24		and 40 CFR Par	ts 51 and 52, provided the owner or operator produces evidence that this
25		equation was act	tually relied on in establishing an emission limitation;
26	(C)	for stacks not co	wered under Part (B) of this Subparagraph, the height of nearby structures
27		measured from t	he ground level elevation at the base of the stack plus 1.5 times the lesser
28		dimension (heigl	ht or projected width) of nearby structure(s) provided that the Director may
29		require the use o	f a field study or fluid model to verify GEP stack height for the source; or
30	(D)	the height demo	nstrated by a fluid model or a field study approved by the Director, which
31		ensures that the	emissions from a stack do not result in excessive concentrations of any air
32		pollutant as a res	ult of atmospheric downwash, wakes, or eddy effects created by the source
33		itself, nearby str	uctures or nearby terrain features.
34	(5) "Nearby"	' means, for a sp	ecific structure or terrain feature:
35	(A)	under Parts (4)(I	3) and (C) of this Paragraph, that distance up to five times the lesser of the
36		height or the wid	Ith dimension of a structure but not greater than one half mile. The height
37		of the structure i	s 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	<u>(4)(6)</u>	"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		<u>.0533 (a)(5)(B) or (C);</u>

1			1
1		(i) a maximum ground-level concentration due in whole or part to downwash, we have $f(x) = f(x) + f$	
2		or eddy effects as provided in Part (A) of this Subparagraph, except that	
3		emission rate specified by any applicable Rule in this Subchapter (or, in	the
4		absence of such a limit, the actual emission rate) shall be used, or <u>used;</u> or	
5		(ii) the actual presence of a local nuisance (odor, visibility impairment, or pollu	
6		concentration) caused by the existing stack, as determined by the Director; an	
7		(C) for sources seeking credit after January 12, 1979, for a stack height determined under	•
8		Part (4)(B) or (C) of this Paragraph 15A NCAC 02D .0533 (a)(5)(B) or [(e)](C) where	
9		Director requires the use of a field study or fluid model to verify GEP stack height,	, for
10		sources seeking stack height credit after November 9, 1984 based on the aerodyna	mic
11		influence of cooling towers, and for sources seeking stack height credit after December	31,
12		1970 based on the aerodynamic influence of structures not adequately represented by	Part
13		(4)(B) or (C) of this Paragraph, <u>15A NCAC 02D .0533 (a)(5)(B) or </u>[(c),](C) a maxim	num
14		ground-level concentration due in whole or part to downwash, wakes, or eddy effects	that
15		is at least 40 percent in excess of the maximum concentration experienced in the abse	ence
16		of such downwash, wakes, or eddy effects.	
17	(7)	"Emission limitation" means a requirement established by this Subchapter or a local air qua	ality
18		program certified by the Commission that limits the quantity, rate, or concentration of emission	is of
19		air pollutants on a continuous basis, including any requirements that limit the level of opac	city,
- /		and periodiate on a continuous case, menoring any requirements and menories of of open	
20		prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f	or a
			òr a
20	(5)	prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f	`or a
20 21	<u>(5)</u>	prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction.	òr a
20 21 22	<u>(5)</u>	prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "Good engineering practice (GEP) stack height" means the greater of:	
20 21 22 23	<u>(5)</u>	prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "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;	t the
20 21 22 23 24	<u>(5)</u>	prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "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	t the er or
20 21 22 23 24 25	<u>(5)</u>	prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for source to assure continuous emission reduction. "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 base of the stack for stacks in existence on January 12, 1979 and for which the owner structure is the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in existence on January 12, 1979 and for which the owner states in the stack for stacks in the stack for stack	t the er or CAC
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20 21 22 23 24 25 26 27	<u>(5)</u>	 prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "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 base of the stack for stacks in existence on January 12, 1979 and for which the owner operator had obtained all applicable permit or approvals required pursuant to 15A NC 02Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence 	t the er or CAC that
 20 21 22 23 24 25 26 27 28 	<u>(5)</u>	 prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "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 base of the stack for stacks in existence on January 12, 1979 and for which the owner operator had obtained all applicable permit or approvals required pursuant to 15A NC 02Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence 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 structure 	t the er or CAC that ures
 20 21 22 23 24 25 26 27 28 29 30 	<u>(5)</u>	 prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "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 base of the stack for stacks in existence on January 12, 1979 and for which the owner operator had obtained all applicable permit or approvals required pursuant to 15A NC 02Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence 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 structure measured from the ground-level elevation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation at the base of the stack plus 1.5 times the levation produces plus plus plus plus plus plus plus plu	t the er or CAC that ures sser
 20 21 22 23 24 25 26 27 28 29 30 31 	<u>(5)</u>	 prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures f source to assure continuous emission reduction. "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 base of the stack for stacks in existence on January 12, 1979 and for which the owner operator had obtained all applicable permit or approvals required pursuant to 15A NC 02Q and 40 CFR Parts 51 and 52, provided the owner or operator produces evidence 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 structure measured from the ground-level elevation at the base of the stack plus 1.5 times the ledimension (height or projected width) of nearby structure(s) provided that the Director produces are provided that the Director produces is provided that the Director pro	t the er or CAC that ures sser may
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2 (A) in Parts (5)(B) and (C) of this Subparagraph, that distance up to five times the	1 0.1
	e lesser of the
3 <u>height or the width dimension of a structure but not greater than one-half mil</u>	le. The height
4 of the structure is measured from the ground-level elevation at the base	of the Stack;
5 [or]and	
6 (B) in Part (5)(D) of this Subparagraph, not greater than one-half mile, except th	nat the portion
7 of a terrain feature may be considered to be nearby which falls within a dist	tance of up to
8 <u>10 times the maximum height [ht] of the feature, not to exceed two miles it</u>	f such feature
9 achieves a height [ht] one-half mile from the stack that is at least 40 percent	nt of the GEP
10 stack height determined by Part (5)(C) of this Subparagraph or 26 meters,	whichever is
11 greater, as measured from the ground-level elevation at the base of the stack	k. The height
12 of the structure or terrain feature is measured from the ground-level elevation	on at the base
13 <u>of the stack.</u>	
14 (7) "Stack" means any point in a source designed to emit solids, liquids, or gases into the	air, including
15 <u>a pipe or duct but not including flares.</u>	
16 (b) With the exception stated in Paragraphs (c) and (d) of this Rule, the degree of emission limitation	ns required by
any rule in this Subchapter shall not be affected by:	
18 (1) that amount of a stack height that exceeds good engineering practice; or	
19 (2) any other dispersion technique.	
20 (c) Paragraph (b) shall not apply to:	
21 (1) stack heights in existence or dispersion techniques implemented before December 31,	, 1970, except
22 where pollutants are being emitted from such stacks or using such dispersion technique	es by sources,
23 as defined in Section 111(a)(3) of the Clean Air Act, which were constructed, or reco	onstructed, or
for which major modifications, as defined in Rules 15A NCAC 02D .0530 (b) and .05	531 (b) of this
25 Section were carried out after December 31, 1970; or	
26 (2) coal-fired steam electric generating units, subject to provisions of Section 118 of the	federal Clean
27 Air Act, which began operation before July 1, 1957, and whose stacks were construct	ted under<u>by</u> a
28 construction contract awarded before February 8, 1974.	
29 However, these exemptions shall not apply to a new stack that replaces a stack that is exempted by Subp	paragraphs (1)
30 and (2) of this Paragraph. These exemptions shall not apply to a new source using a stack that is	exempted by
31 Subparagraphs (1) and (2) of this Paragraph.	
32 (d) This Rule shall not restrict the actual stack height of any source.	
33	
34 <i>History Note: Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or unte</i>	il the
35 <i>permanent rule becomes effective, whichever is sooner;</i>	
36 Authority G.S. 143-215.3(a)(1);	
37 <i>Eff. November 1, 1982;</i>	
38 Amended Eff. July 1, 1994; July 1, 1987; April 1, 1986. <u>1986</u>;	

Readopted Eff. September 1, 2020.

1	15A NCAC 02I	D .0534 is readopted as published in 34:16 NCR 1457 as follows:
2		
3	15A NCAC 021	D .0534 FLUORIDE EMISSIONS FROM PHOSPHATE FERTILIZER INDUSTRY
4	(a) Emissions of	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-supersphosphate superphosphate plant.
17	(b) The phosp	horus-bearing material mentioned in Paragraph (a) of this Regulation-Rule shall be expressed as
18	phosphorus pen	toxide.
19		
20	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
21		Eff. November 1, 1982. <u>1982.</u>
22		<u>Readopted Eff. September 1, 2020.</u>
23		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0535

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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"?

1	15A NCAC 02D	.0535 is reado	pted as publishe	d in 34:16 NCR	1457 as follows:
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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 or6standard allowed by any rule in Sections 15A NCAC 02D .0500, .0900, .1200, or .1400 of this7Subchapter;1400; or by a permit condition; or that exceeds an emission limit established in a permit8issued 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.
- (3) "Start-up" means the commencement of operation of any source that has shut-down or ceased
 operation for a period sufficient to cause temperature, pressure, process, chemical, or a pollution
 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.

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

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

- (1) The air cleaning device, process equipment, or process has been maintained and operated, to the
 maximum extent practicable, consistent with good practice for minimizing emissions;
- 27 (2) Repairs have been made expeditiously when the emission limits have been exceeded;
- (3) The amount and duration of the excess emissions, including any bypass, have been minimized to
 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
- (7) If the source is required to have a malfunction abatement plan, it has followed that plan. All
 malfunctions shall be repaired as expeditiously as practicable. However, the Director shall not
 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 15

(A) the identification of individuals or positions responsible for inspecting, maintaining and repairing air cleaning devices;

16

17

18

19

- (B) a description of the items or conditions that will be inspected and maintained;
- (C) the frequency of the inspection, maintenance services, and repairs; and
- (D) an identification and quantities of the replacement parts that shall be maintained in 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.

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

1	shall state his re	asons fo	r his disapproval. The person who submits the plan shall submit an amendment to the plan to
2	satisfy the reason	ns for th	e Director's disapproval within 30 days of receipt of the Director's notification of disapproval.
3	Any person havi	ing an ap	proved malfunction abatement plan shall submit to the Director for his approval amendments
4	reflecting chang	es in an	y element of the plan required by Paragraph (d) of this Rule or amendments when requested
5	by the Director.	The ma	alfunction abatement plan and amendments to it shall be implemented within 90 days upon
6	receipt of writte	n notice	of approval.
7	(f) The owner of	or operat	tor of a source of excess emissions that last for more than four hours and that results from a
8	malfunction, a b	reakdow	n 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 b	usiness 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		accom	plished;
18	(3)	submi	t 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 an	d shut-d	lown. Excess emissions during start-up and shut-down are considered a violation of the
33	appropriate rule	if the ov	vner or operator cannot demonstrate that the excess emissions are unavoidable. To determine
34	if excess emiss	ions are	unavoidable during startup or shutdown the Director shall consider the items listed in
35	Paragraphs_Sub	paragrap	the $(c)(1)$, $(c)(3)$, $(c)(4)$, $(c)(5)$, and $(c)(7)$ of this Rule along with any other pertinent
36	information. Th	ne Direct	tor 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		<u>Readopted Eff. September 1, 2020.</u>
9		
10		

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		<u>Repealed Eff. September 1, 2020.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0537

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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.

1	15A NCAC 02D	.0537 is readopted with changes as published in 34:16 NCR 1460 as follows:
2		
3	15A NCAC 02D	0.0537 CONTROL OF MERCURY EMISSIONS
4	(a) For the purpo	ose 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 sh	all apply to all new and existing stationary sources engaged in the handling or processing of mercury
10	and not subject to	o standards on emissions for mercury in Rule .0530, .1110, or .1111 of this Subchapter. in 15A NCAC
11	<u>02D .0530, .1110</u>), or .1111.
12	(c) An owner of	r 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.<u>1996;</u>
19		Readopted Eff. September 1, 2020.
20 21		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0538

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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 <u>at facilities for which</u> <u>construction began after August 31, 1992</u> 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"?

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

2			
3	15A NCAC 02I	0.0538	CONTROL OF ETHYLENE OXIDE EMISSIONS
4	(a) For purpose	s of this	Rule, "medical devices" means instruments, apparatus, implements, machines, implants, in
5	vitro reagents, e	ontrivar	nees, or other similar or related articles including their components, parts, and accessories,
6	intended for use	e in the	diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or
7	intended to affect	ct the str	ucture or any function of the body of man or other animals.
8	(b) This Rule a	pplies to	emissions of ethylene oxide resulting from use as a sterilant in:
9	(1)	the pro	oduction and subsequent storage of medical devices; or
10	(2)	the pa	ckaging and subsequent storage of medical devices for sale;
11	at facilities for w	vhich co	nstruction began after August 31, 1992.
12	(c) This Rule de	oes not a	pply to hospital or medical facilities.
13	(d) Facilities su	bject to	this Rule shall comply with the following standards:
14	(1)	For <u>fo</u>	r sterilization chamber evacuation, a closed loop liquid ring vacuum pump, or equipment
15		demor	strated to be as effective at reducing emissions of ethylene oxide shall be used;
16	(2)	For <u>fo</u>	r sterilizer exhaust, a reduction in the weight of uncontrolled emissions of ethylene oxide of
17		at leas	t 99.8 percent by weight shall be achieved;
18	(3)	For fo	r_sterilizer unload and backdraft valve-exhaust, a reduction: exhaust:
19		(A)	<u>a reduction in uncontrolled emissions of ethylene oxide of at least 99 percent by weight</u>
20			shall be achieved; or
21		(B)	to a concentration of no more than one part per million by volume of ethylene oxide shall
22			be achieved;
23	(4)	<u>Sterili</u>	zed 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 eyele, 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)	Emiss	ions- <u>emissions</u> of ethylene oxide from the degassing area-(or or equivalent-process) process
30		shall b	e vented to a control device capable of reducing uncontrolled ethylene oxide emissions by at
31		least 9	9 percent by weight or to no more than one part per million by volume of ethylene-oxide
32		<u>oxide.</u>	The product aeration room and the product transfer area shall be maintained under a negative
33		pressu	re.
34	(e) Before inst	allation	of the controls required by Paragraph (d) of this Rule, and annually thereafter, a written
35	description of w	aste redu	action, elimination, or recycling plan shall be submitted [as specified in G.S. 143 215.108(g)]
36	to determine if o	ethylene	oxide use can be reduced or eliminated through alternative sterilization methods or process

37 modifications.

1	(f) The owner of	or operator of the facility shall conduct a performance test to verify initial efficiency of the control
2	devices. The ov	vner or operator shall maintain temperature records to demonstrate proper operation of the degassing
3	room. Such rec	cords shall be retained for a period of at least two calendar years and shall be made available for
4	inspection by Di	vision 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 NO	CAC 02D .1106, that the emissions of ethylene oxide from all sources at the facility do not cause the
7	acceptable ambi	ent level of ethylene oxide in-Rule .1104 of this Section 15A NCAC 02D .1104 to be exceeded, then
8	the requirements	s 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	s 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.<u>2002;</u>
15		<u>Readopted Eff. September 1, 2020.</u>
16		
17		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0539

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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 do "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 demonstrate that the measuring and recording devices are capable of verifying the compliance status (1) 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 ehecks, 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.

1 (f) A person subject to this Rule shall not cause or permit any raw material to be handled, transported, or stored, or 2 to undertake the preparation of any raw material without taking reasonable precautions to prevent odors from being 3 discharged. For the purpose of this Rule, such raw material is in "storage" after it has been unloaded at a facility or 4 after it has been located at the facility for at least 36 hours. Reasonable precautions shall include the following: 5 (1)storage of all raw material before or in the process of preparation, in properly enclosed and vented 6 equipment or areas, together with the use of effective devices and methods to prevent the discharge 7 of odor bearing gases; 8 (2)use of covered vehicles or containers of watertight construction for the handling and transporting of 9 any raw material; and 10 (3) use of hoods and fans to enclose and vent the storage, handling, preparation, and conveying of any 11 odorous materials together with effective devices or methods, or both, to prevent emissions of odors 12 or odor bearing gases. 13 (g) A vehicle or container holding raw material, which has not been unloaded inside or parked inside an odor

14 controlled area within the facility, shall be unloaded for processing of the raw material prior to the expiration of the 15 following time limits:

- 16 (1) for feathers with only trace amounts of blood, such as those obtained from slaughtering houses that 17 separate blood from offal and feathers, no later than 48 hours after being weighed upon arrival at 18 the facility.
- 19(2)for used cooking oil in sealed tankers, no later than 96 hours after being weighed upon arrival at the20facility.

(h) The owner or operator shall notify the regional supervisor of the appropriate regional office within two business
 days after <u>the provisions of Paragraph (g) of this Rule are not met and the conditions that are encountered that cause</u>
 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:

- 26 (1) documentation that the facility complies with this Rule or an air permit application containing plans
 27 to bring the facility into compliance and a schedule shall be submitted by January 1, 1997;
- 28 (2) the compliance schedule shall contain the following increments of progress:
- 29 (A) a date by which contracts for the emission control system and process equipment shall be
 30 awarded or orders shall be issued for purchase of component parts;
- 31 (B) a date by which on site construction or installation of the emission control and process
 32 equipment shall begin;
- 33 (C) a date by which on site construction or installation of the emission control and process
 34 equipment shall be completed; and
- 35 (D) a date by which final compliance shall be achieved.
- 36 (3) The final compliance date under Subparagraph (2)(D) of this Paragraph shall be no later than July
 37 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
- *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5); *Eff. July 1, 1996; Amended Eff. June 1, 2018; April 1, 2001. 2001;*
- 9 <u>Readopted Eff</u> . September 1, 2020.

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0541

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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?

1	15A NCAC 02D	.0541 is readopted as published in 34:16 NCR 1460 as follows:
2		
3	15A NCAC 02D	0.0541 CONTROL OF EMISSIONS FROM ABRASIVE BLASTING
4	(a) For the purp	ose 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	<u>(4)</u> (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 of	r operator shall ensure that any abrasive blasting operation conducted outside a building or conducted
16	indoors and vent	ed to the atmosphere is performed in accordance with the requirements set forth in 15A NCAC 2D
17	<u>02D</u> .0521, Cont	rol of Visible Emissions. For the purposes of this Rule, the visible emissions reading for abrasive
18	blasting perform	ed outside a building shall be taken at a spot approximately one meter above the point of abrasive
19	blasting with a v	iewing distance of approximately five meters.
20	(c) Except as p	rovided 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	n 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 of	r operator of any abrasive blasting operation conducted in accordance with Subparagraphs (d)(1) and
31	(d)(2) of this Rul	e, 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 bein	g 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		<u>Readopted Eff. September 1, 2020.</u>
7		
8		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0542

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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, nominallyapproximately 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 n	naximum rated capacity of less than 20 bales per hour that do not have cyclones on lint cleaners and
28	battery condenser	rs as of July 1, 2002 are not be required to add:
29	(1)	the emission control devices in $\frac{Paragraph}{Paragraph}$ (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 $\frac{Paragraph}{Paragraph}$ (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 Con	ntrol Requirements. The owner or operator of each cotton ginning operation shall control particulate
34	emissions from th	ne 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

1		(B)	a devi	ce with a minimum of 95 percent efficiency.
2	(2)	low p	pressure	exhausts, except lint cleaning exhausts, by an emission control system that
3		incluc	les: <u>includ</u>	ling:
4		(A)	one or	more 1D-3D or 2D-2D cyclones to achieve 90 percent efficiency; or
5		(B)	a devi	ce with at least a 90 percent efficiency.
6	Efficiency is ba	sed on t	he remov	val of particulate matter between the cyclone's inlet and outlet; it is measured using
7	test methods in	Section	.2600 of	this Subchapter. <u>15A NCAC 02D .2600.</u>
8	(e) Raincaps. <u>E</u>	xhaust	<u>Rain Cap</u>	es. Exhausts from emission points or control devices shall not be equipped with
9	raincaps <u>exhaus</u>	t rain ca	<u>ps</u> or oth	er devices that deflect the emissions downward or outward.
10	(f) Operation an	nd Main	tenance.	To ensure that optimum control efficiency is maintained, the owner or operator shall
11	establish, based	on man	ufacturer	s recommendations, an inspection and maintenance schedule for the control devices,
12	other emission p	processi	ng equipr	nent, and monitoring devices that are-used pursuant to this Rule. The inspection and
13	maintenance sc	hedule	shall be	followed throughout the ginning season. The results of the inspections and any
14	maintenance pe	rformed	on the c	control equipment, emission processing equipment, or monitoring devices shall be
15	recorded in the	log bool	c required	l in Paragraph (k) of this Rule.
16	(g) Fugitive En	nissions	. The own	ner or operator shall minimize fugitive emissions from cotton ginning operations as
17	follows.			
18	(1)	The o	wner or c	pperator of a
19		(A)	trash s	stacker shall:
20			(i)	install, maintain, and operate a three sided enclosure with a roof whose sides are
21				high enough above the opening of the dumping device to prevent wind from
22				dispersing dust or debris; or
23			(ii)	install, maintain, and operate a device to provide wet suppression at the dump area
24				of the trash cyclone and minimize free fall distance of waste material exiting the
25				trash cyclone; or <u>cyclone</u>.
26		(B)	trash	stacker/trash composting system shall: install, maintain, and operate a wet
27			suppre	ession system providing dust suppression in the auger box assembly and at the dump
28			area o	f the trash stacker system. The owner or operator shall keep the trash material wet
29			and co	ompost it in place until the material is removed from the dump area for additional
30			compo	osting or disposal.
31	(2)	Gin Y	ard. The	owner or operator shall clean and dispose of accumulations of trash or lint on the
32		non-s	torage are	eas of the gin yard daily.
33	(3)	Traffi	c areas. T	The owner or operator shall clean paved roadways, parking, and other traffic areas at
34		the fa	cility as 1	necessary to prevent re-entrainment of dust or debris. The owner or operator shall
35		treat u	inpaved i	roadways, parking, and other traffic areas at the facility with wet or chemical dust
36		suppr	essant as	necessary to prevent dust from leaving the facility's property and shall install and

1		maintain signs limiting vehicle speed to 10 miles per hour where chemical suppression is used and
2		to 15 miles per hour where wet suppression is used.
3	(4)	Transport of Trash Material. The owner or operator shall ensure that all trucks transporting gin trash
4		material are covered and that the trucks are cleaned of over-spill material before trucks leave the
5		trash hopper dump area. The dump area shall be cleaned daily.
6	(h) Alternative	Control Measures. The owner or operator of a ginning operation may petition for use of alternative
7	control measure	es to those specified in this Rule. The petition shall include:
8	(1)	the name and address of the petitioner;
9	(2)	the location and description of the ginning operation;
10	(3)	a description of the alternative control measure;
11	(4)	a demonstration that the alternative control measure is at least as effective as measure's effectiveness
12		is equal to or greater than the control device or method specified in this Rule.
13	(i) Approval of	Alternative Control Measure. The Director shall approve the alternative control measure if he or she
14	finds that: finds	<u>.</u>
15	(1)	all the information required by Paragraph (h) of this Rule has been submitted; and
16	(2)	the alternative control measure is at least as effective asmeasure's effectiveness is equal to or greater
17		than the control device or method specified in this Rule.
18	(j) Monitoring.	
19	(1)	The owner or operator of each ginning operation shall install, maintain, and calibrate monitoring
20		devices that measure-measuring pressures, rates of flow, and other operating conditions necessary
21		to determine if the control devices are functioning function properly.
22	(2)	Before or during the first week of operation of the 2002-2003 ginning season, the owner or operator
23		of each gin shall conduct a baseline study of the entire dust collection system, without cotton being
24		processed, to ensure air flows are stay within the design range for each collection device. For 2D-
25		2D cyclones the air flow design range is 2600 to 3600 feet per minute. For 1D-3D cyclones the
26		design range is 2800 to 3600 feet per minute. For other control devices the air flow design range is
27		that found in the manufacturer's specifications. Gins constructed after the 2002-2003 ginning season
28		shall conduct the baseline study before or during the first week of operation of the first ginning
29		season following construction. During the baseline study the owner or operator shall measure or
30		determine according to the methods specified in this Paragraph and record in a logbook:
31		(A) the calculated inlet velocity for each control device; and
32		(B) the pressure drop across each control device.
33		The owner or operator shall use Method 1 and Method 2 of 40 CFR Part 60 Appendix A to measure
34		flow and static pressure and determine inlet velocity or the USDA method for determining duct
35		velocity and static pressure in Agricultural Handbook Number 503, Cotton Ginners Handbook,
36		dated December 1994. The Cotton Ginners Handbook method shall only be used where test holes
37		are located a minimum of eight and one-half pipe diameters downstream and one and one-half pipe

1		diameters upstream from elbows, valves, dampers, changes in duct diameter or any other flow
2		disturbances. Where Method 2 is used a standard pitot tube may be used in lieu of the s-pitot
3		specified in Method 2 subject to the conditions specified in Paragraph 2.1 of Method 2.
4	(3)	On a monthly basis following the baseline study, the owner or operator shall measure and record in
5		the logbook the static pressure at each port where the static pressure was measured in the baseline
6		study. Measurements shall be made using a manometer, a Magnahelic® gauge, or other device that
7		the Director has approved approves as being equivalent to a manometer. If the owner or operator
8		measures a change in static pressure of 20 percent or more from that measured in the baseline study,
9		the owner or operator shall initiate corrective action. Corrective action shall be recorded in the
10		logbook. If corrective action will take more than 48 hours to complete, the owner or operator shall
11		notify the regional supervisor of the region in which the ginning operation is located as soon as
12		possible, but by no later than the end of the day such static pressure is measured.
13	(4)	When any design changes to the dust control system are made, the owner or operator shall conduct
14		a new baseline study for that portion of the system and shall record the new values in the logbook
15		required in Paragraph (k) of this Rule. Thereafter monthly static pressure readings for that portion
16		of the system shall be compared to the new values.
17	(5)	During the ginning season, the owner or operator shall daily inspect for structural integrity of the
18		control devices and other emissions processing systems and shall ensure that the control devices and
19		emission processing systems conform to normal and proper operation of the gin. If a problem is
20		found, corrective action shall be taken and recorded in the logbook required in Paragraph (k) of this
21		Rule.
22	(6)	At the conclusion of the ginning season, the owner or operator shall conduct an inspection of the
23		facility to identify all scheduled maintenance activities and repairs needed relating to the
24		maintenance and proper operation of the air pollution control devices for the next season. Any
25		deficiencies identified through the inspection shall be corrected before beginning operation of the
26		gin for the next season.
27	(k) Recordkee	ping. The owner operator shall establish and maintain on-site a logbook documenting the following
28	items:	
29	(1)	Results of the baseline study as specified in Paragraph Subparagraph (j)(2) of this Rule;
30	(2)	Results of new baseline studies as specified in Paragraph Subparagraph (j)(4) of this Rule;
31	(3)	Results of monthly static pressure checks and any corrective action taken as specified in Paragraph
32		Subparagraph (j)(3) of this Rule;
33	(4)	Observations from daily inspections of the facility and any resulting corrective actions taken as
34		required in Paragraph Subparagraph (j)(5) of this Rule; and
35	(5)	A copy of the manufacturer's specifications for each type of control device installed.
36	The logbook sh	all be maintained on site and made available to Division representatives upon request.
37	(l) Reporting.	The owner or operator shall submit by March 1 of each year a report containing the following:

1	(1)	the name and location of the cotton gin;		
2	(2)	the number of bales of cotton produced during the previous ginning season;		
3	(3)	a maintenance and repair schedule based on inspection of the facility at the conclusion of the		
4		previous cotton ginning season required in $\frac{Paragraph Subparagraph}{Subparagraph}(j)(6)$ of this Rule; and		
5	(4)	signature of the appropriate responsible official as identified in 15A NCAC 02Q .0304(j), certifying		
6		as to the truth and accuracy of the report. <u>.0303.</u>		
7	(m) Compliance Schedule. Existing sources shall comply as specified in Paragraph (d) of this Rule. New and modified			
8	sources shall be	in compliance upon start-up.		
9	(n) Record retention. The owner or operator shall retain all records required to be kept by this Rule for three years			
10	from the date of	recording.		
11				
12	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);		
13		Eff. August 1, 2002;		
14		Amended Eff. June 1, 2008. <u>2008:</u>		
15		<u>Readopted Eff. September 1, 2020.</u>		
16				
17				

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0543

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE:</u> 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"

- 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 <u>evaluation</u>. Pursuant to 40 CFR 51.308, the evaluation shall include:
- 14 (1) the technology available, available;
- 15 (2) the cost of compliance, <u>compliance</u>;
- 16 (3) the energy and non-air quality environmental impacts of compliance, <u>compliance</u>, <u>compliance</u>;
- 17 (4) any pollution control equipment in use at source, the source;
- 18 (5) the remaining useful life of the source, source; and
- the degree of improvement in visibility that may reasonably be anticipated to result from the use of
 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 <u>under pursuant to</u> 15A NCAC 02Q.
- 24 (g) The owner or operators of a BART-eligible source required to install BART under this Rule shall submit permit
- 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-
- 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
- amendments or editions. This document, which was published in the Federal Register on February6, 1980 (45 FR

1	8210), is EPA	publication No.	450/3-80-009	b and can	be obtained	from the	e National	Service (Center for
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- 2 Environmental Publications (NSCEP) available for free through their online publication search tool at:
- 3 <u>https://www.epa.gov/nscep. The document is also available through</u> 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.

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9 History Note: Authority G.S.143-215.3(a)(1); 143-215.107(a)(5),(10);
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- 10 *Eff. September 1, 2006;*
- 11 Amended Eff. May 1, 2007.2007;
- 12 <u>Readopted Eff. September 1, 2020.</u>
- 13

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14

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02D .0544

DEADLINE FOR RECEIPT: Friday, August 14, 2020

<u>PLEASE NOTE</u>: 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")

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

2

34

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 for greenhouse gases as required by 40 CFR 51.166. [Wherever the language of the portions of 40 CFR 51.166 6 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which 7 they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this 8 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 circumstances, those exemptions and provisions of non-applicability are also hereby adopted under this Rule. 17 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) permit on the sole basis of its greenhouse gases emissions. For all other regulated new source review (NSR) pollutants, 23 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 the definition of "baseline actual emissions." "Baseline actual emissions" means the rate of emissions, in tons per year, 26 27 of a regulated NSR pollutant, as determined in accordance with Subparagraphs (1) through (3) of this Paragraph: 28 For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at (1) 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 is received by the Division for a permit required under this Rule. The Director shall allow a different 31 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

- 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;

1		(B)	The average rate shall be adjusted downward to exclude any non-compliant emissions that
2			occurred while the source was operating above any emission limitation that was legally
3			enforceable during the consecutive 24-month period;
4		(C)	For an existing emission-unit (other unit, other than an electric utility steam generating
5			unit), unit, the average rate shall be adjusted downward to exclude any emissions that
6			would have exceeded an emission limitation with which the major stationary source shall
7			currently comply. However, if the State has taken credit in an attainment demonstration or
8			maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an
9			emission limitation that is part of a maximum achievable control technology standard that
10			the Administrator proposed or promulgated under part 63 of the Code of Federal
11			Regulations, the baseline actual emissions shall be adjusted to account for such emission
12			reductions;
13		(D)	For an electric utility steam generating unit, the average rate shall be adjusted downward
14			to reflect any emissions reductions under G.S. 143-215.107D and for which cost recovery
15			is sought pursuant to G.S. 62-133.6;
16		(E)	For a regulated NSR pollutant, when a project involves multiple emissions units, only one
17			consecutive 24-month period shall be used to determine the baseline actual emissions for
18			all the emissions units being changed. A different consecutive 24-month period for each
19			regulated NSR pollutant can be used for each regulated NSR pollutant; and
20		(F)	The average rate shall not be based on any consecutive 24-month period for which there is
21			inadequate information for determining annual emissions, in tons per year, and for
22			adjusting this amount if required by Parts (B) and (C) of this Subparagraph;
23	(2)	For a r	new emissions unit, the baseline actual emissions for purposes of determining the emissions
24		increas	se that will result from the initial construction and operation of such unit shall equal zero; and
25		thereat	fter, for all other purposes, shall equal the unit's potential to emit; and
26	(3)	For a p	plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall
27		be cal	culated for existing emissions units in accordance with the procedures contained in
28		Subpa	ragraph (1) of this Paragraph and for a new emissions unit in accordance with the procedures
29		contain	ned in Subparagraph (2) of this Paragraph.
30	(c) In the defin	nition of "	'net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be
31	seven years.		
32	(d) In the defi	nition of	"subject to regulation", a greenhouse gas's global warming potential is the global warming
33	potential publi	shed at T	able A-1 of Subpart A of 40 CFR Part 98 and shall include subsequent amendments and
34	editions.		
35	(e) The limitat	ion specif	fied in 40 CFR 51.166(b)(15)(ii) shall not apply.
36	(f) Major stat	ionary so	burces and major modifications shall comply with the requirements contained in 40 CFR
37	51.166(i) and (a)(7) and	by extension in 40 CFR 51.166(j) through $\frac{(\mathbf{o})(\mathbf{r})}{(\mathbf{r})}$ and (w). The transition provisions allowed

110

- 1 by 40 CFR 52.21 (i)(11)(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".
- (k) Permits may be issued based on innovative control technology as set forth in 40 CFR 51.166(s)(1) if the 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 allowance set forth in 40 CFR 51.166(s)(4).
- 25 (1) 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;

1 the calculated projected actual emissions and an explanation of how the projected actual emissions (3) 2 were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c); 3 (4) the calculated baseline actual emissions in Subparagraph (b)(1) of this Rule an explanation of how 4 the baseline actual emissions were calculated; and 5 (5) any netting calculations, if applicable. 6 If upon reviewing the notification, [application,] the Director finds that the project will cause require a prevention of 7 significant deterioration evaluation, then the Director shall notify the owner or operator of his or her findings. findings 8 and the The owner or operator shall not make the modification until a prevention of significant deterioration permit 9 has been the owner or operator has received a permit issued pursuant to this Rule. If a permit revision is not required 10 pursuant to this Rule, the If the Director finds that the project will not require a prevention of significant deterioration 11 evaluation and the projected actual emissions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus the 12 baseline actual emissions, is 50 percent or greater of the amount that is a significant emissions increase, without 13 reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant, then, the Director 14 will require a permit application to include a permit condition for the monitoring, recordkeeping, and reporting of the 15 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 16 17 operations after the change if the project involves increasing the emissions unit's design capacity or its potential to 18 emit for the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption 19 of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after 20 the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 21 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under 22 this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii). 23 The monitoring, recordkeeping, and reporting requirements in this Paragraph shall not apply if the projected actual 24 emissions, calculated pursuant to 40 CFR 51.166(b)(40)(ii)(a) and (b), minus the baseline actual emissions, is less 25 than 50 percent of the amount that is a significant emissions increase, without reference to the amount that is a 26 significant net emissions increase, for the regulated NSR pollutant. 27 (o) The references to Portions of the regulations in the Code of Federal Regulations (CFR) that are referred to in this 28 Rule are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated 29 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 30 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 31 amendment set forth on 76 FR 43507 at http://www.gpo.gov/fdsys/pkg/FR 2011 07 20/pdf/2011 17256.pdf at 32 33 https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol2/pdf/CFR-2019-title40-vol2-sec51-166.pdf and does 34 not include any subsequent amendments or editions to the referenced material. editions. Federal regulations 35 referenced in 40 CFR 51.166 shall include subsequent amendments and editions. This Rule is applicable in accordance 36 with 40 CFR 51.166(b)(48) and (b)(49)(iv) and (v).

37

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.<u>2015;</u>
10		Readopted Eff. <u>September 1, 2020.</u>
11		
12		

15A NCAC 02D	.0615 is repealed through readoption as published in 34:16 NCR 1460 as follows:
15A NCAC 02D	.0615 DELEGATION
History Note:	Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4);
	Eff. April 1, 1999. <u>1999;</u>
	<u>Repealed Eff. September 1, 2020.</u>
	15A NCAC 02D