1	15A NCAC 02	D.1201 is proposed for readoption with substantive changes as follows:	
2	SECTI	NI 1200 CONTROL OF EMISSIONS FROM INCINEDATORS AND SOLID WASTE	
4	BECIN	COMPLETORS	
4		COMBUSIONS	Commented [ZV1]: Amendments to this rule reflect changes to the incinerator rules that are required by the
5	15A NCAC 02	D 1201 DUDDASE AND SCADE	federal requirements defined in 40 CFR Part 60; Part 61: P
7	(a) This Section	n sets forth rules for the control of the emissions of air pollutants from incinerators	05 and 1 at 505.
8	(a) This been	s in this Section apply to all types of incinerators as defined by $15A \times CAC (D2D - 0.0101/21)$ including	
9	incinerators wi	the heat recovery and industrial incinerators apply to:	
10	(1)	all types of incinerators as defined by $154 \text{ NCAC} (22D, 0101(21))$ including incinerators with heat	
11	(1)	recovery and industrial incinerators: or	
12	(2)	municinal waste combustors as defined in 40 CFR 40 CFR 60 1940	
13	$\frac{2}{(b)}$ The rule	s in this Section do not apply to:	
14	(t) <u>(t)</u> (1)	afterburners flares fume incinerators and other similar devices used to reduce the emissions of air	
15	(1)	pollutants from processes, whose emissions shall be regulated as process emissions:	
16	(2)	any boilers or industrial furnaces that burn waste as a fuel, except hazardous waste as defined in 40	
17		CFR 260.10; municipal solid waste as defined in 40 CFR 60.51b and solid waste as defined in 40	
18		CFR 60.241.2	
19	(3)	air curtain burners, which shall comply with Section .1900 of this Subchapter; or	
20	(4)	incinerators used to dispose of dead animals or poultry, that meet all the following requirements:	
21		(A) the incinerator is located on a farm and is operated by the farm owner or by the farm	
22		operator;	
23		(B) the incinerator is used solely to dispose of animals or poultry originating on the farm where	
24		the incinerator is located;	
25		(C) the incinerator is not charged at a rate that exceeds its design capacity; and	
26		(D) the incinerator complies with Rule <u>15A NCAC 02D</u> .0521 (visible emissions) and .1806	
27		(odorous emissions) of this Subchapter. (visible emissions).	Commented [ZV2]: 15A NCAC 02D .1806 exempts all
28	(d) If an incin	erator is more than one type of incinerator, then the following order shall be used to determine the	on-farm operations from the odor rule.
29	standards and r	equirements to apply:	Commented [ZV3]: The removal of Paragraph (d) is pending due to parallel amendments in the readoption
30	(1)	hazardous waste incinerators;	process.
31	(2)	- sewage sludge incinerators;	
32	(3)		
33	(4)	municipal waste combustors;	
34	(5)	commercial and industrial solid waste incinerators;	
35	(6)	hospital, medical, or infectious waste incinerators (HMIWIs);	
36	(7)	other solid waste incinerators;	
37	(8)	conical incinerators;	

V1]: Amendments to this rule reflect inerator rules that are required by the nts defined in 40 CFR Part 60; Part 61: Part

1	(9)	-crematory incinerators; and	
2	(10)	-other incinerators.	
3	(e) In addition t	o any permit that may be required under 15A NCAC 02Q, Air Quality Permits Procedures, a permit	
4	may be required	by the Division of Waste Management as determined by the permitting rules enforced by the Division	
5	of Waste Manag	ement.	
6	(f)(c) Reference	d document SW-846 "Test Methods for Evaluating Solid Waste," Third Edition, cited by rules in this	
7	Section is hereby	y incorporated by reference and does not include subsequent amendments or editions. A copy of this	
8	document is avai	ilable for inspection at the North Carolina Department of Environment and Natural Resources Library	
9	located at 512 N	orth Salisbury Street, Raleigh, NC 27603. Copies of this document may be obtained through the US	
10	Government Pri	nting Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, or by	
11	calling (202) 783	3 3238. The cost of this document is three hundred nineteen dollars (\$319.00).	Comm
12			is obsc
13	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(1), (3), (4), (5);	
14		Eff. October 1, 1991;	
15		Amended Eff. July 1, 2000; July 1, 1999; July 1, 1998; April 1, 1995; December 1, 1993;	
16		Temporary Amendment Eff. March 1, 2002;	
17		Amended Eff. July 1, 2007; December 1, 2005; August 1, 2002.	
18		Readopted Eff.	
19			

20

Commented [ZV4]: This information is no longer valid. It s obsolete.

1	15A NCAC 02D	.1202 is proposed for readoption with substantive changes as follows:	
2			
3	15A NCAC 02D	.1202 DEFINITIONS	Commented [ZV5]: Amendments to this rule reflect
4	(a) For the purp	oses of this Section, the definitions at G.S. 143-212 and 143-213 and 15A NCAC 02D .0101 shall	changes to Section .1200. They also make language in Paragraph (a) less confusing
5	apply, and in add	lition, apply in addition to the following definitions shall apply. If a term in this Rule is also defined	
6	at 15A NCAC 02	2D .0101, then the definition in this Rule controls.definitions:	
7	(1)	"Class I municipal waste combustor" means a small municipal waste combustor located at a	
8		municipal waste combustion plant with an aggregate plant combustion capacity greater than 250	
9		tons per day of municipal solid waste.	
10	(2)	"Commercial and industrial solid waste incinerator" (CISWI) or "commercial and industrial solid	Commented [ZV6]: Modification is consistent with the
11		waste incineration unit" means any-combustion device, except air pollution control devices, that	Emission Guidelines for the CISWI units.
12		combusts commercial and industrial waste.distinct operating unit of any commercial or industrial	
13		facility defined in 40 CFR Part 60, Subpart DDDD.	
14	(3)	"Commercial and industrial waste" means solid waste combusted in an enclosed device using	
15		controlled flame combustion without energy recovery that is a distinct operating unit of any	
16		commercial or industrial facility (including field-erected, modular, and custom built incineration	
17		units operating with starved or excess air).	
18	(4)	"Co-fired combustor (as defined in 40 CFR Part 60, Subpart Ec)" means a unit combusting hospital,	
19		medical, or infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject	
20		to an enforceable requirement limiting the unit to combusting a fuel feed stream, 10 percent or less	
21		of the weight of which is comprised, in aggregate, of hospital, medical, or infectious waste as	
22		measured on a calendar quarter basis. For the purposes of this definition, pathological waste,	
23		chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when	
24		calculating the percentage of hospital, medical, or infectious waste combusted.	
25	(5)	"Crematory incinerator" means any incinerator located at a crematory regulated under 21 NCAC	
26		34C that is used solely for the cremation of human remains.	
27	(6)	"Construction and demolition waste" means wood, paper, and other combustible waste, except for	
28		hazardous waste and asphaltic material, resulting from construction and demolition projects.	
29	(7)	"Dioxin and Furan" means tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.	
30	(8)	"Hazardous waste incinerator" means an incinerator regulated under 15A NCAC 13A .0101 through	Commented [ZV7]: DAQ has not identified any applicable
31		.0119, 40 CFR 264.340 to 264.351, Subpart O, or 265.340 to 265.352, Subpart O.	sources.
32	(9)<u>(8)</u>	"Hospital, medical and infectious waste incinerator (HMIWI)" means any device that combusts any	
33		amount of hospital, medical and infectious waste.	
34	(10)<u>(9)</u>	"Large HMIWI" means:	
35		(A) a HMIWI whose maximum design waste burning capacity is more than 500 pounds per	
36		hour;	

1	(B) a continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds
2	per hour; or
3	(C) a batch HMIWI whose maximum charge rate is more than 4,000 pounds per day.
4	(11)(10) "Hospital waste" means discards generated at a hospital, except unused items returned to the
5	manufacturer. The definition of hospital waste does not include human corpses, remains, and
6	anatomical parts that are intended for interment or cremation.
7	(12)(11) "Institutional facility" means a land-based facility owned or operated by an organization having a
8	governmental, educational, civic, or religious purpose, such as a school, hospital, prison, military
9	installation, church, or other similar establishment or facility.
10	(13)(12) "Institutional waste" means solid waste that is combusted at any institutional facility using
11	controlled flame combustion in an enclosed, distinct operating unit:
12	(A) whose design does not provide for energy recovery and
13	(B) which is operated without energy recovery or operated with only waste heat recovery.
14	Institutional waste also means solid waste combusted on site in an air curtain incinerator that is a
15	distinct operating unit of any institutional facility.
16	(14)(13) "Institutional waste incineration unit" means any combustion unit that combusts institutional waste
17	and is a distinct operating unit of the institutional facility that generated the waste.
18	(15)(14) "Large municipal waste combustor" means each municipal waste combustor unit with a combustion
19	capacity greater than 250 tons per day of municipal solid waste-waste as defined in 40 CFR
20	<u>60.32b(a).</u>
21	(16)(15) "Medical and Infectious Waste" means any waste generated in the diagnosis, treatment, or
22	immunization of human beings or animals, in research pertaining thereto, or in the production or
23	testing of biologicals that is listed in Part (A)(i) through (A)(vii) of this Subparagraph.
24	(A) The definition of medical and infectious waste includes:
25	(i) cultures and stocks of infectious agents and associated biologicals, including:
26	(I) cultures from medical and pathological laboratories;
27	(II) cultures and stocks of infectious agents from research and industrial
28	laboratories;
29	(III) wastes from the production of biologicals;
30	(IV) discarded live and attenuated vaccines; and
31	(V) culture dishes and devices used to transfer, inoculate, and mix cultures;
32	(ii) human pathological waste, including tissues, organs, and body parts and body
33	fluids that are removed during surgery or autopsy, or other medical procedures,
34	and specimens of body fluids and their containers;
35	(iii) human blood and blood products including:
36	(I) liquid waste human blood;
37	(II) products of blood;

1			(III)	items saturated or dripping with human blood; or
2			(IV)	items that were saturated or dripping with human blood that are now
3				caked with dried human blood including serum, plasma, and other blood
4				components, and their containers, which were used or intended for use
5				in either patient care, testing and laboratory analysis or the development
6				of pharmaceuticals. Intravenous bags are also included in this category;
7		(iv)	sharps t	hat have been used in animal or human patient care or treatment or in
8			medical	, research, or industrial laboratories, including hypodermic needles,
9			syringes	s (with or without the attached needle), pasteur pipettes, scalpel blades,
10			blood v	ials, needles with attached tubing, and culture dishes (regardless of
11			presence	e of infectious agents). Also included are other types of broken or
12			unbroke	n glassware that were in contact with infectious agents, such as used slides
13			and cov	er slips;
14		(v)	animal	waste including contaminated animal carcasses, body parts, and bedding
15			of anim	als that were known to have been exposed to infectious agents during
16			research	(including research in veterinary hospitals), production of biologicals or
17			testing of	of pharmaceuticals;
18		(vi)	isolation	n wastes including biological waste and discarded materials contaminated
19			with blo	ood, excretions, exudates, or secretions from humans who are isolated to
20			protect	others from highly communicable diseases, or isolated animals known to
21			be infec	ted with highly communicable diseases; and
22		(vii)	unused	sharps including the following unused or discarded sharps;
23			(I)	hypodermic needles;
24			(II)	suture needles;
25			(III)	syringes; and
26			(IV)	scalpel blades.
27	(B)	The def	inition of	medical and infectious waste does not include:
28		(i)	hazardo	us waste identified or listed under 40 CFR Part 261;
29		(ii)	househo	old waste, as defined in 40 CFR 261.4(b)(1);
30		(iii)	ash from	n incineration of medical and infectious waste, once the incineration
31			process	has been completed;
32		(iv)	human o	corpses, remains, and anatomical parts that are intended for interment or
33			crematio	on; and
34		(v)	domesti	c sewage materials identified in 40 CFR 261.4(a)(1).
35	(17)(16) "Mediu	m HMIW	'I" means	
36	(A)	a HMIV	VI whose	e maximum design waste burning capacity is more than 200 pounds per
37		hour bu	t less that	n or equal to 500 pounds per hour;

1	(B)	a continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds	
2		per hour but less than or equal to 500 pounds per hour; or	
3	(C)	a batch HMIWI whose maximum charge rate is more than 1,600 pounds per day but less	
4		than or equal to 4,000 pounds per day.	
5	(18)(17) "Mun	icipal waste combustor (MWC) or municipal waste combustor unit" means a municipal waste	
6	combi	ustor as defined in 40 CFR 60.51b.	
7	(19)(18) "Mun	icipal waste combustor plant" means one or more designated units at the same location.	
8	(20)(19) "Mun	icipal waste combustor unit capacity" means the maximum charging rate of a municipal waste	
9	combi	ustor unit expressed in tons per day of municipal solid waste combusted, calculated according	
10	to the	procedures under 40 CFR 60.58b(j). Section 60.58b(j) includes procedures for determining	
11	munic	ipal waste combustor unit capacity for continuous and batch feed municipal waste	
12	combi	ustors.	
13	(21)(20) "Mun	icipal-type solid waste (MSW) or Municipal Solid Waste" means municipal-type solid waste	
14	define	ed in 40 CFR 60.51b.	
15	(22)<u>(</u>21) "POT	W" means a publicly owned treatment works as defined in 40 CFR 501.2.	
16	(23) "Othe	r solid waste incineration unit" or "OSWI unit" means either a very small municipal waste	Com
17	comb	ustion unit or an institutional waste incineration unit, as defined in this Paragraph.	sourc
18	(24)<u>(22)</u> "Same	e Location" means the same or contiguous property that is under common ownership or control	
19	includ	ling properties that are separated only by a street, road, highway, or other public right-of-way.	
20	Comn	non ownership or control includes properties that are owned, leased, or operated by the same	
21	entity	, parent entity, subsidiary, subdivision, or any combination thereof including any municipality	
22	or oth	er governmental unit, or any quasi-governmental authority (e.g., a public utility district or	
23	region	nal waste disposal authority).	
24	(25)<u>(</u>23) "Sewa	age sludge incinerator" means any incinerator regulated under that falls under the definition in	
25	40 CF	R Part 503, Subpart E. <u>60.5250.</u>	
26	(26) "Slud	ge incinerator" means any incinerator regulated under Rule .1110 of this Subchapter but not	Com
27	under	40 CFR Part 503, Subpart E.	regula
28	(27)<u>(</u>24) "Smal	ll HMIWI" means:	
29	(A)	a HMIWI whose maximum design waste burning capacity is less than or equal to 200	
30		pounds per hour;	
31	(B)	a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to	
32		200 pounds per hour; or	
33	(C)	a batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.	
34	(28) (25) "Smal	Il municipal waste combustor" means each municipal waste combustor unit with a combustion	
35	capac	ity that is greater than 11 tons per day but not more than 250 tons per day of municipal solid	
36	waste		

Commented [ZV8]: DAQ has not identified any applicable sources.

Commented [CM9]: Sludge incinerators are now regulated as CISWI units.

1	(29) (26	6) "Small remote HMIWI" means any small HMIWI which is located more than 50 miles from the	
2		boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and which burns less than	
3		2,000 pounds per week of hospital, medical and infectious waste. The 2,000 pound per week	
4		limitation does not apply during performance tests.	
5	(27)	"Solid waste" means the term solid waste as defined in 40 CFR 241.2.	Cc
6	(30)<u>(28</u>	8) "Standard Metropolitan Statistical Area (SMSA)" means any area listed in Office of Management	En
7		and Budget (OMB) Bulletin No. 93-17, entitled "Revised Statistical Definitions for Metropolitan	
8		Areas" dated July 30, 1993. The referenced document cited by this Item is hereby incorporated by	
9		reference and does not include subsequent amendments or editions. A copy of this document may	
10		be obtained from the Division of Air Quality, P.O. Box 29580, Raleigh, North Carolina 27626-0580	
11		at a cost of 10 cents ($\$0.10$) per page or may be obtained through the internet at	
12		http://www.census.gov/population/estimates/metro-city/93mfips.txt .	
13	(31)<u>(29</u>	2) "Very small municipal waste combustion unit" means any municipal waste combustion unit that has	
14		the capacity to combust less than 35 tons per day of municipal solid waste or refuse-derived fuel, as	
15		determined by the calculations in 40 CFR 60.3076.	
16	(b) Whenever	reference is made to the Code of Federal Regulations in this Section, the definition in the Code of	
17	Federal Regulat	ions shall apply unless specifically stated otherwise in a particular rule.	
18			
19	History Note:	Authority G.S. 143-213; 143-215.3(a)(1);	
20		Eff. October 1, 1991;	
21		Amended Eff. July 1, 2000; July 1, 1999; July 1, 1998; July 1, 1996; April 1, 1995; December 1,	
22		1993;	
23		Temporary Amendment Eff. March 1, 2002;	
24		Amended Eff. July 1, 2007; August 1, 2002.	
25		Readopted Eff.	
26			
27			

Commented [ZV10]: Definition consistent with the Emission Guidelines for CISWI units is added.

1	15A NCAC 02D .1203 is proposed for repeal as follows:
2	
3	15A NCAC 02D .1203 HAZARDOUS WASTE INCINERATORS
4	(a) Applicability. This Rule applies to hazardous waste incinerators.
5	(b) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 260.10, 270.2, and 40 CFR 63.1201
6	shall apply in addition to the definitions in Rule .1202 of this Section.
7	(c) Emission Standards.
8	(1) The emission standards in this Paragraph apply to all incinerators subject to this Rule except where
9	Rule .0524, .1110, or .1111 of this Subchapter applies. However, when Subparagraphs (8) or (9) of
10	this Paragraph or Paragraph (h) of this Rule and Rules .0524, .1110, or .1111 of this Subchapter
11	regulate the same pollutant, the more restrictive provision for each pollutant shall apply,
12	notwithstanding provisions of Rules .0524, .1110, or .1111 of this Subchapter to the contrary.
13	(2) Particulate Matter. Any incinerator subject to this Rule shall meet the particulate matter emission
14	requirements of 40 CFR 264.343(c).
15	(3) Visible Emissions. Any incinerator subject to this Rule shall comply with Rule .0521 of this
16	Subchapter for the control of visible emissions.
17	(4) Sulfur Dioxide. Any incinerator subject to this Rule shall comply with Rule .0516 of this Subchapter
18	for the control of sulfur dioxide emissions.
19	(5) Odorous Emissions. Any incinerator subject to this Rule shall comply with Rule .1806 of this
20	Subchapter for the control of odorous emissions.
21	(6) Hydrogen Chloride. Any incinerator subject to this Rule shall meet the hydrogen chloride emission
22	requirements of 40 CFR 264.343(b). Compliance with this Subparagraph shall be determined by
23	averaging emissions over a one hour period.
24	(7) Mercury Emissions. The emissions of mercury and mercury compounds from the stack or chimney
25	of any incinerator subject to this Rule shall not exceed 0.032 pounds per hour. Compliance with this
26	Subparagraph shall be determined by averaging emissions over a one-hour period.
27	(8) Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate
28	compliance with Section .1100 of this Subchapter according to 15A NCAC 02Q .0700 for the
29	control of toxic emissions.
30	(9) Ambient Standards.
31	(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the
32	following ambient air quality standards, which are an annual average, in milligrams per
33	cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure
34	and which are increments above background concentrations, shall apply aggregately to all
35	incinerators at a facility subject to this Rule:
36	(i) arsenic and its compounds 2.3x10 ⁻⁷
37	(ii) beryllium and its compounds 4.1x10 ⁻⁶

Commented [ZV11]: DAQ has not identified any existing sources subject to this rule. Therefore, we are seeking Stakeholder comment on the following options: (1) the retention and modification of the existing rule to incorporate the current federal emission guidelines, or (2) the repeal of the rule.

1		(iii) cadmium and its compounds 5.5x10 ⁻⁶	
2		(iv) chromium (VI) and its compounds 8.3x10 ⁻⁸	
3	(B)	- The owner or operator of a facility with incinerators subject to this Rule shall demon	strate
4		compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of	f-this
5		Subparagraph by following the procedures set out in Rule .1106 of this Subcha	apter.
6		Modeling demonstrations shall comply with the requirements of Rule .0533 of	f this
7		Subchapter.	
8	(C)	- The emission rates computed or used under Part (B) of this Subparagraph that demon	strate
9		compliance with the ambient standards under Part (A) of this Subparagraph sha	ill be
10		specified as a permit condition for the facility with incinerators subject to this Rule as	their
11		allowable emission limits unless Rules .0524, .1110, or .1111 of this Subchapter rec	juires
12		more restrictive rates.	
13	(d) Operational Standard	l S.	
14	(1) The op	erational standards in this Rule do not apply to any incinerator subject to this Rule	when
15	applica	ble operational standards in Rules .0524, .1110, or .1111 of this Subchapter apply.	
16	(2) Hazard	ous waste incinerators shall comply with 15A NCAC 13A .0101 through .0119, whic	h are
17	admini	stered and enforced by the Division of Waste Management.	
18	(e) Test Methods and Pre	ocedures.	
19	(1) The tes	t methods and procedures described in Section .2600 of this Subchapter and in 40 CFR	<mark>≀ Part</mark>
20	60 Apj	pendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance	with
21	emissio	on rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for me	etals.
22	Howev	er, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060	shall
23	be used	l for the analysis.	
24	(2) The Di	rector may require the owner or operator to test his incinerator to demonstrate compl	liance
25	with th	e emission standards listed in Paragraph (c) of this Rule.	
26	(f) Monitoring, Recordk	zeping, and Reporting.	
27	(1) The ow	ner or operator of an incinerator subject to the requirements of this Rule shall comply	with
28	the mo	nitoring, recordkeeping, and reporting requirements in Section .0600 of this Subchapte	er, 40
29	CFR 2	70.31, and 40 CFR 264.347.	
30	(2) The ow	mer or operator of an incinerator subject to the requirements of this Rule shall maintain	n and
31	operate	a continuous temperature monitoring and recording device for the primary chamber	: and,
32	where	there is a secondary chamber, for the secondary chamber. The owner or operator of	of an
33	inciner	ator that has installed air pollution abatement equipment to reduce emissions of hydr	rogen
34	chlorid	e shall install, operate, and maintain continuous monitoring equipment to measure pl	H for
35	wet sci	ubber systems and rate of alkaline injection for dry scrubber systems. The Director	shall
36	require	the owner or operator of an incinerator with a permitted charge rate of 750 pounds per	hour
37	or more	e to install, operate, and maintain continuous monitors for oxygen or for carbon monoxi	i de or

1		both as necessary to determine proper operation of the incinerator. The Director may require the			
2	owner or operator of an incinerator with a permitted charge rate of less than 750 pounds per hour to				
3		install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to			
4		determine proper operation of the incinerator.			
5	(g) Excess Emi	ssions and Start-up and Shut-down. All incinerators subject to this Rule shall comply with Rule .0535,			
6	Excess Emissions Reporting and Malfunctions, of this Subchapter.				
7	(h) Incinerators subject to this Rule shall comply with the emission limits, operational specifications, and other				
8	restrictions or c	onditions determined by the Division of Waste Management under 40 CFR 270.32, establishing			
9	Resource Conservation and Recovery Act permit conditions, as necessary to protect human health and the				
10	environment.				
11					
12	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);			
13		Eff. October 1, 1991;			
14		Amended Eff. June 1, 2008; August 1, 2002; July 1, 2000; July 1, 1999; July 1, 1998; April 1, 1995.			
15		Repealed Eff;			
16					
17					

1	15A NCAC 02E	.1205 is proposed for readoption with substantive changes as follows:	
2			
3	15A NCAC 02I	0.1205 LARGE MUNICIPAL WASTE COMBUSTORS	
4	(a) Applicabilit	y. This Rule applies to large municipal waste combustors as defined in 40 CFR 60.32b(a) and Rule	Commented [ZV12]: The goal of all changes is to ensu
5	.1202 .1201 of th	is Section. Section for which construction was commenced on or before September 20, 1994.	for beryllium.
6	(b) Definitions.	For the purpose of this Rule, the definitions contained in 40 CFR 60.31b (except administrator means	
7	the Director of the	he Division of Air Quality) apply in addition to the definitions in Rule .1202 of this Section.	
8	(c) The provision	as of this Rule apply to any combustor subject to this Rule. However, when the provisions of this Rule	
9	and provisions of	f 15A NCAC 02D .0524, .1110, or .1111 or provisions of 40 CFR Part 60, Subpart Cb; 40 CFR Part	
10	<u>61, Subpart C, r</u>	eferenced in this Rule, regulate the same pollutant, the provisions of the more restrictive standards	
11	established in Pa	aragraphs (e) and (f) of this Rule shall apply. Notwithstanding provisions of 15A NCAC 02D .0524,	
12	<u>.1110, or .1111</u>	or provisions 40 CFR Part 61, Subpart C; 40 CFR Part 61, Subpart E; or 40 CFR Part 503, Subpart E	
13	to the contrary.		Commented [NB13]: Corrected in the new version.
14	(d) Exemptions	Any large municipal waste combustor is not subject to:	
15	(1)	this rule if the owner or operator meets the requirements listed in 40 CFR 60.32b(b) through (j), (l)	
16		and (m), and;	
17	(2)	40 CFR Part 60, Subpart E.	
18	(c)(e) Emission	Standards.Limits.	Commented [ZV14]: Make it consistent with the Emiss
19	(1)	The emission standards in this Paragraph apply to any municipal waste combustor subject to the	Guidelines.
20		requirements of this Rule except where Rule .0524, .1110, or .1111 of this Subchapter applies.	
21		However, when Subparagraphs (13) or (14) of this Paragraph and Rule .0524, .1110, or .1111 of	
22		this Subchapter regulate the same pollutant, the more restrictive provision for each pollutant apply,	
23		notwithstanding provisions of Rules .0524, .1110, or .1111 of this Subchapter to the contrary.	
24	(2)(1)	Particulate Matter Emissions of particulate matter from each-any municipal waste-combustor	
25		subject to this rule shall not exceed 25 milligrams per dry standard cubic meter corrected to seven	
26		percent oxygen.oxygen as defined in 40 CFR 60.33b(a)(1)(i).	
27	(3)<u>(2)</u>	Visible Emissions. The emission limit for opacity from any municipal waste combustor subject to	
28		this Rule shall not exceed 10 percent (6 minute average).(6-minute average) as defined in 40 CFR	
29		<u>60.33b(a)(1)(iii).</u>	
30	<u>(4)(3)</u>	Sulfur Dioxide. Emissions of sulfur dioxide from each municipal waste combustor shall be reduced	
31		by at least 75 percent by weight or volume or to no more than 29 parts per million by volume,	
32		whichever is less stringent. Percent reduction shall be determined from continuous emissions	
33		monitoring data and according to Reference Method 19, Section 12.5.4 of 40 CFR Part 60 Appendix	
34		A-7. Compliance with either standard is based on a 24 hour daily block geometric average of	
35		concentration data corrected to seven percent oxygen (dry basis). Sulfur dioxide emissions from any	
36		combustor subject to this Rule shall not exceed 31 parts per million by volume or 25 percent of the	
37		potential sulfur dioxide emission concentration (75-percent reduction by weight or volume),	

1		corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission
2		limit is based on a 24-hour daily geometric mean as defined in 40 CFR 60.33b(b)(1)(i).
3		
4	- <u>(5)(4)</u>	Nitrogen Oxide. Emissions of nitrogen oxides from each municipal waste combustor shall not
5		exceed the emission limits in Table 1 to Subpart Cb of Part 60 "Nitrogen Oxide Guidelines for
6		Designated Facilities." Nitrogen oxide emissions averaging is allowed as specified in 40 CFR
7		60.33b(d)(1)(i) through (d)(1)(v). If nitrogen oxide emissions averaging is used, the emissions shall
8		not exceed Table 2 to Subpart Cb of Part 60 "Nitrogen Oxides Limits for Existing Designated
9		Facilities Included in an Emission Averaging Plan at a Municipal Waste Combustor Plant."
10		Emissions of nitrogen oxides from any:
11		(A) non-fluidized combustor subject to this Rule shall not exceed the limits in Table 1 of 40
12		CFR Part 60, Subpart Cb. Nitrogen oxide emissions averaging may be elected to implement
13		as specified in 40 CFR 60.33b(d)(1)(i) through (d)(1)(v) with exceptions specified in 40
14		CFR 60.33b(d)(1)(i)(A) and (d)(1)(i)(B). If nitrogen oxide emissions averaging plan is
15		used, compliance with the applicable limits specified in Table 2 of 40 CFR Part 60, Subpart
16		Cb shall be demonstrated using the averaging procedure specified in 40 CFR
17		<u>60.33b(d)(1)(iv).</u>
18		(B) fluidized combustor subject to this Rule shall not exceed 180 parts per million by volume,
19		corrected to 7 percent oxygen. Nitrogen oxide emissions averaging may be elected to
20		implement as specified in 40 CFR 60.33b(d)(1)(i) through (d)(1)(v) with exceptions
21		specified in 40 CFR 60.33b(d)(1)(i)(A) and (d)(1)(i)(B). If nitrogen oxide emissions
22		averaging plan is used, the emission limit for nitrogen oxides from any fluidized combustor
23		subject to this Rule shall not exceed 165 parts per million by volume, corrected to 7 percent
24		oxygen.
25	(6) (5)	Odorous Emissions. Each municipal waste combustor shall comply with Rule .1806 of this
26		Subchapter for the control of odorous emissions. Emissions of beryllium from any combustor
27		subject to this Rule shall meet the requirements established in 40 CFR 61.32(a) through (c) as
28		referenced in 15A NCAC 02D .1110 (a), (d), and (e).
29	-(7)<u>(6)</u>	Hydrogen Chloride. Emissions of hydrogen chloride from each municipal waste combustor shall
30		be reduced by at least 95 percent (simultaneously at the inlet and outlet data sets with a minimum
31		of three valid test periods, the length of each test period shall be a minimum of one-hour); or shall
32		not exceed, as determined by Reference Method 26 or 26A of 40 CFR Part 60 Appendix A-8, more
33		than 29 parts per million volume, whichever is less stringent. Compliance with this Subparagraph
34		shall be determined by averaging emissions over three 1 hour test runs, with paired data sets for
35		percent reduction and correction to seven percent oxygen (dry basis). Hydrogen chloride emissions
36		from any combustor subject to this Rule shall not exceed 31 parts per million by volume or 5 percent
37		of the potential hydrogen chloride emission concentration (95-percent reduction by weight or

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1		volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent as defined in 40 CFR
2		60.33b(b)(2)(i).
3		
4	(8)<u>(7)</u>	Mercury Emissions. Emissions of mercury from each municipal waste combustor shall be reduced
5		by at least 85 percent by weight of potential mercury emissions (simultaneously at the inlet and
6		outlet data sets with a minimum of three valid test periods, the length of each test period shall be a
7		minimum of one hour); or shall not exceed, as determined by Reference Method 29 of 40 CFR Part
8		60 Appendix A-8 or ASTM D6784-02 (Ontario Hydro method), more than 50 micrograms per dry
9		standard cubic meter, whichever is less stringent. Compliance with this Subparagraph shall be
10		determined by averaging emissions over three 1 hour test runs corrected to seven percent oxygen
11		(dry basis). Mercury emissions from any combustor subject to this Rule shall not exceed 50
12		micrograms per dry standard cubic meter or 15 percent of the potential mercury emission
13		concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less
14		stringent as defined in 40 CFR 60.33b(a)(3).
15	(9)<u>(8)</u>	Lead Emissions. Emissions of lead emissions from each municipal waste any combustor subject to
16		this Rule shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A-
17		8,400 micrograms per dry standard cubic meter and corrected to seven percent oxygen. oxygen as
18		defined in 40 CFR 60.33b(a)(4).
19	(10)<u>(9)</u>	Cadmium Emissions. Emissions of cadmium emissions from each municipal waste-any combustor
20		subject to this Rule shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60
21		Appendix A-8, exceed 35 micrograms per dry standard cubic meter and corrected to seven percent
22		oxygen. oxygen as defined in 40 CFR 60.33b(a)(1)(i).
23	(11)(10)	Dioxins and Furans. Emissions of dioxins and furans emissions from each municipal waste any
24		combustor: combustor subject to this Rule:
25		(A) that employs an electrostatic precipitator-based emission control system, shall not exceed
26		35 nanograms per dry standard cubic meter (total mass dioxins and furans). (total mass
27		dioxins and furans), corrected to 7 percent oxygen as defined in 40 CFR 60.33b(c)(1)(ii).
28		(B) that does not employ an electrostatic precipitator-based emission control system, shall not
29		exceed 30 nanograms per dry standard cubic meter (total mass dioxins and furans).
30		Compliance with this Subparagraph shall be determined by averaging emissions over three
31		test runs with a minimum of four hour duration per test run, performed in accordance with
32		Reference Method 23 of 40 CFR Part 60 Appendix A-7, and corrected to seven percent
33		oxygen. oxygen as defined in 40 CFR 60.33b(c)(1)(iii).
34	(12)<u>(11)</u>	Fugitive Ash.
35		(A) On or after the date on which the initial performance test is completed, no owner or operator
36		of a municipal waste any combustor subject to this Rule shall cause to be discharged to the
37		atmosphere visible emissions of combustion ash from an ash conveying system (including

Commented [NB17]: CFR states: update to current Emission Guideline limits.

1	conveyor transfer points) in excess of five percent of the observation period (i.e	., nine
2	minutes per three-hour block period), as determined by visible emission observation	s using
3	Reference Method 22 of 40 CFR 60 Appendix A-7, except as provided in Part (B)	of this
4	Subparagraph. Compliance with this Part shall be determined from at least three on	e-hour
5	observation periods when the facility transfers ash from the municipal waste combu	stor to
6	the area where the ash is stored or loaded into containers or trucks.	
7	(B) The emission limit specified in Part (A) of this Subparagraph covers visible em	ssions
8	discharged to the atmosphere from buildings or enclosures, not the visible em	issions
9	discharged inside of the building or enclosures, of ash conveying systems.	
10	(C) The provisions specified in Part (A) of this Subparagraph do not apply during maintenance.	enance
11	and repair of ash conveying systems.	
12	(13)(12) Toxic Emissions. Air Pollutants. The owner or operator of a municipal waste any combustor	subject
13	to this Rule shall demonstrate compliance with Section .1100 of this Subchapter according	o 15A
14	NCAC 02Q .0700.	
15	(14) Ambient Standards.	Commented [ZV18]: "Ambient Standards" removed due
16	(A) In addition to the ambient air quality standards in Section .0400 of this Subchapt	er, the to the duplication of corresponding EG limits or state air
17	following are annual average ambient air quality standards in milligrams per cubic	meter
18	at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure:	
19	(i) arsenic and its compounds 2.3x10.7	
20	(ii) beryllium and its compounds 4.1x10-6	
21	(iii) cadmium and its compounds 5.5x10-6	
22	(iv) chromium (VI) and its compounds 8.3x10-8	
23	These are increments above background concentrations and apply aggregately	to all
24	municipal waste combustors at a facility subject to this Rule.	
25	(B) The owner or operator of a facility with municipal waste combustors shall demo	nstrate
26	compliance with the ambient standards in Subparts (i) through (iv) of Part (A)	of this
27	Subparagraph by following the procedures set out in Rule .1106 of this Subc	hapter.
28	Modeling demonstrations shall comply with the good engineering practice stack	height
29	requirements of Rule .0533 of this Subchapter.	
30	(C) The emission rates computed or used under Part (B) of this Subparagraph that demo	nstrate
31	compliance with the ambient standards under Part (A) of this Subparagraph sl	all be
32	specified as a permit condition for the facility with municipal waste combustors a	s their
33	allowable emission limits unless Rule .0524, .1110, or .1111 of this Subchapter re-	equires
34	more restrictive rates.	
35	(15)(13) The emission standards of Subparagraphs (1) through $(14)(12)$ of this Paragraph apply at all	times
36	except during periods of municipal waste combustor startup, shutdown, or malfunction that	ast no
37	more than three hours.	

1	(d)(f) Operational Standards. Any combustor subject to this Rule shall meet the following operational standards:
2	(1) The operational standards in this Rule do not apply to any municipal waste combustor when
3	applicable operational standards in Rule .0524, .1110, or .1111 of this Subchapter apply.
4	(2) Each municipal waste combustor shall meet the following operational standards:
5	(A) The concentration of carbon monoxide at the municipal waste combustor outlet shall not
6	exceed the applicable emissions level contained in Table 3 to Subpart Cb of Part 60
7	"Municipal Waste Combustor Operating Guidelines."
8	(1) The concentration of carbon monoxide at the municipal waste combustor outlet shall not exceed the
9	applicable emissions level contained in Table 3 of 40 CFR Part 60, Subpart Cb;
10	(B) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste
11	combustor load determined from the highest 4 hour block arithmetic average achieved
12	during four consecutive hours in the course of the most recent dioxins and furans stack test
13	that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.
14	(2) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste
15	combustor load as defined in 40 CFR 60.51b, except:
16	(A) during the annual dioxin/furan or mercury performance test and the two weeks preceding
17	the annual dioxin/furan or mercury performance test, no combustor subject to this Rule
18	load limit is applicable if the provisions of Part (f)(2)(B) of this Rule are met.
19	(B) The combustor subject to this Rule load limit may be waived in writing by the Director for
20	the purpose of evaluating system performance, testing new technology or control
21	technologies, diagnostic testing, or related activities for the purpose of improving facility
22	performance or advancing the state-of-the-art for controlling facility emissions. The
23	municipal waste combustor unit load limit continues to apply, and remains enforceable,
24	until and unless the Director grants the waiver.
25	(C) The combustor operating temperature measured at the particulate matter control device
26	inlet shall not exceed 63 degrees F above the maximum demonstrated particulate matter
27	control device temperature from the highest 4 hour block arithmetic average measured at
28	the inlet of the particulate matter control device during four consecutive hours in the course
29	of the most recent dioxins and furans stack test that demonstrates compliance with the
30	emission limits of Paragraph (c) of this Rule.
31	(3) The combustor subject to this Rule operating temperature measured at the particulate matter control
32	device inlet shall not exceed 63 degrees F above the maximum demonstrated particulate matter
33	control device temperature as defined in § 60.51b, except:
34	(A) During the annual dioxin/furan or mercury performance test and the two weeks preceding
35	the annual dioxin/furan or mercury performance test, no particulate matter control device
36	temperature limitations are applicable if the provisions of Part (f)(2)(B) of this Rule are
37	<u>met.</u>

1		(B)	The particulate matter control device temperature limits may be waived in writing by the
2			Director for the purpose of evaluating system performance, testing new technology or
3			control technologies, diagnostic testing, or related activities for the purpose of improving
4			facility performance or advancing the state-of-the-art for controlling facility emissions. The
5			temperature limits continues to apply, and remains enforceable, until and unless the
6			Director grants the waiver.
7	(4)	During	operation of the affected facility, the carbon injection system operating parameters that are
8		the prin	nary indicators of the carbon mass feed rate (e.g., screw feeder setting) shall be averaged
9		over a	block 8-hour period, and the 8-hour block average must equal or exceed the levels
10		docume	ented during the performance tests specified in Part (f)(4)(A) and (B) of this Rule, except as
11		specifie	ed in Part (f)(4)(C) and (D) of this section.
12		(A)	An average carbon mass feed rate in pounds per hour shall be estimated during the initial
13			performance test for mercury emissions and each subsequent performance test for mercury
14			emissions.
15		<u>(B)</u>	An average carbon mass feed rate pounds per hour shall be estimated during the initial
16			performance test for dioxin/furan emissions and each subsequent performance test for
17			dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed
18			on only one affected facility at the municipal waste combustion plant, as provided in 40
19			CFR 60.58b(g)(5)(iii), the owner or operator may elect to apply the same estimated average
20			carbon mass feed rate from the tested facility for all the similarly designed and operated
21			affected facilities at the municipal waste combustion plant.
22		<u>(C)</u>	During the annual dioxin/furan or mercury performance test and the two weeks preceding
23			the annual dioxin/furan or mercury performance test, no limit is applicable for average
24			mass carbon feed rate if the provisions of paragraph (m)(2)(ii) of this section are met.
25		<u>(D)</u>	The limit for average mass carbon feed rate may be waived in accordance with permission
26			granted by the Director for the purpose of evaluating system performance, testing new
27			technology or control technologies, diagnostic testing, or related activities for the purpose
28			of improving facility performance or advancing the state-of the-art for controlling facility
29			emissions
30		(D)	The owner or operator of a municipal waste combustor with activated carbon control
31			system to control dioxins and furans or mercury emissions shall maintain an eight hour
32			block average carbon feed rate at or above the highest average level established during the
33			most recent dioxins and furans or mercury test.
34		(E)	The owner or operator of a municipal waste combustor is exempted from limits on load
35			level, temperature at the inlet of the particular matter control device, and carbon feed rate
36			during:
37			(i) the annual tests for dioxins and furans;

1	(ii) the annual mercury tests for carbon feed requirements only;	
2	(iii) the two weeks preceding the annual tests for dioxins and furans;	
3	(iv) the two weeks preceding the annual mercury tests (for carbon feed rate	
4	requirements only); and	
5	(v) any activities to improve the performance of the municipal waste combustor or its	
6	emission control including performance evaluations and diagnostic or new	
7	technology testing.	
8	The municipal waste combustor load limit continues to apply and remains enforceable until	
9	and unless the Director grants a waiver in writing.	
10	(F) The limits on load level for a municipal waste combustor are waived when the Director	
11	concludes that the emission control standards would not be exceeded based on test	
12	activities to evaluate system performance, test new technology or control technology,	
13	perform diagnostic testing, perform other activities to improve the performance; or perform	
14	other activities to advance the state of the art for emissions controls.	
15	(3) The operational standards of this Paragraph apply at all times except during periods of municipal	
16	waste combustor startup, shutdown, or malfunction that last no more than three hours, with the	
17	following exception: For the purpose of compliance with the carbon monoxide emission limits in	
18	Subparagraph (2) of this Paragraph, if a loss of boiler water level control (e.g., boiler waterwall tube	
19	failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan,	
20	combustion grate bar failure) is determined to be a malfunction according to 15A NCAC 02D .0535.	
21	the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of	
22	malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall	
23	be recorded and reported in accordance with the provisions of Paragraph (f) of this Rule.	
24	(e)(g) Test Methods and Procedures. The test methods and procedures described in Section .2600 of this Subchapter	
25	shall be used in addition to compliance and performance testing listed in Subparagraphs (1) through (14) in this	
26	Paragraph shall be used to:	
27	(1) The test methods and procedures described in Section .2600 of this Subchapter and in Parts (A)	
28	through (K) in this Subparagraph shall be used to demonstrate compliance:	
29	(A) 40 CFR 60.58b(b) for continuous emissions monitoring of oxygen or carbon monoxide at	
30	each location where carbon monoxide, sulfur dioxide, or nitrogen oxides are monitored;	
31	(1) Measure the oxygen or carbon dioxide content of the flue gas as specified in 40 CFR 58b(b)(1)	
32	through (8).	
33	(B) 40 CFR 60.58b(c) for determination of compliance with particulate and opacity emission	
34	limits. The data from the continuous opacity monitoring system shall not be used to	
35	determine compliance with the opacity limit.	
36	(2) Determine compliance with the emission limits for particulate matter and opacity under	
37	Subparagraphs (e)(1) and (2) of this Rule as specified in 40 CFR 58b(c)(1) through (11).	

1		(C) 40 CFR 60.58b(d) for determination of compliance with emission limits for cadmium, lead
2		and mercury;
3	(3)	Determine compliance with the emission limits for cadmium, lead, and mercury under
4		Subparagraphs (e)(7), (8), and (9) of this Rule as specified in 40 CFR 58b(d)(1) through (4).
5		(D) 40 CFR 60.58b(e) for determination of compliance with sulfur dioxide emission limits
6		from continuous emissions monitoring data;
7	(4)	Determine compliance with the sulfur dioxide emission limit under Subparagraph (e)(3) of this Rule
8		as specified in 40 CFR 58b(e)(1) through (14).
9		(E) 40 CFR 60.58b(f) for determination of compliance with hydrogen chloride emission limits;
10	(5)	Determine compliance with the hydrogen chloride emission limit under Subparagraph (e)(6) of this
11		Rule as specified in 40 CFR 58b(f)(1) through (8).
12		(F) 40 CFR 60.58b(g) for determination of compliance with dioxin/furan emission limits;
13	(6)	Determine compliance with the limits for dioxin/furan emissions under Subparagraph (e)(10) of this
14		Rule as specified in 40 CFR 58b(g)(1) through (9).
15		(G) 40 CFR 60.58b(h) for determination of compliance with nitrogen oxides limits from
16		continuous emission monitoring data;
17	(7)	Determine compliance with the nitrogen oxides emission limit under Subparagraph (e)(4) of this
18		Rule as specified in 40 CFR 58b(h)(1) through (12).
19		(H) 40 CFR 60.58b(i) for determination of compliance with operating requirements under
20		Paragraph (d);
21	(8)	Determine compliance with the operating requirements under Paragraph (f) of this Rule as specified
22		in 40 CFR 58b(i)(1) through (12).
23		(I) 40 CFR 60.58b(j) for determination of municipal waste combustor capacity;
24	(9)	Calculate municipal waste combustor unit capacity as defined in 40 CFR 60.51b.
25		(J) 40 CFR 60.58b(k) for determination of compliance with the fugitive ash emission limit;
26	<u>(10)</u>	Determine compliance with the fugitive ash emission limit under Subparagraph (e)(11) of this Rule
27		as specified in 40 CFR 58b(k)(1) through (4). and
28		(K) 40 CFR 60.58b(m)(1) to determine parametric monitoring for carbon injection control
29		systems.
30	<u>(11)</u>	Estimate parameters of activated carbon injection system as specified in 40 CFR 58b(m)(1) through
31		<u>(4).</u>
32	(2)<u>(12)</u>	Method 29 of 40 CFR Part 60 Appendix A-8 shall be used to determine emission rates for metals.
33		However, Method 29 shall be used only to collect sample for chromium (VI), and SW 846 Method
34		0060 shall be used for the analysis. A continuous automated sampling system may be elected to
35		install, calibrate, maintain, and operate for determining emissions discharged to the atmosphere In
36		place of periodic manual testing of mercury, cadmium, lead, or hydrogen chloride with EPA

1		Reference Method 26, 26A, 29, or as an alternative ASTM D6784-02 (as applicable) as specified
2		in 40 CFR 58b(n)(1) through (13),
3	(3)(13)	The owner or operator shall conduct initial stack tests to measure the emission levels of dioxins and
4		furans, cadmium, lead, mercury, beryllium, arsenic, chromium (VI), particulate matter, opacity,
5		hydrogen chloride, and fugitive ash. Annual stack tests for the same pollutants except beryllium,
6		arsenic, and chromium (VI) shall be conducted no less than 9 months and no more than 15 months
7		since the previous test and must complete five performance tests in each 5-year calendar period. If
8		a continuous automated sampling system is installed, calibrated, maintained, and operated for
9		mercury, cadmium, lead, or hydrogen chloride, a site-specific mercury, cadmium, lead, or hydrogen
10		chloride monitoring plan that addresses the elements and requirements in 40 CFR 60.58b(o)(1)
11		through (7) shall be developed and submitted for approval by EPA.
12	(4)<u>(14)</u>	The testing frequency for dioxin and furan may be reduced to the alternative testing schedule
13		specified in 40 CFR 60.58b(g)(5)(iii) if the owner or operator notifies the Director of the intent to
14		begin the reduced dioxin and furan performance testing schedule during the following calendar year.
15		a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter total
16		mass, corrected to 7 percent oxygen is achieved as specified in 40 CFR 60.38b(b).
17	(5) (15)	The owner or operator of an affected facility may request that compliance with the dioxin and furan
18		emission limit be determined using carbon dioxide measurements corrected to an equivalent of
19		seven percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected
20		facility shall be established as specified in 40 CFR 60.58b(b)(6). The Director will approve the
21		request after verification of the correct calculations that provides the relationship between oxygen
22		and carbon dioxide levels and of the completeness of stack test data used to establish the relationship
23		between oxygen and carbon dioxide levels. A continuous automated sampling system may be elected
24		to install, calibrate, maintain, and operate for determining emissions discharged to the atmosphere
25		in place of periodic manual testing of dioxin/furan or mercury with EPA Reference Method 23, 29,
26		or as an alternative ASTM D6784-02 (as applicable), as specified in 40 CFR 58b(p)(1) through
27		<u>(12).</u>
28	(16)	If a continuous automated sampling system is installed, calibrated, maintained, and operated for
29		dioxin/furan or mercury, a site-specific monitoring plan that meets the requirements in 40 CFR
30		60.58b(q)(1) through (7) shall be developed and submitted for approval by EPA.
31	(6)<u>(17)</u>	The Director may require the owner or operator of any municipal waste combustor subject to this
32		Rule to test his municipal waste combustor to demonstrate compliance with the emission standards
33		in Paragraph (c) (e) of this Rule.
34	(f)(h) Monitorin	g, Recordkeeping, and Reporting. The owner or operator of an affected facility subject to this Rule
35	shall:	
36	<u>(1)</u>	maintain on site for a period of at least 5 years all records of the information under Subparagraphs
37		(h)(1) as specified in 40 CFR 60.39b(a) in a manner specified in 40 CFR 60.59b(j) through (1).

1	(1) The owner or operator of a municipal waste combustor shall comply with the monitoring,
2	recordkeeping, and reporting requirements in Section .0600 of this Subchapter.
3	(2) The owner or operator of a municipal waste combustor that has installed air pollution abatement
4	equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous
5	monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry
6	scrubber systems.
7	(3) The owner or operator of a municipal waste combustor shall:
8	(A) install, calibrate, operate, and maintain, for each municipal waste combustor, continuous
9	emission monitors to determine:
10	(i) sulfur dioxide concentration;
11	(ii) nitrogen oxides concentration;
12	(iii) oxygen or carbon dioxide concentration;
13	(iv) opacity according to 40 CFR 60.58b(c); and
14	(v) carbon monoxide at the combustor outlet and record the output of the system and
15	shall follow the procedures and methods specified in 40 CFR 60.58b(i)(3);
16	(B) monitor the load level of each municipal waste combustor according to 40 CFR
17	60.58b(i)(6);
18	(C) monitor the temperature of each municipal waste combustor flue gases at the inlet of the
19	particulate matter air pollution control device according to 40 CFR 60.58b(i)(7);
20	(D) monitor carbon feed rate of each municipal waste combustor carbon delivery system and
21	total plant predicted quarterly usage if activated carbon is used to abate dioxins and furans
22	or mercury emissions according to 40 CFR 60.58b(m)(2) and (m)(3);
23	(E) maintain records of the information listed in 40 CFR 60.59b(d)(1) through (d)(15) for a
24	period of at least five years;
25	(F) following the first year of municipal combustor operation, submit an annual report
26	specified in 40 CFR 60.59b(g) for municipal waste combustors no later than February 1 of
27	each year following the calendar year in which the data were collected. Once the municipal
28	waste combustor is subject to permitting requirements under 15A NCAC 02Q .0500, Title
29	V Procedures, the owner or operator of an affected facility shall submit these reports
30	semiannually; and
31	(G) submit a semiannual report specified in 40 CFR 60.59b(h) for each municipal waste
32	combustor for any recorded pollutant or parameter that does not comply with the pollutant
33	or parameter limit specified in this Section, according to the schedule specified in 40 CFR
34	60.59b(h)(6).
35	(A) The calendar date of each record;
36	(B) The emission concentrations and parameters measured using continuous monitoring
37	systems as specified in 40 CFR 60.59b(d)(2)(i) and (ii);

1		(C)	Identification of the calendar dates when any of the average emission concentrations,
2			percent reductions, or operating parameters recorded under 40 CFR 60.59b(d)(2)(ii)(A)
3			through (F) or the opacity levels recorded under 40 CFR 60.59b(d)(2)(i)(A) of this section
4			are above the applicable limits, with reasons for such exceedances and a description of
5			corrective actions taken;
6		<u>(D)</u>	the records specified in 40 CFR 60.59b(d)(4)(i) through (v), for affected facilities that apply
7			activated carbon for mercury or dioxin/furan control;
8		<u>(E)</u>	Identification of the calendar dates and times (hours) for which valid hourly data specified
9			in 40 CFR 60.59b(d)(6)(i) through (vi) have not been obtained, or continuous automated
10			sampling systems were not operated as specified in 40 CFR 60.59b(d)(6)(vii), including
11			reasons for not obtaining the data and a description of corrective actions taken;
12		(F)	Identification of each occurrence that emissions data specified in 40 CFR 60.59b(d)(7)
13			have been excluded from the calculation of average emission concentrations or parameters,
14			and the reasons for excluding the data;
15		(G)	The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide,
16			nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as
17			required under 40 CFR Appendix F to Part 60, procedure 1 specified in 40
18			CFR60.59b(d)(8).
19		(H)	The recorded test reports and supporting calculations documenting the results of the initial
20			performance test and all annual performance tests listed in 40 CFR 60.59b(d)(9)(i) and (ii);
21		(I)	records specified in 40 CFR 60.59b(d)(10)(i) through (iii) if continuous emission
22			monitoring is elected instead of performance testing by EPA manual methods;
23		(J)	The records specified in 40 CFR 60.59b(d)(12)(i) through (iv);
24		(K)	Records showing the names of persons who have completed a review of the operating
25			manual as required by 40 CFR 60.54b(f) including the date of the initial review and
26			subsequent annual reviews as specified in 40 CFR 60.59b(d)(13)
27		(L)	identification of the calendar dates when the average carbon mass feed rates recorded for
28			affected facilities that apply activated carbon recorded under Subparagraph (h)(4) of this
29			Rule, as specified in 40 CFR 60.59b(d)(14);
30		(M)	Identification of the dates when the carbon injection system operating parameters that are
31			the primary indicators of carbon mass feed rate are below the levels estimated during the
32			performance tests with reasons for such occurrences and a description of corrective actions
33			taken, for affected facilities that apply activated carbon for mercury or dioxin/furan control
34			as specified in 40 CFR 60.59b(d)(15), and;
35	(2)	Submit	to EPA all records of the information under Subparagraphs (h)(2) of this Rule as specified
36		in 40 C	FR 60.39b(a) in a manner specified in 40 CFR 60.59b(j) through (l):
37		(A)	The information specified in 40 CFR 60.59b(f)(1) through (6) in the initial

1			performance test report;	
2		<u>(B)</u>	an annual report that includes the information specified in40 CFR 60.59(g)(1) through (5),	
3			following the first year of municipal waste combustor operation and no later than February	
4			1 of each year after that following the calendar year in which the data were collected as	
5			specified in 40 CFR 60.59b(g), and;	
6		<u>(C)</u>	Semiannual report that includes the information specified in 40 CFR 60.59b(h)(1) through	
7			(5) for any recorded pollutant or parameter that does not comply with the pollutant or	
8			parameter limit specified under Paragraphs (e) and (f) of this Rule in accordance with the	
9			schedule specified under paragraph 40 CFR 60.59b(h)(6)(i) and (ii).	
10	<u>(3)</u>	Notify	EPA if continuous monitoring system for particulate matter, cadmium, lead, mercury,	
11		hydrog	en chloride or continuous automated sampling systems for dioxin/furan or mercury emissions	
12		is elect	ed instead of conducting performance testing using EPA manual test methods as specified in	
13		<u>40 CFF</u>	<u>R 60.59b(m).</u>	
14	(4)	Additio	onal recordkeeping and reporting requirements for affected facilities with continuous:	
15		<u>(A)</u>	Cadmium, lead, mercury, or hydrogen chloride monitoring systems shall maintain the	
16			records in 40 CFR 60.59b(n)(1) through (10) and report the information in 40 CFR	
17			60.59b(n)(11) through (12), relevant to the continuous emission monitoring system in	
18			addition to complying with the requirements specified in Subparagraphs (h)(1) through (3);	
19		<u>(B)</u>	Automated sampling systems for dioxin/furan or mercury monitoring as specified in	
20			Subparagraph 9g)(15) of this Rule, shall maintain the records in 40 CFR 60.59b(o)(1)	
21			through (o)(10) and report the information in 40 CFR 60.59b(o)(11) and (o)(12) relevant	
22			to the continuous automated sampling system in addition to complying with the	
23			requirements specified in Subparagraphs (h)(1) through (3).	
24	(g) Excess Emis	sions an	d Start up and Shut down. All municipal waste combustors shall comply with Rule .0535,	
25	Excess Emission	ns Report	ting and Malfunctions, of this Subchapter.	-[
26	(i) Emission lim	nits and o	perational standards established in Paragraphs (e) and (f) of this Rule and in accordance with	
27	provisions in P	aragraph	(c) of this Rule shall apply at all times including periods of startup, shutdown, and	C
28	malfunction.			
29	(h)(j)_Operator	Certifica	tion.	
30	(1)	Each c	hief facility operator and shift supervisor shall have completed complete full certification or	
31		schedu	led a full certification exam with the American Society of Mechanical Engineers (ASME	
32		QRO-1	-1994)-(ASME QRO-1-1994) or a State certification program as specified in 40 CFR	
33		<u>60.54b</u>	(a) and (b).	
34	(2)	The re	equirement to complete full certification or schedule a full certification exam with the	
35		Americ	can Society of Mechanical Engineers (ASME QRO-1-1994) does not apply to chief All chief	
36		facility	operators, shift supervisors, and control room operators who have obtained full certification	

Commented [NB19]: EG requires compliance with emission limits and operational limits at all times including SSM periods.

EPA or State municipal waste combustor operator training course as specified in 40 CFR 60.54b 3 (3) No owner or operator of an affected facility shall allow the facility to be operated at any time un 4 one of the following persons is on duty and at the affected facility. as specified in 40 CFR 60.54b 5 <u>60.54b(c)(1):</u> 6 (A) a fully certified chief facility operator; 7 (B) a provisionally certified chief facility operator who is scheduled to take the full certifica 8 exam within six months; 9 (C) a fully certified shift supervisor; or 10 (D) a provisionally certified control room operator on site: 13 (A) A provisionally certified control room operator on site: 13 (A) A provisionally certified control room operator on site: 13 (A) A provisionally certified operator is on-site. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, one of three criteria specified in 40 CFR 60.54b(c)(2)(i) through (ii) shall be met; 18 (B) If the certified chief facility operator and certified shift supervisor are off site for more t 20 facility must record the period when the certified shift supervisor are off site for more	he
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28 that a certified chief facility operator or certified shift supervisor is on site as expedition	ure.
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29 as practicable. The notice shall be delivered within 30 days of the start date of when	he.
30 provisionally certified control room operator takes over the duties of the certified of	iof.
31 facility operator or cartified shift supervisor. A status report and corrective action sump	nev.
32 shall be submitted to the Director every four weeks following the initial patification.	
32 (B) who is newly promoted or recently transferred to a shift supervisor position or a d	ief
34 facility operator position at the municipal waste combustion unit may perform the du	es
35 of the certified chief facility operator or certified shift supervisor as spacified in 40 (
36 60 54b(c)(3)	N

1		(D) If the Director provides notice that the status report or corrective action summary is
2		disapproved, the municipal waste combustor may continue operation for 90 days, but then
3		must cease operation. If corrective actions are taken in the 90 day period such that the
4		Director withdraws the disapproval, municipal waste combustor operation may continue.
5		(E) The Director shall disapprove the status report or corrective action summary report,
6		described in Part (C) of this Subparagraph, if operating permit requirements are not being
7		met, the status and corrective action reports indicate that the effort to have a certified chief
8		facility operator or certified shift supervisor on site as expeditiously as practicable is not
9		being met, or the reports are not delivered in a timely manner.
10	(5)	A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor
11		position or a chief facility operator position at the municipal waste combustion facility may perform
12		the duties of the certified chief facility operator or certified shift supervisor without notice to, or
13		approval by, the Director for up to six months before taking the ASME QRO - Certification for
14		Municipal Solid Waste Combustion Facilities Operators.
15	(6)	If the certified chief facility operator and certified shift supervisor are both unavailable, a
16		provisionally certified control room operator who is scheduled to take the full certification exam,
17		may fulfill the requirements of this Subparagraph.
18	The referenced	ASME exam (ASME QRO-1-1994), (ASME QRO-1-2005), "Standard for the Qualification and
19	Certification of	Resource Recovery Facility Operators," in this Paragraph is hereby incorporated by reference and
20	includes subsequ	uent amendments and editions. Copies of the referenced ASME exam may be obtained from the
21	American Societ	y of Mechanical Engineers (ASME), 22 Law Drive, Fairfield, NJ 07007, at a cost of forty-nine dollars
22	(\$49.00).	
23	(i)(k) Training.	
24	(1)	The owner or operator of each municipal waste combustor shall develop and update on a yearly
25		basis a site-specific operating manual that shall address the elements of municipal waste combustor
26		operation specified in 40 CFR 60.54b(e)(1) through (e)(11). The operating manual shall be kept in
27		a readily accessible location for all persons required to undergo training under Subparagraph (2) of
28		this Paragraph. The operating manual and records of training shall be available for inspection by the
29		personnel of the Division of Air Quality on request.
30	(2)	The owner or operator of the municipal waste combustor plant shall establish a training program to
31		review the operating manual according to the schedule specified in Parts (A) and (B)Part (j)(4)(A)
32		of this SubparagraphRule with each person who has responsibilities affecting the operation of the
33		facility including chief facility operators, shift supervisors, control room operators, ash handlers,
34		maintenance personnel, and crane and load handlers:
35		(A) A date prior to the day when the person assumes responsibilities affecting municipal waste
36		combustor operation; and

1		(B) Annually, following the initial training required by Part (j)(4)(A) of this Subparagraph.
2		Rule.
3		
4	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 40 CFR 60.35b; 40 CFR 60.34e; 40
5		CFR 60.1515;
6		Eff. October 1, 1991;
7		Amended Eff. July 1, 2000; July 1, 1999; July 1, 1998; July 1, 1996; April 1, 1995;
8		Temporary Amendment Eff. March 1, 2002;
9		Amended Eff. August 1, 2002;
10		Temporary Amendment Eff. March 1, 2003;
11		Temporary Amendment Expired December 12, 2003;
12		Amended Eff. July 1, 2010; April 1, 2004.
13		Readopted Eff .
14		
15		

1	15A NCAC 02D	1206 is proposed for readoption with substantive changes as follows:
2		
3	15A NCAC 02D	0.1206 HOSPITAL, MEDICAL, AND INFECTIOUS WASTE INCINERATORS
4	(a) Applicability	7. This Rule applies to any hospital, medical, and infectious waste incinerator (HMIWI), except:
5	(1)	any HMIWI required to have a permit under Section 3005 of the Solid Waste Disposal Act;
6	(2)	any pyrolysis unit;
7	(3)	any cement kiln firing hospital waste or medical and infectious waste;
8	(4)	any physical or operational change made to an existing HMIWI solely for the purpose of complying
9		with the emission standards for HMIWIs in this Rule. These physical or operational changes are not
10		considered a modification and do not result in an existing HMIWI becoming subject to the
11		provisions of 40 CFR Part 60, Subpart Ec;
12	(5)	any HMIWI during periods when only pathological waste, low-level radioactive waste, or
13		chemotherapeutic waste is burned, provided that the owner or operator of the HMIWI:
14		(A) notifies the Director of an exemption claim; and
15		(B) keeps records on a calendar quarter basis of the periods of time when only pathological
16		waste, low-level radioactive waste, or chemotherapeutic waste is burned; or
17	(6)	any co-fired HMIWI, if the owner or operator of the co-fired HMIWI:
18		(A) notifies the Director of an exemption claim;
19		(B) provides an estimate of the relative weight of hospital, medical and infectious waste, and
20		other fuels or wastes to be combusted; and
21		(C) keeps records on a calendar quarter basis of the weight of hospital, medical and infectious
22		waste combusted, and the weight of all other fuels and wastes combusted at the co-fired
23		HMIWI.
24	(b) Definitions.	For the purpose of this Rule, the definitions contained in 40 CFR 60.51c shall apply in addition to
25	the definitions in	Rule .1202 of this Section.15A NCAC 02D .1202.
26	(c) Emission Sta	andards.
27	(1)	The emission standards in this Paragraph apply to all HMIWIs subject to this Rule except where
28		Rules-15A NCAC 02D .0524, .1110, or .1111 of this Subchapter applies. However, when
29		Subparagraphs (7)(6) or (8)(7) of this Paragraph and Rules15A NCAC 02D .0524, .1110, or .1111
30		of this Subchapter regulate the same pollutant, the more restrictive provision for each pollutant shall
31		apply, notwithstanding provisions of Rules-15A NCAC 02D .0524, .1110, or .1111 of this
32		Subchapter to the contrary;
33	(2)	-Prior to July 1, 2013, each HMIWI for which construction was commenced on or before June 20,
34		1996, or for which modification is commenced on or before March 16, 1998, shall not exceed the
35		requirements listed in Table 1A of Subpart Ce of 40 CFR Part 60;

Commented [KP20]: The emission standards in this paragraph are now obsolete.

1	(3)(2)	On or after July 1, 2013, each Each HMIWI for which construction was commenced on or before	Commented [KP21]: Removed the reference to July 1,
2		June 20, 1996, or for which modification is commenced on or before March 16, 1998, shall not	2013 since it is now unnecessary with the removal of current $(c)(2)$.
3		exceed the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60;	
4	(4)<u>(3)</u>	Each HMIWI for which construction was commenced after June 20, 1996 but no later than	
5		December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than	
6		April 6, 2010, shall not exceed the more stringent of the requirements listed in Table 1B of Subpart	
7		Ce and Table 1A of Subpart Ec of 40 CFR Part 60;	
8	(5)(4)	Each small remote HMIWI for which construction was commenced on or before June 20, 1996, or	
9		for which modification was commenced on or before March 16, 1998, and which burns less than	
10		2,000 pounds per week of hospital waste and medical or infectious waste shall not exceed emission	
11		standards listed in Table 2A of Subpart Ce of 40 CFR Part 60 before July 1, 2013. On or after July	Commented [KP22]: First sentence removed because
12		1, 2013, each Each small remote HMIWI shall not exceed emission standards listed in Table 2B of	requirements are obsolete. They applied before July 1, 2013.
13		Subpart Ce of 40 CFR Part 60;	
14	(6)<u>(5)</u>	Visible Emissions. Prior to July 1, 2013, the owner or operator of any HMIWI shall not cause to be	
15		discharged into the atmosphere from the stack of the HMIWI any gases that exhibit greater than 10	
16		percent opacity (6 minute block average). On or after July 1, 2013, the The owner or operator of	
17		any HMIWI shall not cause to be discharged into the atmosphere from the stack of the HMIWI any	
18		gases that exhibit greater than six percent opacity six-minute (six-minute block average);	
19	(7)<u>(6)</u>	Toxic Emissions. Air Pollutants. The owner or operator of any HMIWI subject to this Rule shall	
20		demonstrate compliance with Section-15A NCAC 02D .1100 of this Subchapter-according to 15A	
21		NCAC 02Q .0700; and .0700.	
22	(7)	Ambient Standards.	Commented [CM23]: "Ambient Standards" removed due
23		(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the	to the duplication of corresponding EG limits or state air toxic AALs
24		following ambient air quality standards, which are an annual average, in milligrams per	
25		eubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure,	
26		and which are increments above background concentrations, shall apply aggregately to all	
27		HMIWIs at a facility subject to this Rule:	
28		(i) arsenic and its compounds 2.3x10 ⁻⁷	
29		(ii) beryllium and its compounds 4.1x10 ⁻⁶	
30		(iii) cadmium and its compounds 5.5x10 ⁻⁶	
31		(iv) chromium (VI) and its compounds 8.3x10*;	
32		(B) The owner or operator of a facility with HMIWIs subject to this Rule shall demonstrate	
33		compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this	
34		Subparagraph by following the procedures set out in Rule .1106 of this Subchapter.	
35		Modeling demonstrations shall comply with the requirements of Rule .0533 of this	
36		Subchapter; and	

1		(C)	The emission rates computed or used under Part (B) of this Subparagraph that demonstrate	
2			compliance with the ambient standards under Part (A) of this Subparagraph shall be	
3			specified as a permit condition for the facility with HMIWIs subject to this Rule as their	
4			allowable emission limits unless Rules .0524, .1110, or .1111 of this Subchapter requires	
5			more restrictive rates.	
6	(d) Operationa	ıl Standar	rds.	
7	(1)	The o	perational standards in this Rule do not apply to any HMIWI subject to this Rule when	
8		applic	cable operational standards in Rule-15A NCAC 02D .0524, .1110, or .1111 of this	
9		Subch	napterapply;	
10	(2)	Annua	al Equipment Inspection.	
11		(A)	Each HMIWI shall undergo an equipment inspection initially within 6 months upon this	Commented [KP24]: This rule has been effective since
12			Rule's effective date and an annual equipment inspection (no more than 12 months	2011 so language is obsolete.
13			following the previous annual equipment inspection);	
14		(B)	The equipment inspection shall include all the elements listed in 40 CFR 60.36e(a)(1)(i)	
15			through (xvii);	
16		(C)	Any necessary repairs found during the inspection shall be completed within 10 operating	
17			days of the inspection unless the owner or operator submits a written request to the Director	
18			for an extension of the 10 operating day period; and	
19		(D)	The Director shall grant the extension if the owner or operator submits a written request to	
20			the Director for an extension of the 10 operating day period if the owner or operator of the	
21			small remote HMIWI demonstrates that achieving compliance by the time allowed under	
22			this Part is not feasible, the Director does not extend the time allowed for compliance by	
23			more than 30 days following the receipt of the written request, and the Director concludes	
24			that the emission control standards would not be exceeded if the repairs were delayed;	
25	(3)	Air Po	ollution Control Device Inspection.	
26		(A)	Each HMIWI shall undergo air pollution control device inspections, as applicable, initially	
27			within six months upon this Rule's effective date and inspections annually (no more than	Commented [KP25]: Remove obsolete language. The
28			12 months following the previous annual air pollution control device inspection) to inspect	initial inspection language (Rule effective date) not needed.
29			air pollution control device(s) for proper operation, if applicable: ensure proper calibration	
30			of thermocouples, sorbent feed systems, and any other monitoring equipment; and	
31			generally observe that the equipment is maintained in good operating condition. Any	
32			necessary repairs found during the inspection shall be completed within 10 operating days	
33			of the inspection unless the owner or operator submits a written request to the Director for	
34			an extension of the 10 operating day period; and	
35		(B)	The Director shall grant the extension if the owner or operator of the HMIWI demonstrates	
36			that achieving compliance by the 10 operating day period is not feasible, the Director does	
37			not extend the time allowed for compliance by more than 30 days following the receipt of	

1		the written request, and the Director concludes that the emission control standards would	
2		not be exceeded if the repairs were delayed;	
3	(4)	Any HMIWI, except for a small HMIWI for which construction was commenced on or before June	
4		20, 1996, or for which modification was commenced on or before March 16, 1998, and subject to	
5		the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60, shall comply with 40 CFR	
6		60.56c except for: for	
7		(A) Before July 1, 2013, the test methods listed in Paragraphs 60.56c(b)(7) and (8), the fugitive	Commented [KP26]: Remove requirements before July 1,
8		emissions testing requirements under 40 CFR 60.56c(b)(14) and (c)(3), the CO CEMS	2013.
9		requirements under 40 CFR 60.56c(c)(4), and the compliance requirements for monitoring	
10		listed in 40 CFR 60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7)	
11		through (10), (g)(6) through (10), and (h); and	
12		(B) On or after July 1, 2013, sources Sources subject to the emissions limits under Table 1B of	
13		Subject Ce of 40 CFR Part 60 or more stringent of the requirements listed in Table 1B of	
14		Subpart 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part	
15		60 may, however, elect to use CO CEMS as specified under 40 CFR 60.56c(c)(4) or bag	
16		detection systems as specified under 40 CFR 60.57c(h);	
17	(5)	Prior to July 1, 2013, the owner or operator of any small remote HMIWI shall comply with the	Commented [KP27]: This Paragraph contained
18		following compliance and performance testing requirements:	requirements for before July 1, 2013 so it is now obsolete.
19		(A) conduct the performance testing requirements in 40 CFR 60.56c(a), (b)(1) through (b)(9),	
20		(b)(11)(mercury only), and (c)(1). The 2,000 pound per week limitation does not apply	
21		during performance tests;	
22		(B) establish maximum charge rate and minimum secondary chamber temperature as site-	
23		specific operating parameters during the initial performance test to determine compliance	
24		with applicable emission limits; and	
25		(C) following the date on which the initial performance test is completed, ensure that the	
26		HMIWI does not operate above the maximum charge rate or below the minimum secondary	
27		chamber temperature measured as three hour rolling averages, calculated each hour as the	
28		average of all previous three operating hours, at all times except during periods of start-up,	
29		shut down and malfunction. Operating parameter limits do not apply during performance	
30		tests. Operation above the maximum charge rate or below the minimum secondary chamber	
31		temperature shall constitute a violation of the established operating parameters;	
32	(6)<u>(5)</u>	On or after July 1, 2013, any Any small remote HMIWI constructed on or before June 20, 1996, or	
33		for which modification was commenced on or before March 16, 1998, is subject to the requirements	
34		listed in Table 2B of Subpart Ce of 40 CFR Part 60. The owner or operator shall comply with the	
35		compliance and performance testing requirements of 40 CFR 60.56c, excluding test methods listed	
36		in 40 CFR 60.56c(b)(7), (8), (12), (13) (Pb and Cd), and (14), the annual PM, CO, and HCl emissions	
37		testing requirements under 40 CFR 60.56c(c)(2), the annual fugitive emissions testing requirements	

under 40 CFR 60.56c(c)(3), the CO CEMS requirements under 40 CFR 60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR 60.56c(c)(5) through (7), and (d) through (k):

(7)(6) On or after July 1, 2013, any Any small remote HMIWI Forfor which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, subject to the requirements listed in Table 2A or 2B of Subpart Ce of 40 CFR Part 60, and not equipped with an air pollution control device shall meet the following compliance and performance testing requirements:

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- (A) Establish maximum charge rate and minimum secondary chamber temperature as sitespecific operating parameters during the initial performance test to determine compliance with applicable emission limits. The 2,000 pounds per week limitation does not apply during performance tests;
- (B) The owner or operator shall not operate the HMIWI above the maximum charge rate or below the minimum secondary chamber temperature measured as 3-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times. Operating parameter limits shall not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s); and
 - (C) Operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emissions limits. The owner or operator of an HMIWI may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emissions limit(s). Repeat performance tests conducted shall be conducted under process and control device operating conditions duplicating as nearly as possible those that indicated during the violation;
- 27 (8) On or after July 1, 2013, any Any small HMIWI constructed commenced emissions guidelines as promulgated on September 15, 1997, meeting all requirements listed in Table 2B of Subpart Ce of 28 29 40 CFR Part 60, which is located more than 50 miles from the boundary of the nearest Standard 30 Metropolitan Statistical Area and which burns less than 2,000 pounds per week of hospital, medical 31 and infectious waste and is subject to the requirements listed in Table 2B of Subpart Ce of 40 CFR 32 Part 60. The 2,000 pounds per week limitation does not apply during performance tests. The owner 33 or operator for which construction was commenced after June 20, 1996 but no later than December 34 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 35 2010, shall comply with the compliance and performance testing requirements of 40 CFR 60.56c, excluding the annual fugitive emissions testing requirements under 40 CFR 60.56c(c)(3),the CO 36 37 CEMS requirements under 40 CFR 60.56c(c)(4), and the compliance requirements for monitoring

Commented [BJ28]: Proposed to delete language that is duplicative of definition of small HMIWI and clarify paragraph.

1		listed in 40 CFR 60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10),
2		and (g)(6) through (10). The owner or operator may elect to use CO CEMS as specified under 40
3		CFR 60.56c(c)(4) or bag leak detection systems as specified under 40 CFR 60.57c(h); and
4	(9)	On or after July 1, 2013, the The owner or operator of any HMIWI equipped with selective
5		noncatalytic reduction technology shall:
6		(A) Establish the maximum charge rate, the minimum secondary chamber temperature, and the
7		minimum reagent flow rate as site specific operating parameters during the initial
8		performance test to determine compliance with the emissions limits;
9		(B) Ensure that the affected facility does not operate above the maximum charge rate, or below
10		the minimum secondary chamber temperature or the minimum reagent flow rate measured
11		as three-hour rolling averages (calculated each hour as the average of the previous three
12		operating hours) at all times. Operating parameter limits shall not apply during
13		performance tests; and
14		(C) Operation of any HMIWI above the maximum charge rate, below the minimum secondary
15		chamber temperature, and below the minimum reagent flow rate simultaneously shall
16		constitute a violation of the $\ensuremath{\text{NO}_{\text{X}}}$ emissions limit. The owner or operator may conduct a
17		repeat performance test within 30 days of violation of applicable operating parameter(s) to
18		demonstrate that the affected facility is not in violation of the applicable emissions limit(s).
19		Repeat performance tests conducted pursuant to this paragraph shall be conducted using
20		the identical operating parameters that indicated a violation.
21	(e) Test Method	s and Procedures.
22	(1)	The test methods and procedures described in Section .2600 of this Subchapter 15A NCAC 02D
23		.2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine
24		compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission
25		rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846
26		Method 0060 shall be used for the analysis; and
27	(2)	The Director may require the owner or operator to test the HMIWI to demonstrate compliance with
28		the emission standards listed in Paragraph (c) of this Rule.
29	(f) Monitoring, l	Recordkeeping, and Reporting.
30	(1)	The owner or operator of an HMIWI subject to the requirements of this Rule shall comply with the
31		monitoring, recordkeeping, and reporting requirements in Section .0600 of this Subchapter;15A
32		NCAC 02D .0600.
33	(2)	The owner or operator of an HMIWI subject to the requirements of this Rule shall maintain and
34		operate a continuous temperature monitoring and recording device for the primary chamber and,
35		where there is a secondary chamber, for the secondary chamber. The owner or operator of an
36		HMIWI that has installed air pollution abatement equipment to reduce emissions of hydrogen
37		chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for

1		wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall
2		require the owner or operator of an HMIWI with a permitted charge rate of 750 pounds per hour or
3		more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or
4		both as necessary to determine proper operation of the HMIWI. The Director may require the owner
5		or operator of an HMIWI with a permitted charge rate of less than 750 pounds per hour to install,
6		operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine
7		proper operation of the HMIWI;
8	(3)	In addition to the requirements of Subparagraphs (1) and (2) of this Paragraph, the owner or operator
9		of a HMIWI shall comply with the reporting and recordkeeping requirements listed in 40 CFR
10		60.58c(b), (c), (d), (e), and (f),(b) through (g), excluding 40 CFR 60.58c(b)(2)(ii) and (b)(7);
11	(4)	In addition to the requirements of Subparagraphs (1), (2) and (3) of this Paragraph, the owner or
12		operator of a small remote HMIWI shall:
13		(A) maintain records of the annual equipment inspections, any required maintenance, and any
14		repairs not completed within 10 days of an inspection;
15		(B) submit an annual report containing information recorded in Part (A) of this Subparagraph
16		to the Director no later than 60 days following the year in which data were collected.
17		Subsequent reports shall be sent no later than 12 calendar months following the previous
18		report. The report shall be signed by the HMIWI manager; and
19		(C) submit the reports required by Parts (A) and (B) of this Subparagraph to the Director
20		semiannually once the HMIWI is subject to the permitting procedures of 15A NCAC 02Q
21		.0500, Title V Procedures;
22	(5)	Waste Management Guidelines. The owner or operator of a HMIWI shall comply with the
23		requirements of 40 CFR 60.55c for the preparation and submittal of a waste management plan;
24	(6)	Except as provided in Subparagraph (7) of this Paragraph, the owner or operator of any HMIWI
25		shall comply with the monitoring requirements in 40 CFR 60.57c;
26	(7)	The owner or operator of any small remote HMIWI shall:
27		(A) install, calibrate, maintain, and operate a device for measuring and recording the
28		temperature of the secondary chamber on a continuous basis, the output of which shall be
29		recorded, at a minimum, once every minute throughout operation;
30		(B) install, calibrate, maintain, and operate a device which automatically measures and records
31		the date, time, and weight of each charge fed into the HMIWI; and
32		(C) obtain monitoring data at all times during HMIWI operation except during periods of
33		monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring
34		data shall be obtained for 75 percent of the operating hours per day and for 90 percent of
35		the operating hours per calendar quarter that the HMIWI is combusting hospital, medical,
36		and infectious waste;

1	(8)	On or after July 1, 2013, any Any HMIWI, except for small remote HMIWI not equipped with an
2		air pollution control device, subject to the emissions requirements in Table 1B or Table 2B of
3		Subpart Ce of 40 CFR Part 60, or the more stringent of the requirements listed in Table 1B of
4		Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60, shall perform the
5		monitoring requirements listed in 40 CFR 60.57c;
6	(9)	On or after July 1, 2013, the The owner or operator of a small remote HMIWI, not equipped with
7		an air pollution control device and subject to the emissions requirements in Table 2B of Subpart Ce
8		of 40 CFR Part 60 shall:
9		(A) install, calibrate (to manufacturers' specifications), maintain, and operate a device for
10		measuring and recording the temperature of the secondary chamber on a continuous basis,
11		the output of which shall be recorded, at a minimum, once every minute throughout
12		operation;
13		(B) install, calibrate (to manufacturers' specifications), maintain, and operate a device which
14		automatically measures and records the date, time, and weight of each charge fed into the
15		HMIWI; and
16		(C) obtain monitoring data at all times during HMIWI operation except during periods of
17		monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring
18		data shall be obtained for 75 percent of the operating hours per day for 90 percent of the
19		operating hours per calendar quarter that the designated facility is combusting hospital,
20		medical and infectious waste;
21	(10)	On or after July 1, 2013, any Any HMIWI for which construction commenced on or before June 20,
22		1996, or for which modification was commenced on or before March 16, 1998, and is subject to
23		requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60; or any HMIWI which construction
24		was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification
25		is commenced after March 16, 1998 but no later than April 6, 2010, and subject to the requirements
26		of Table 1B of this Subpart and Table 1A of Subpart Ec of 40 CFR Part 60, may use the results of
27		previous emissions tests to demonstrate compliance with the emissions limits, provided that:
28		(A) Previous emissions tests had been conducted using the applicable procedures and test
29		methods listed in 40 CFR 60.56c(b);
30		(B) The HMIWI is currently operated in a manner that would be expected to result in the same
31		or lower emissions than observed during the previous emissions test and not modified such
32		that emissions would be expected to exceed; and
33		(C) The previous emissions test(s) had been conducted in 1996 or later;
34	(11)	On or after July 1, 2013, any Any HMIWI, (with the exception of small remote HMIWI and HMIWIs
35		for which construction was commenced no later than December 1, 2008, or for which modification
36		is commenced no later than April 6, 2010, and subject to the requirements listed in Table 1B of
37		Subpart Ce of 40 CFR Part 60 or the more stringent of the requirements listed in Table 1B of Subpart

1		Ce of 40 CFR Part 60 and Table 1A of Subpart Ec), shall include the reporting and recordkeeping
2		requirements listed in 40 CFR 60.58c(b);(b) through (g) in Subpart Ec; and
3	(12)	On or after July 1, 2013, any Any HMIWI for which construction was commenced no later than
4		December 1, 2008, or for which modification is commenced no later than April 6, 2010, and subject
5		to the requirements listed in Table 1B or the more stringent of the requirements listed in Table 1B
6		of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60, is not required to
7		maintain records required in 40 CFR 60.58c(b)(2)(xviii) (bag leak detection system alarms),
8		(b)(2)(xix) (CO CEMS data), and (b)(7) (siting documentation).
9	(g) Excess Emi	issions and Start-up and Shut-down. All HMIWIs subject to this Rule shall comply with Rule .0535,
10	Excess Emissio	ns Reporting and Malfunctions, of this Subchapter. Emissions from bypass conditions shall not be
11	exempted as pro	ovided under Paragraphs (c) and (g) of Rule 0.535 of this Subchapter. 15A NCAC 02D .0535.
12	(h) Operator Tr	raining and Certification.
13	(1)	The owner or operator of a HMIWI shall not allow the HMIWI to operate at any time unless a fully
14		trained and qualified HMIWI operator is accessible, either at the facility or available within one
15		hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct
16		supervisor of one or more HMIWI operators;
17	(2)	Operator training and qualification shall be obtained by completing the requirements of 40 CFR
18		60.53c(c) through (g);
19	(3)	The owner or operator of a HMIWI shall maintain, at the facility, all items required by 40 CFR
20		60.53c(h)(1) through (h)(10);
21	(4)	The owner or operator of a HMIWI shall establish a program for reviewing the information required
22		by Subparagraph (3) of this Paragraph annually with each HMIWI operator. The reviews of the
23		information shall be conducted annually; and
24	(5)	The information required by Subparagraph (3) of this Paragraph shall be kept in a readily accessible
25		location for all HMIWI operators. This information, along with records of training shall be available
26		for inspection by Division personnel upon request.
27		
28	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 40 CFR 60.34e;
29		Eff. October 1, 1991;
30		Amended Eff. January 1, 2011; June 1, 2008; August 1, 2002; July 1, 2000; July 1, 1999; July 1,
31		1998; July 1, 1996; April 1, 1995; December 1, 1993.<u>1</u>993;
32		Readopted Eff.

1	15A NCAC 02D .1207 is proposed for repeal as follows:
2	
3	15A NCAC 02D .1207 CONICAL INCINERATORS
4	(a) Purpose. The purpose of this Rule is to set forth the requirements of the Commission relating to the use of conical
5	incinerators in the burning of wood and agricultural waste.
6	(b) Scope. This Rule shall apply to all conical incinerators which are designed to incinerate wood and agricultural
7	waste.
8	(c) Each conical incinerator subject to this Rule shall be equipped and maintained with:
9	(1) an underfire and an overfire forced air system and variable damper which is automatically controlled
10	to ensure the optimum temperature range for the complete combustion of the amount and type of
11	material waste being charged into the incinerator;
12	(2) a temperature recorder for continuously recording the temperature of the exit gas;
13	(3) a feed system capable of delivering the waste to be burned at a sufficiently uniform rate to prevent
14	temperature from dropping below 800°F during normal operation, with the exception of one startup
15	and one shutdown per day.
16	(d) The owner of the conical incinerator shall monitor and report ambient particulate concentrations using the
17	appropriate method specified in 40 CFR Part 50 with the frequency specified in 40 CFR Part 58. The Director may
18	require more frequent monitoring if measured particulate concentrations exceed the 24-hour concentration allowed
19	under 15A NCAC 2D .0400. The owner or operator shall report the monitoring data quarterly to the Division.
20	(e) In no case shall the ambient air quality standards as defined in Section .0400 of this Subchapter be exceeded.
21	(f) The conical incinerator shall not violate the opacity standards in Rule .0521 of this Subchapter.
22	(g) The distance a conical incinerator is located and operated from the nearest structure(s) in which people live or
23	work shall be optimized to prevent air quality impact and shall be subject to approval by the Commission.
24	(h) New conical incinerators shall be in compliance with this Rule on startup.
25	
26	History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
27	Eff. October 1, 1991;
28	Amended Eff. July 1, 2000; July 1, 1998.
29	Repealed Eff;
30	
31	

Commented [ZV29]: "DAQ has not identified any xisting sources subject to this rule. Therefore, we are eeking Stakeholder comment on the following options: (1) he retention and modification of the existing rule, or (2) the epeal of the rule."

1	15A NCAC 02D .120	8 is proposed for readoption without substantive changes as follows:	
2	15A NCAC 02D .120	8 OTHER INCINERATORS	Com
4	(a) Applicability.	· [*	renam
5	(1) This	s Rule applies to any incinerator not covered under Rules 15A NCAC 02D .1203 .1204 through	
6	-120	07-,1206. or 15A NCAC 02D .1210 through and -1212 of this Section-1212.	Com
7	(2) If a	ny incinerator subject to this Rule:	to the
8	(A)	is used solely to cremate pets; or	
9	(B)	if the emissions of all toxic air pollutants from an incinerator subject to this Rule and	
10		associated waste handling and storage are less than the levels listed in 15A NCAC 02Q	
11		.0711; the incinerator is exempt from Subparagraphs (b)(6) through (b)(9) and Paragraph	
12		(c) of this Rule.	
13	The inciner	ator is exempt from Subparagraphs (b)(6) through (b)(9) and Paragraph (c) of this Rule.	
14	(b) Emission Standar	ds.	
15	(1) The	emission standards in this Rule apply to any incinerator subject to this Rule except where Rules	
16	<u>15A</u>	NCAC 02D .0524, 1110, or .1111 of this Subchapter apply. However, when Subparagraphs	
17	(8)	or (9) of this Paragraph and Rules-15A NCAC 02D .0524, .1110, or .1111-of this Subchapter	
18	regu	alate the same pollutant, the more restrictive provision for each pollutant applies notwithstanding	
19	prov	visions of Rules15A NCAC 02D .0524, .1110, or .1111 of this Subchapter to the contrary.	
20	(2) Part	ticulate Matter. Any incinerator subject to this Rule shall comply with one of the following	
21	emi	ssion standards for particulate matter:	
22	(A)	For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions	
23		rate for particulate matter from any stack or chimney of any incinerator subject to this Rule	
24		shall not exceed the level calculated with the equation $E=0.002P$ calculated to two	
25		significant figures, where "E" equals the allowable emission rate for particulate matter in	
26		pounds per hour and "P" equals the refuse charge rate in pounds per hour. For refuse charge	
27		rates of 0 to 100 pounds per hour the allowable emission rate in 0.2 pounds per hour. For	
28		refuse charge rates of 2000 pounds per hour or greater the allowable emission rate shall be	
29		4.0 pounds per hour. Compliance with this Part shall be determined by averaging	
30		emissions over a three-hour block period.	
31	(B)	Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of	
32		any incinerator subject to this Rule may choose to limit particulate emissions from the	
33		incinerator to 0.08 grains per dry standard cubic foot corrected to 12 percent carbon	
34		dioxide. In order to choose this option, the owner or operator of the incinerator shall	
35		demonstrate that the particulate ambient air quality standards will not be violated. To	
36		correct to 12 percent carbon dioxide, the measured concentration of particulate matter is	

Commented [ZV30]: Seeking stakeholder input for renaming the rule.

Commented [**ZV31**]: Reference structure is pending due to the outcome of this rulemaking.

1		multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with	
2		this Part shall be determined by averaging emissions over a three-hour block period.	
3	(3)	Visible Emissions. Any incinerator subject to this Rule shall comply with Rule15A NCAC 02D	
4		.0521 of this Subchapter for the control of visible emissions.	
5	(4)	Sulfur Dioxide. Any incinerator subject to this Rule shall comply with Rule 15A NCAC 02D.0516	
6		of this Subchapter for the control of sulfur dioxide emissions.	
7	(5)	Odorous Emissions. Any incinerator subject to this Rule shall comply with Rule15A NCAC 02D	
8		.1806 of this Subchapter for the control of odorous emissions.	
9	(6)	Hydrogen Chloride. Any incinerator subject to this Rule shall control emissions of hydrogen	
10		chloride such that they do not exceed four pounds per hour unless they are reduced by at least 90	
11		percent by weight or to no more than 50 parts per million by volume corrected to seven percent	
12		oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions	
13		over a one-hour period.	
14	(7)	Mercury Emissions. Emissions of mercury and mercury compounds from the stack or chimney of	
15		any incinerator subject to this Rule shall not exceed 0.032 pounds per hour. Compliance with this	
16		Subparagraph shall be determined by averaging emissions over a one-hour period.	
17	(8)	Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate	
18		compliance with Section .1100 of this Subchapter according to 15A NCAC 02Q .0700.	
19	(9)	Ambient Standards.	
20		(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the	
21		following ambient air quality standards, which are an annual average, in milligrams per	
22		cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure,	
23		and which are increments above background concentrations, apply aggregately to all	
24		incinerators at a facility subject to this Rule:	
25		(i) arsenic and its compounds $\frac{2.3 \times 10^{-7} 2.1 \times 10^{-6}}{2.1 \times 10^{-6}}$	
26		(ii) beryllium and its compounds 4.1×10^{-6}	
27		(iii) cadmium and its compounds 5.5×10^{-6}	
28		(iv) chromium (VI) and its compounds 8.3x10 ⁻⁸	
29		(B) The owner or operator of a facility with incinerators subject to this Rule shall	
30		demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this	
31		Subparagraph by following the procedures set out in Rule .1106 of this Subchapter.15A NCAC	
32		02D.1106. Modeling demonstrations shall comply with the requirements of Rule15A NCAC 02D	
33		.0533 of this Subchapter0533.	
34		(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate	
35		compliance with the ambient standards under Part (A) of this Subparagraph shall be	
36		specified as a permit condition for the facility with incinerators subject to this Rule as their	

	allowable emission limits unless Rule <u>15A NCAC 02D</u> .0524, .1110 or .1111 of this
	Subchapter-requires more restrictive rates.
(c) Operational	Standards.
(1)	The operational standards in this Rule do not apply to any incinerator subject to this Rule when
	applicable operational standards in Rule15A NCAC 02D .0524, .1110, or .1111 of this Subchapter
	apply.
(2)	Crematory Incinerators. Gases generated by the combustion shall be subjected to a minimum
	temperature of 1600 degrees F for a period of not less than one second.
(3)	Other Incinerators. All incinerators not subject to any other rule in this Section shall meet the
	following requirement: Gases generated by the combustion shall be subjected to a minimum
	temperature of 1800 degrees F for a period of not less than one second. The temperature of 1800
	degrees F shall be maintained at least 55 minutes out of each 60-minute period, but at no time shall
	the temperature go below 1600 degrees F.
(4)	Except during start-up where the procedure has been approved according to Rule15A NCAC 02D
	.0535(g) of this Subchapter, .0535(g), waste material shall not be loaded into any incinerator subject
	to this Rule when the temperature is below the minimum required temperature. Start-up procedures
	may be determined on a case-by-case basis according to Rule15A NCAC 02D0535(g) of this
	Subchapter. 0535(g). Any incinerator subject to this Rule shall have automatic auxiliary burners that
	are capable of maintaining the required minimum temperature in the secondary chamber excluding
	the heat content of the wastes.
(d) Test Method	ds and Procedures.
(1)	The test methods and procedures described in Section .2600 of this Subchapter and in 40 CFR Part
	60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with
	emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals.
	However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall
	be used for the analysis.
(2)	The Director shall require the owner or operator to test his incinerator to demonstrate compliance
	with the emission standards listed in Paragraph (b) of this Rule if necessary to determine compliance
	with the emission standards of Paragraph (b) of this Rule.
(e) Monitoring,	Recordkeeping, and Reporting.
(1)	The owner or operator of an incinerator subject to the requirements of this Rule shall comply with
	the monitoring, recordkeeping, and reporting requirements in Section .0600 of this Subchapter.
(2)	The owner or operator of an incinerator, except an incinerator meeting the requirements of Parts
	.1201(c)(4)(A) through (D) of this Section, shall maintain and operate a continuous temperature
	monitoring and recording device for the primary chamber and, where there is a secondary chamber,
	for the secondary chamber. The Director shall require a temperature monitoring device for
	incinerators meeting the requirements of Parts .1201(c)(4)(A) through (D) of this Section if the
	 (c) Operational (1) (2) (3) (4) (4) (2) (2) (e) Monitoring, (1) (2)

1		incinerator is in violation of the requirements of Part $.1201(c)(4)(D)$ of this Section. The owner or
2		operator of an incinerator that has installed air pollution abatement equipment to reduce emissions
3		of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to
4		measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The
5		Director shall require the owner or operator of an incinerator with a permitted charge rate of 750
6		pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for
7		carbon monoxide or both as necessary to determine proper operation of the incinerator. The Director
8		shall require the owner or operator of an incinerator with a permitted charge rate of less than 750
9		pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or
10		both if necessary to determine proper operation of the incinerator.
11	(f) Excess Emiss	sions and Start-up and Shut-down. Any incinerator subject to this Rule shall comply with Rule15A
12	<u>NCAC 02D</u> .053	5, Excess Emissions Reporting and Malfunctions, of this Subchapter.
13		
14	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);
15		Eff. July 1, 1998;

- 15
 19,5 any 1, 1995,

 16
 Amended Eff. August 1, 2008; June 1, 2008; July 1, 2007; January 1, 2005; August 1, 2002; July 1,

 17
 2000; July 1, 1999.
- 18 <u>Readopted Eff.</u>.
- 19
- 20

1	15A NCAC 02D .1211 is proposed for repeal as follows:
2	
3	15A NCAC 02D .1211 OTHER SOLID WASTE INCINERATION UNITS
4	(a) Applicability. With the exceptions in Paragraph (b), this Rule applies to other solid waste incineration (OSWI)
5	units.
6	(b) Exemptions. The following types of incineration units are exempted from this Rule:
7	(1) incineration units covered under Rules .1203 through .1206 and .1210 of this Section;
8	(2) units, burning 90 percent or more by weight on a calendar quarter basis, excluding the weight of
9	auxiliary fuel and combustion air, pathological waste, low level radioactive waste, or
10	ehemotherapeutic waste, if the owner or operator of the unit:
11	(A) notifies the Director that the unit qualifies for this exemption; and
12	(B) keeps records on a calendar quarter basis of the weight, pathological waste, low level
13	radioactive waste, or chemotherapeutic waste burned, and the weight of all other fuels and
14	wastes burned in the unit;
15	(3) Cogeneration units if;
16	(A) The unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power
17	Act (16 U.S.C. 796(18)(B));
18	(B) The unit burns homogeneous waste (not including refuse derived fuel) to produce
19	electricity and steam or other forms of energy used for industrial, commercial, heating, or
20	cooling purposes; and
21	(C) The owner or operator of the unit notifies the Director that the unit qualifies for this
22	exemption;
23	(4) Small power production unit if:
24	(A) The unit qualifies as a small power-production facility under section 3(17)(C) of the
25	Federal Power Act (16 U.S.C. 796(17)(C));
26	(B) The unit burns homogeneous waste (not including refuse derived fuel) to produce
27	electricity; and
28	(C) The owner or operator of the unit notifies the Director that the unit qualifies for this
29	exemption.
30	(5) units that combust waste for the primary purpose of recovering metals;
31	(6) rack, part, and drum reclamation units that burn the coatings off racks used to hold items for
32	application of a coating;
33	(7) cement kilns;
34	(8) laboratory analysis units that burn samples of materials for the purpose of chemical or physical
35	analysis;
36	(9) air curtain burners covered under Rule .1904 of this Subchapter;

Commented [ZV32]: DAQ has not identified any existing sources subject to this rule. Therefore, we are seeking Stakeholder comment on the following options: (1) the retention and modification of the existing rule to incorporate the current federal emission guidelines, or (2) the repeal of the rule.

1	(10)	-institutional boilers and process heaters regulated under 40 CFR Part 63, Subpart DDDDD (National
2		Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional
3		Boilers and Process Heaters);
4	(11)	-rural institutional waste incinerators that meet the conditions in 40 CFR 60.2993(h);
5	(12)	incinerators that combust contraband or prohibited goods if owned or operated by a government
6		agency, such as police, customs, agricultural inspection, or a similar agency, to destroy only illegal
7		or prohibited goods, such as illegal drugs, or agricultural food products that cannot be transported
8		into the country or across state lines to prevent biocontamination. The exclusion does not apply to
9		items either confiscated or incinerated by private, industrial, or commercial entities; or
10	(13)	Incinerators used for national security and is used solely:
11		(A) to destroy national security materials integral to the field exercises during military training
12		field exercises; or
13		(B) to incinerate national security materials when necessary to safeguard national security if
14		the owner or operator follows to procedures in 40 CFR 60.2993(q)(2) to receive this
15		exemption.
16	(c) Definitions.	For the purpose of this Rule, the definitions contained in 40 CFR 60.3078 shall apply in addition to
17	the definitions in	h Rule .1202 of this Section.
18	(d) Emission St	tandards. The emission standards in this Rule apply to all incinerators subject to this Rule except
19	where Rule .0524	4, .1110, or .1111 of this Subchapter applies. When Subparagraphs (12) or (13) of this Paragraph and
20	Rules .0524, .11	10, or .1111 of this Subchapter regulate the same pollutant, the more restrictive provision for each
21	pollutant shall ap	oply, notwithstanding provisions of Rules .0524, .1110, or .1111 of this Subchapter to the contrary.
22	(1)	Particulate Matter. Emissions of particulate matter from an OSWI unit shall not exceed 0.013 grains
23		per dry standard cubic foot corrected to seven percent oxygen, dry basis (3 run average with 1 hour
24		minimum sample time per run).
25	(2)	Opacity. Visible emissions from the stack of an OSWI unit shall not exceed 10 percent opacity (6-
26		minute block average with 1 hour minimum sample time per run).
27	(3)	Sulfur Dioxide. Emissions of sulfur dioxide from an OSWI unit subject to the requirements of this
28		Rule shall not exceed 3.1 parts per million by volume corrected to seven percent oxygen, dry basis
29		(3 run average with 1 hour minimum sample time per run).
30	(4)	Nitrogen Oxides. Emissions of nitrogen oxides from an OSWI unit shall not exceed 103 parts per
31		million by dry volume corrected to seven percent oxygen, dry basis (3-run average with 1 hour
32		minimum sample time per run).
33	(5)	Carbon Monoxide. Emissions of carbon monoxide from an OSWI unit shall not exceed 40 parts per
34		million by dry volume, corrected to seven percent oxygen, dry basis (3-run average with 1 hour
35		minimum sample time per run) and 12-hour rolling averages measured using continuous emissions
36		monitoring system (CEMS).

1	(6)	Odorous Emissions. An OSWI unit shall comply w	ith Rule .1806 of this Subchapter for the control
2		of odorous emissions.	
3	(7)	Hydrogen Chloride. Emissions of hydrogen chlorid	le from an OSWI unit shall not exceed 15 parts
4		per million by dry volume, corrected to seven perce	ent oxygen, dry basis (3-run average with 1 hour
5		minimum sample time per run).	
6	(8)	Mercury Emissions. Emissions of mercury from an	OSWI unit shall not exceed 74 micrograms per
7		dry standard cubic meter, corrected to seven perce	nt oxygen, dry basis (3 run average with 1 hour
8		minimum sample time per run).	
9	(9)	Lead Emissions. Emissions of lead from an OSW	I unit shall not exceed 226 micrograms per dry
10		standard cubic meter, corrected to seven percent	oxygen, dry basis (3 run average with 1 hour
11		minimum sample time per run).	
12	(10)	Cadmium Emissions. Emissions of cadmium from	an OSWI unit shall not exceed 18 micrograms
13		per dry standard cubic meter, corrected to seven p	ercent oxygen, dry basis (3 run average with 1
14		hour minimum sample time per run).	
15	(11)	Dioxins and Furans. Emissions of dioxins and fu	arans from an OSWI unit shall not exceed 33
16		nanograms per dry standard cubic meter, corrected t	o seven percent oxygen, dry basis (3-run average
17		with 1 hour minimum sample time per run).	
18	(12)	Toxic Emissions. The owner or operator of any inc	inerator subject to the requirements of this Rule
19		shall demonstrate compliance with Section .1100	of this Subchapter according to Section 15A
20		NCAC 02Q .0700.	
21	(13)	Ambient Standards.	
22		(A) In addition to the ambient air quality star	ndards in Section .0400 of this Subchapter, the
23		following ambient air quality standards, v	which are an annual average, in milligrams per-
24		cubic meter at 77oF (25oC) and 29.92 inc	ches (760 mm) of mercury pressure, and which
25		are increments above background concentr	rations, shall apply aggregately to all incinerators
26		at a facility subject to this Rule:	
27			
		POLLUTANT	STANDARD
		arsenic and its compounds	2.3x10-7
		beryllium and its compounds	4.1x10 6
		cadmium and its compounds	5.5x10-6
		chromium (VI) and its compounds	8.3x10-8
28			
29		(B) The owner or operator of a facility with O	SWI units subject to this Rule shall demonstrate
30		compliance with the ambient standards in	Part (A) of this Subparagraph by following the
31		procedures set out in Rule .1106 of this Sul	ochapter. Modeling demonstrations shall comply
32		with the requirements of Rule .0533 of thi	s Subchapter.

32

1	(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate
2	compliance with the ambient standards under Part (A) of this Subparagraph shall be
3	specified as a permit condition for the facility with incinerators as their allowable emission
4	limits unless Rule .0524, .1110, or .1111 of this Subchapter requires more restrictive rates.
5	(e) Operational Standards.
6	(1) The operational standards in this Rule do not apply to an OSWI unit when applicable operational
7	standards in Rule .0524, .1110, or .1111 of this Subchapter apply.
8	(2) The owner or operator of the OSWI shall meet the emission standards in Paragraph (d) of this Rule
9	by July 1, 2010.
10	(3) If a wet scrubber is used to comply with emission limitations, then the owner or operator of the
11	OSWI unit:
12	(A) shall establish operating limits for the four operating parameters as specified in the Table
13	3 of 40 CFR 60, Subpart FFFF and as described in Paragraphs 40 CFR 60.3023(a) during
14	the initial performance test, and;
15	(B) shall meet the operating limits established during the initial performance test beginning on
16	July 1, 2010.
17	(4) If an air pollution control device other than a wet scrubber is used or if emissions are limited in some
18	other manner to comply with the emission standards of Paragraph (d) of this Rule, the owner or
19	operator of the OSWI unit subject to the requirements of this Rule shall petition the US
20	Environmental Protection Agency (EPA) for specific operating limits that shall be established
21	during the initial performance test and continuously monitored thereafter. The initial performance
22	test shall not be conducted until after the EPA approves the petition. The petition shall include the
23	five items listed in the Paragraph 40 CFR 60.3024(a) through (e).
24	(f) Periods of Startup, Shutdown, and Malfunction. The emission and operating standards apply at all times except
25	during OSWI unit startups, shutdowns, or malfunctions.
26	(g) Test Methods and Procedures.
27	(1) The test methods and procedures described in Rule .0501 of this Subchapter, 40 CFR Part 60,
28	Appendix A, 40 CFR Part 61, Appendix B, and 40 CFR 60.3027 shall be used to determine
29	compliance with the emission standards in Paragraph (d) this Rule.
30	(2) The owner or operator of OSWI unit shall conduct:
31	(A) an initial performance test as required under 40 CFR 60.8 and according to 40 CFR
32	60.3027, no later than July 1, 2010; and after that;
33	(B) annual performance tests according to 40 CFR 60.3027 and 40 CFR 60.3033, within 12
34	months following the initial performance test and within each 12 months thereafter.
35	(3) The owner or operator of OSWI unit shall use the results of these tests:
36	(A) to demonstrate compliance with the emission standards in Paragraph (d) of this Rule, and;

1		(B) to establish operating standards using the procedures in Subparagraphs (e)(3) and (e)(4) of
2		this Rule.
3	(4)	The owner or operator of OSWI unit may conduct annual performance testing less often if the
4		requirements of 40 CFR 60.3035 are met.
5	(5)	The owner or operator of OSWI unit may conduct a repeat performance test at any time to establish
6		new values for the operating limits. The Director may request a repeat performance test at any time
7		if he finds that the current operating limits are no longer appropriate.
8	(h) Monitoring.	
9	(1)	The owner or operator of OSWI unit shall comply with the monitoring, recordkeeping, and reporting
10		requirements in Section .0600 of this Subchapter and in 40 CFR 60.13, Monitoring Requirements.
11	(2)	The owner or operator of OSWI unit shall:
12		(A) install, calibrate to manufacturers specifications, maintain, and operate continuous
13		emission monitoring systems for carbon monoxide and for oxygen. The oxygen
14		concentration shall be monitored at each location where the carbon monoxide
15		concentrations are monitored;
16		(B) operate the continuous monitoring system according to 40 CFR 60.3039;
17		(C) conduct daily, quarterly, and annual evaluations of the continuous emission monitoring
18		systems according to 40 CFR 60.3040;
19		(D) collect the minimum amount of monitoring data using the procedures in 40 CFR 60.3041(a)
20		through (e) if the continuous emission monitoring system is operating or the procedures in
21		40 CFR 60.3041(f) if the continuous emissions monitoring system is temporarily
22		unavailable; and
23		(E) convert the one-hour arithmetic averages into the appropriate averaging times and units as
24		specified in 40 CFR 60.3042 to monitor compliance with the emission standards in
25		Paragraph (d) of this Rule.
26	(3)	The owner or operator of OSWI unit shall:
27		(A) install, calibrate to manufacturers specifications, maintain, and operate devices or establish
28		methods for monitoring or measuring the operating parameters as specified in 40 CFR
29		60.3043; and
30		(B) obtain operating parameter monitoring data as specified in 40 CFR 60.3044 to monitor
31		compliance with the operational standards in Paragraph (e) of this Rule.
32	(i) Recordkeepir	ng and Reporting. The owner or operators of an OSWI unit:
33	(1)	shall maintain all records required specified in 40 CFR 60.3046;
34	(2)	shall keep and submit records according to 40 CFR 60.3047;
35	(3)	shall submit, as specified in 40 CFR 60.3048, the following reports:
36		(A) an initial test report and operating limits, as specified in 40 CFR 60.3049(a) and (b);
37		(B) a waste management plan as specified in 40 CFR 60.3049(c); and

1	(C) an annual report as specified in 40 CFR 60.3050 and 40 CFR 60.3051;
2	(D) a deviation report as specified in 40 CFR 60.3053 if a deviation from the operating limits
3	or the emission limitations occurs according to 40 CFR 60.3052(a); the deviation report-
4	shall be submitted following 40 CFR 60.3052(b);
5	(E) a deviation report according to 40 CFR 60.3054(a) if a deviation from the requirement to
6	have a qualified operator accessible occurs;
7	(4) shall keep records and submit reports and notifications as required by 40 CFR 60.7;
8	(5) may request changing semiannual or annual reporting dates as specified in this Paragraph; the
9	Director may approve the request change using the procedures in 40 CFR 60.19(f).
10	(6) shall submit reports in electronic or paper format postmarked on or before the submittal due dates.
11	(j) Excess Emissions and Start up and Shut down. All OSWI units shall comply with Rule .0535, Excess Emissions
12	Reporting and Malfunctions, of this Subchapter.
13	(k) Operator Training and Certification.
14	(1) No OSWI unit shall be operated unless a fully trained and qualified OSWI unit operator is
15	accessible, either at the facility or available within one hour. The trained and qualified OSWI unit
16	operator may operate the OSWI unit directly or be the direct supervisor of one or more other plant
17	personnel who operate OSWI unit.
18	(2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR
19	60.3014(c) by the latest of:
20	(A) January 1, 2010,
21	(B) six month after OSWI unit startup, or
22	(C) six month after an employee assumes responsibility for operating the OSWI unit or
23	assumes responsibility for supervising the operation of the OSWI unit.
24	(3) Operator qualification shall be valid from the date on which the training course is completed and
25	the operator successfully passes the examination required in 40 CFR 60.3014 (c)(2).
26	(4) Operator qualification shall be maintained by completing an annual review or refresher course
27	covering:
28	(A) update of regulations;
29	(B) incinerator operation, including startup and shutdown procedures, waste charging, and ash
30	handling;
31	(C) inspection and maintenance;
32	(D) responses to malfunctions or conditions that may lead to malfunction; and
33	(E) discussion of operating problems encountered by attendees.
34	(5) Lapsed operator qualification shall be renewed by:
35	(A) Completing a standard annual refresher course as specified in Subparagraph (4) of this
36	Paragraph for a lapse less than three years, and

1		(B) Repeating the initial qualification requirements as specified in Subparagraph (3) of this
2		Paragraph for a lapse of three years or more.
3	(6)	The owner or operator of the OSWI unit subject to the requirements of this Rule shall:
4		(A) have documentation specified in 40 CFR 60.3019(a) and (c) available at the facility and
5		readily accessible for all OSWI unit operators and are suitable for inspection upon request;
6		(B) establish a program for reviewing the documentation specified in Part (A) of this
7		Subparagraph with each OSWI unit operator in a manner that the initial review of the
8		information listed in Part (A) of this Subparagraph shall be conducted by the later of the
9		three dates: January 1, 2010, six month after OSWI unit startup, or six month after an
10		employee assumes responsibility for operating the OSWI unit or assumes responsibility for
11		supervising the operation of the OSWI unit; and subsequent annual reviews of the
12		information listed in Part (A) of this Subparagraph shall be conducted no later than twelve
13		month following the previous review.
14	(7)	The owner or operator of the OSWI unit shall follow the procedures in 40 CFR 60.3020 if all
15		qualified OSWI unit operators are temporarily not at the facility and not able to be at the facility
16		within one hour.
17	(1) Waste Mana	gement Plan.
18	(1)	The owner or operator of the OSWI unit shall submit a waste management plan that identifies in
19		writing the feasibility and the methods used to reduce or separate components of solid waste from
20		the waste stream in order to reduce or eliminate toxic emissions from incinerated waste. A waste
21		management plan shall be submitted to the Director before September 1, 2010.
22	(2)	The waste management plan shall include:
23		(A) consideration of the reduction or separation of waste-stream elements such as paper,
24		cardboard, plastics, glass, batteries, or metals; and the use of recyclable materials;
25		(B) identification of any additional waste management measures;
26		(C) implementation of those measures considered practical and feasible, based on the
27		effectiveness of waste management measures already in place;
28		(D) the costs of additional measures and the emissions reductions expected to be achieved; and
29		(E) any other environmental or energy impacts.
30	(m) Compliance	e Schedule.
31	(1)	- This Paragraph applies only to OSWI that commenced construction on or before December 9, 2004.
32	(2)	The owner or operator of an OSWI unit shall submit a permit application, including a compliance
33		schedule, to the Director before January 1, 2008.
34	(3)	All OSWI shall be in compliance with this Rule no later than January 1, 2010.
35	(4)	The owner or operator of an CISWI unit shall notify the Director within 10 business days after the
36		OSWI unit is to be in final compliance whether the final compliance has been achieved. The final
37		compliance is achieved by completing all process changes and retrofitting construction of control

1		devices, as specified in the permit application and required by its permit, so that, if the affected
2		OSWI unit is brought on line, all necessary process changes and air pollution control devices would
3		operate as designed and permitted. If the final compliance has not been achieved the owner or
4		operator of the OSWI unit, shall submit a notification informing the Director that the final
5		compliance has not been met and submit reports each subsequent calendar month until the final
6		compliance is achieved.
7	(5)	The owner or operator of an OSWI unit who closes the OSWI unit and restarts it before January 1,
8		2010 shall submit a permit application, including a compliance schedule, to the Director. Final
9		compliance shall be achieved by January 1, 2010.
10	(6)	The owner or operator of an OSWI unit who closes the OSWI unit and restarts it after January 1,
11		2010, shall submit a permit application to the Director and shall complete the emission control
12		retrofit and meet the emission limitations of this Rule by the date that the OSWI unit restarts
13		operation. The initial performance test shall be conducted within 30 days of restarting the OSWI
14		unit.
15	(7)	The permit applications for OSWI units shall be processed under 15A NCAC 02Q .0500, Title V
16		Procedures.
17	(8)	The owner or operator of an OSWI unit who plans to close it rather than comply with the
18		requirements of this Rule shall submit a closure notification including the date of closure to the
19		Director by January 1, 2008, and shall cease operation by January 1, 2010.
20		
21	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4), (5), (10); 40 CFR
22		60.3014 through 60.3020;
23		Eff. August 1, 2007.
24		Repealed Eff;
25		
26		

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3	15A NCAC 02I	D.1212 SMALL MUNICIPAL WASTE COMBUSTORS
4	(a) Applicability	y. This Rule applies to Class I municipal waste combustors, as defined in Rule .1202 of this Section.
5	(b) Definitions.	. For the purpose of this Rule, the definitions contained in 40 CFR 60.1940 (except administrator
6	means the Direc	tor of the Division of Air Quality) apply in addition to the definitions in Rule .1202 of this Section.
7	(c) Emission St	andards.
8	(1)	The emission standards in this Paragraph apply to any municipal waste combustor subject to the
9		requirements of this Rule except where Rule .0524, .1110, or .1111 of this Subchapter applies.
10		However, when Subparagraphs (13) or (14) of this Paragraph and Rule .0524, .1110, or .1111 of
11		this Subchapter regulate the same pollutant, the more restrictive provision for each pollutant applies,
12		notwithstanding provisions of Rules .0524, .1110, or .1111 of this Subchapter to the contrary.
13	(2)	Particulate Matter. Emissions of particulate matter from each municipal waste combustor shall not
14		exceed 27 milligrams per dry standard cubic meter corrected to seven percent oxygen.
15	(3)	Visible Emissions. The emission limit for opacity from each municipal waste combustor shall not
16		exceed 10 percent average during any six-minute period.
17	(4)	Sulfur Dioxide. Emissions of sulfur dioxide from each municipal waste combustor shall not exceed
18		31 parts per million by volume, dry basis, or potential sulfur dioxide emissions shall be reduced by
19		at least 75 percent volume, dry basis, whichever is less stringent. Percent reduction shall be
20		determined from continuous emissions monitoring data and in accordance with Reference Method
21		19, Section 12.5.4 of 40 CFR Part 60, Appendix A-7. Compliance with either standard is based on
22		a 24 hour daily block geometric average of concentration data corrected to seven percent oxygen.
23	(5)	Nitrogen Oxide. Emissions of nitrogen oxide from each municipal waste combustor shall not exceed
24		the emission limits in Table 3 of 40 CFR Part 60, Subpart BBBB.
25	(6)	Odorous Emissions. Each municipal waste combustor shall comply with Rule .1806 of this
26		Subchapter for the control of odorous emissions.
27	(7)	Hydrogen Chloride. Emissions of hydrogen chloride from each municipal waste combustor shall
28		not exceed 31 milligrams per dry standard cubic meter (31 parts per million by weight as determined
29		by Reference Method 26 or 26A of 40 CFR Part 60, Appendix A-8) or potential hydrogen chloride
30		emissions shall be reduced by at least 95 percent of the mass concentration, dry basis, whichever is
31		less stringent. Compliance with this Part shall be determined by averaging emissions over three one-
32		hour test runs, with paired data sets for percent reduction and correction to seven percent oxygen.
33	(8)	Mercury Emissions. Emissions of mercury from each municipal waste combustor shall not exceed
34		0.080 milligrams per dry standard cubic meter (as determined by Reference Method 29 of 40 CFR
35		Part 60, Appendix A-8) or potential mercury emissions shall be reduced by at least 85 percent of the
36		mass concentration, basis, whichever is less stringent. Compliance with this Subparagraph shall be

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15A NCAC 02D .1212 is proposed for repeal as follows:

Commented [ZV33]: "DAQ has not identified any existing sources subject to this rule. Therefore, we are seeking Stakeholder comment on the following options: (1) the retention and modification of the existing rule to incorporate the current federal emission guidelines, or (2) the repeal of the rule."

1		determined by averaging emissions over three one hour test runs, with paired data sets for percent
2		reduction and correction to seven percent oxygen.
3	(9)	Lead Emissions. Emissions of lead from each municipal waste combustor shall not exceed 0.490
4		milligrams per dry standard cubic meter and corrected to seven percent oxygen (as determined by
5		Reference Method 29 of 40 CFR Part 60, Appendix A-8).
6	(10)	Cadmium Emissions. Emissions of cadmium from each municipal waste combustor shall not
7		exceed 0.040 milligrams per dry standard cubic meter, corrected to seven percent oxygen (as
8		determined by Reference Method 29 of 40 CFR Part 60, Appendix A 8).
9	(11)	Dioxins and Furans. Emissions of dioxins and furans from each municipal waste combustor shall
10		not exceed:
11		(A) 60 nanograms per dry standard cubic meter (total mass) for facilities that employ an
12		electrostatic precipitator based emission control system, or
13		(B) 30 nanograms per dry standard cubic meter (total mass) for facilities that do not employ an
14		electrostatic precipitator based emission control system.
15		Compliance with this Subparagraph shall be determined by averaging emissions over three test runs
16		with a minimum four hour run duration, performed in accordance with Reference Method 23 of 40
17		CFR Part 60, Appendix A-7, and corrected to seven percent oxygen.
18	(12)	-Fugitive Ash.
19		(A) On or after the date on which the initial performance test is completed, no owner or operator
20		of a municipal waste combustor shall cause to be discharged to the atmosphere visible
21		emissions of combustion ash from an ash conveying system (including conveyor transfer
22		points) in excess of five percent of the observation period as determined by Reference
23		Method 22 (40 CFR Part 60, Appendix A 7), except as provided in Part (B) of this
24		Subparagraph. Compliance with this Part shall be determined from at least three 1-hour
25		observation periods when the facility transfers ash from the municipal waste combustor to
26		the area where the ash is stored or loaded into containers or trucks.
27		(B) The emission limit specified in Part (A) of this Subparagraph covers visible emissions
28		discharged to the atmosphere from buildings or enclosures, not the visible emissions
29		discharged inside of the building or enclosures, of ash conveying systems.
30	(13)	Toxic Emissions. The owner or operator of a municipal waste combustor shall demonstrate
31		compliance with Section .1100 of this Subchapter in accordance with 15A NCAC 02Q .0700.
32	(14)	Ambient Standards.
33		(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the
34		following annual average ambient air quality standards in milligrams per cubic meter (77-
35		degrees Fahrenheit, 25 degrees Celsius, and 29.92 inches, 760 millimeters of mercury
36		pressure) are arsenic and its compounds (2.3x10-7), beryllium and its compounds (4.1x10-
37		⁶), cadmium and its compounds (5.5x10 ⁻⁶), and chromium (VI) and its compounds (8.3x10 ⁻

1		⁸). These are increments above background concentrations and apply aggregately to all
2		municipal waste combustors at a facility.
3		(B) The owner or operator of a facility with municipal waste combustors shall demonstrate
4		compliance with the ambient standards in Part (A) of this Subparagraph by following the
5		procedures set out in Rule .1106 of this Subchapter. Modeling demonstrations shall
6		comply with the good engineering practice stack height requirements of Rule .0533 of this
7		Subchapter.
8		(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate
9		compliance with the ambient standards under Part (A) of this Subparagraph shall be
10		specified as a permit condition for the facility with municipal waste combustors as their
11		allowable emission limits unless Rule .0524, .1110, or .1111 of this Subchapter requires
12		more restrictive rates.
13	(15)	The emission standards of Subparagraphs (1) through (14) of this Paragraph apply at all times except
14		during periods of municipal waste combustor startup, shutdown, or malfunction that last no more
15		than three hours.
16	(d) Operational	Standards.
17	(1)	The operational standards in this Rule do not apply to any municipal waste combustors subject to
18		this Rule when applicable operational standards in Rule .0524, .1110, or .1111 of this Subchapter
19		apply.
20	(2)	Each municipal waste combustor shall meet the following operational standards:
21		(A) The concentration of carbon monoxide at the municipal waste combustor outlet shall not
22		exceed the concentration in Table 5 of 40 CFR Part 60, Subpart BBBB for each municipal
23		waste combustor. The municipal waste combustor technology named in this table is
24		defined in 40 CFR 60.1940.
25		(B) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste
26		combustor load determined from the highest four-hour block arithmetic average achieved
27		during four consecutive hours in the course of the most recent dioxins and furans stack test
28		that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.
29		(C) The temperature at which the combustor operates measured at the particulate matter control
30		device inlet shall not exceed 63 degrees F (17 degrees C) above the maximum
31		demonstrated particulate matter control device temperature determined from the highest 4-
32		hour block arithmetic average measured at the inlet of the particulate matter control device
33		during four consecutive hours in the course of the most recent dioxins and furans stack test
34		that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.
35		(D) The owner or operator of a municipal waste combustor with activated carbon control
36		system to control dioxins and furans or mercury emissions shall maintain an eight hour
37		block average carbon feed rate at or above the highest average level established during the

1		most recent dioxins and furans or mercury test. The owner or operator of a municipal waste
2		combustor shall calculate the required quarterly usage of carbon using the equation in 40
3		CFR 60.1935(f).
4		(E) The owner or operator of a municipal waste combustor is exempted from limits on load
5		level, temperature at the inlet of the particular matter control device, and carbon feed rate
6		during the annual tests for dioxins and furans, the annual mercury tests (for carbon feed
7		requirements only), the two weeks preceding the annual tests for dioxins and furans, and
8		the two weeks preceding the annual mercury tests (for carbon feed rate requirements only).
9		(F) The limits on load level for a municipal waste combustor are waived when the Director
10		concludes that the emission control standards would not be exceeded based on test
11		activities to evaluate system performance, test new technology or control technology,
12		perform diagnostic testing, perform other activities to improve the performance; or perform
13		other activities to advance the state of the art for emissions controls.
14	(3)	The operational standards of this Paragraph apply at all times except during periods of municipal
15		waste combustor startup, shutdown, or malfunction that last no more than three hours. For periods
16		of municipal waste combustor startup, shutdown, or malfunction that last more than three hours
17		emission data shall not be discarded from compliance calculations and all provisions of 40 CFR
18		60.11(d) apply. During all periods of municipal waste combustor startup, shutdown, or malfunction,
19		data shall be recorded and reported in accordance with the provisions of Paragraphs (f) and (g) of
20		this Rule.
21	(e) Test Methods	and Procedures.
22	(1)	References contained in Table 8 of 40 CFR Part 60, Subpart BBBB shall be used to determine the
23		sampling location, pollutant concentrations, number of traverse points, individual test methods, and
24		other testing requirements for the different pollutants.
25	(2)	Stack tests for all the pollutants shall consist of at least three test runs, as specified in 40 CFR 60.8
26		and use the average of the pollutant emission concentrations from the three test runs to determine
27		compliance with the applicable emission limits of Paragraph (c).
28	(3)	An oxygen (or carbon dioxide) measurement shall be obtained at the same time as pollutant
29		measurements to determine diluent gas levels, as specified in 40 CFR 60.1720.
30	(4)	The equations in 40 CFR 60.1935 shall be used to calculate emission levels at seven percent oxygen
31		(or an equivalent carbon dioxide basis), the percent reduction in potential hydrogen chloride
32		emissions, and the reduction efficiency for mercury emissions. Other required equations are
33		contained in individual test methods specified in Table 6 of 40 CFR Part 60, Subpart BBBB.
34	(5)	The owner or operator may apply to the Director for approval under 40 CFR 60.8(b) to use a
35		reference method with minor changes in methodology, use an equivalent method, use an alternative
36		method the results of which the Director has determined are adequate for demonstrating compliance,

1		waive the requirement for a performance test because the owner or operator have demonstrated
2		compliance by other means, or use a shorter sampling time or smaller sampling volume.
3	(6)	The test methods and procedures described in Section 15A NCAC 02D .2600 of this Subchapter, 40
4		CFR Part 60, Appendix A and 40 CFR Part 61, Appendix B shall be used to determine compliance
5		with emission standards in Paragraph (c) according to table 8 of 40 CFR Part 60, Subpart BBBB.
6	(7)	-Method 29 of 40 CFR Part 60, Appendix A 8 shall be used to determine emission rates for metals
7		for toxic evaluations except for chromium (VI). Method 29 shall be used only to collect samples
8		and SW-846 Method 0060 shall be used to analyze the samples of chromium (VI).
9	(8)	The owner or operator shall conduct initial stack tests to measure the emission levels of dioxins and
10		furans, cadmium, lead, mercury, beryllium, arsenic, chromium (VI), particulate matter, opacity,
11		hydrogen chloride, and fugitive ash. Annual stack tests for the same pollutants except beryllium,
12		arsenic, and chromium (VI) shall be conducted no less than 9 months and no more than 15 months
13		since the previous test and must complete five performance tests in each five year calendar period.
14	(9)	The owner or operator must use results of stack tests for dioxins and furans, cadmium, lead, mercury,
15		particulate matter, opacity, hydrogen chloride, and fugitive ash to demonstrate compliance with the
16		applicable emission limits in this rule except for carbon monoxide, nitrogen oxides, and sulfur
17		dioxide.
18	(10)	The owner or operator must use results of continuous emissions monitoring of carbon monoxide,
19		nitrogen oxides, and sulfur dioxide to demonstrate compliance with the applicable emission limits
20		in this rule. The data from the continuous opacity monitoring system shall not be used to determine
21		compliance with the opacity limit.
22	(11)	The testing frequency for dioxin and furan may be reduced if the conditions under 40 CFR
23		60.1795(b) are met.
24	(12)	The Director may require the owner or operator of any municipal waste combustor subject to this
25		Rule to test his municipal waste combustor to demonstrate compliance with the emission standards
26		in Paragraph (c) of this Rule.
27	(f) Monitoring,	Recordkeeping, and Reporting.
28	(1)	The owner or operator shall comply with the monitoring, recordkeeping, and reporting requirements
29		developed pursuant to Section .0600 of this Subchapter.
30	(2)	The owner or operator that has installed air pollution abatement equipment to reduce emissions of
31		hydrogen chloride shall install, operate, and maintain continuous parametric monitoring equipment
32		to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.
33	(3)	The owner or operator shall:
34		(A) install, calibrate, operate, and maintain, for each municipal waste combustor, continuous
35		emission monitors to determine opacity, sulfur dioxide emissions, nitrogen oxides
36		emissions, carbon monoxide, and oxygen (or carbon dioxide) according to 40 CFR 60.1715-
37		through 60.1770;

1	(B) monitor load level of each municipal waste combustor according to 40 CFR 60.1810 and
2	60.1825;
3	(C) monitor temperature of the flue gases at the inlet of the particulate matter air pollution
4	control device according to 40 CFR 60.1815 and 60.1825;
5	(D) monitor carbon feed rate if activated carbon is used to abate dioxins and furans or mercury
6	emissions according to 40 CFR 60.1820 and 60.1825;
7	(E) maintain records of the information listed in 40 CFR 60.1830 through 60.1855 for a period
8	of at least five years;
9	(F) submit a semiannual report specified in 40 CFR 60.1885, no later than February 1 and
10	August 1 each year; and
11	(G) submit semiannual reports specified in 40 CFR 60.1900 of any recorded pollutant or
12	parameter that does not comply with the pollutant or parameter limit specified in this
13	Section using the schedule specified in 40 CFR 60.1895.
14	(g) Excess Emissions and Start up and Shut down. All municipal waste combustors subject to this Rule shall comply
15	with Rule .0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.
16	(h) Operator Certification.
17	(1) Each chief facility operator and shift supervisor shall obtain and keep a current provisional
18	certification within six months after he transfers to the municipal waste combustion facility or six
19	months after he is hired to work at the municipal waste combustor facility.
20	(2) Each chief facility operator and shift supervisor shall have obtained a full certification or have
21	scheduled a full certification exam with the American Society of Mechanical Engineers (ASME
22	QRO 1-1994) after he transfers to the municipal waste combustor facility or six months after he is
23	hired to work at the municipal waste combustor facility.
24	(3) The owner or operator of a municipal waste combustor facility shall not allow the facility to be
25	operated at any time unless one of the following persons is on duty at the affected facility:
26	(A) a fully certified chief facility operator;
27	(B) a provisionally certified chief facility operator who is scheduled to take the full certification
28	exam;
29	(C) a fully certified shift supervisor; or
30	(D) a provisionally certified shift supervisor who is scheduled to take the full certification
31	exam.
32	(4) If the certified chief facility operator and certified shift supervisor both are unavailable, a
33	provisionally certified control room operator at the municipal waste combustor may fulfill the
34	certified operator requirement. Depending on the length of time that a certified chief facility
35	operator and certified shift supervisor are away, one of three criteria shall be met:

1	(A)	When the certified chief facility operator and certified shift supervisor are both offsite for
2		12 hours or less and no other certified operator is on-site, the provisionally certified control
3		room operator may perform those duties without notice to or approval by the Director.
4	(B)	When the certified chief facility operator and certified shift supervisor are offsite for more
5		than 12 hours, but for two weeks or less, and no other certified operator is on site, the
6		provisionally certified control room operator may perform those duties without notice to
7		or approval by the Director. However, the owner or operator must record the periods when
8		the certified chief facility operator and certified shift supervisor are offsite and include the
9		information in the annual report as specified under 40 CFR 60.1885(1).
10	(C)	When the certified chief facility operator and certified shift supervisor are offsite for more
11		than two weeks and no other certified operator is on site, the provisionally certified control
12		room operator may perform those duties without notice to or approval by the Director.
13		However, the owner or operator shall notify the Director in writing and submit a status
14		report and corrective action summary to the Director every four weeks. In the notice, the
15		owner or operator shall state what caused the absence and what is being done to ensure that
16		a certified chief facility operator or certified shift supervisor is on site. If the Director
17		notifies the owner or operator that the status report or corrective action summary is
18		disapproved, the municipal waste combustor may continue operation for 90 days, but then
19		shall cease operation. If corrective actions are taken in the 90 day period such that the
20		Director withdraws the disapproval, municipal waste combustor operations may continue.
21	(D)	The Director shall disapprove the status report and corrective action summary report,
22		described in Part (C) of this Subparagraph, if operating permit requirements are not being
23		met, the status or corrective action reports indicate that the effort to have a certified chief
24		facility operator or certified shift supervisor on site as expeditiously as practicable is not
25		being met, or the reports are not delivered in a timely manner.
26	The referenced ASME ex	xam (ASME QRO-1-1994), "Standard for the Qualification and Certification of Resource
27	Recovery Facility Opera	tors," in this Paragraph is hereby incorporated by reference and includes subsequent
28	amendments and editions	s. Copies of the referenced ASME exam may be obtained from the American Society of
29	Mechanical Engineers (A	SME), 22 Law Drive, Fairfield, NJ 07007, at a cost of forty-nine dollars (\$49.00).
30	(i) Training.	
31	(1) The ow	mer or operator of each municipal waste combustor shall develop and update on a yearly
32	basis a	site specific operating manual that shall address:
33	(A)	a summary of all applicable requirements in this Rule;
34	(B)	-a description of the basic combustion principles that apply to municipal waste combustors;
35	(C)	procedures for receiving, handling, and feeding municipal solid waste;
36	(D)	procedures to be followed during periods of startup, shutdown, and malfunction of the
37		municipal waste combustor;

1		(E) procedures for maintaining a proper level of combustion air supply;
2		(F) procedures for operating the municipal waste combustor in compliance with the
3		requirements contained in 40 CFR 60 Subpart JJJ;
4		(G) procedures for responding to periodic upset or off specification conditions;
5		(H) procedures for minimizing carryover of particulate matter;
6		(I) procedures for handling ash;
7		(J) procedures for monitoring emissions from the municipal waste combustor; and
8		(K) procedures for recordkeeping and reporting.
9		The operating manual shall be updated continually and be kept in a readily accessible location for
10		all persons required to undergo training under Subparagraph (2) of this Paragraph. The operating
11		manual and records of training shall be available for inspection by the personnel of the Division on
12		request.
13	(2)	The owner or operator of the municipal waste combustor plant shall establish a training program to
14		review the operating manual according to the schedule specified in Parts (A) and (B) of this
15		Subparagraph with each person who has responsibilities affecting the operation of the facility
16		including chief facility operators, shift supervisors, control room operators, ash handlers,
17		maintenance personnel, and crane and load handlers:
18		(A) A date prior to the day when the person assumes responsibilities affecting municipal waste
19		combustor operation; and
20		(B) Annually, following the initial training required by Part (A) of this Subparagraph.
21		
22	History Note:	Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 40 CFR 60.35b; 40 CFR 60.34e; 40
23		CFR 60.1515;
24		Eff. July 1, 2010.
25		Repealed
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