- 15A NCAC 13B .0830 is amended with changes as published in 33:04 NCR 404 as follows:

3	15A NCAC 13H	3 .0830	INCO	RPORA	TION B	Y REFER	ENCE							
4	(a) All Sections	of the C	ode of F	ederal R	egulation	s (CFR) cit	ed in thi	s Section	n are h	ereby i	incorpo	ated	by refere	nce,
5	including subs	equent	amendm	ents or	additio	ns. <u>additi</u>	ons, ar	nd may	be	obtain	ed fre	e of	charge	<u>at</u>
6	https://www.gpc	o.gov/fds	<u>ys/.</u>											
7	(b) Copies of	Federal :	statutes,	<u>US Env</u>	rironment	al Protection	on Ager	ncy (EPA	A) and	d Ame	rican So	ociety	for Tes	sting
8	Materials (AST)	<u>M)</u> test m	nethods a	and proc	edures, ar	nd other pu	blished	standard	s refe	renced	in this S	Sectio	on are he	reby
9	incorporated by	reference	e, includ	ing subs	equent an	nendments	or addit	ions.						
10	(c) Copies of al	l materia	l incorp	orated by	y reference	ce <u>in this S</u>	ection a	re availal	ble for	r inspe	ction <u>fr</u>	ee of	<u>charge</u> a	t the
11	Department of <u>I</u>	Environm	nental Qu	uality Er	vironme	nt and Natu	ıral Res	ources, I	Divisi	on of V	Vaste N	lanag	ement, S	olid
12	Waste Section	n, <u>217</u>	West	Jones	Street,	Raleigh,	N.C.	27603	or	the	Divisio	n's	website	at
13	https://deq.nc.go	ov/about/	divisions	s/waste-r	nanagem	<u>ent.</u> 401 Oł	erlin Ro	ad, Rale	igh, N	I.C. 27	699-16 /	1 6.		
14	(d) Material inc	orporated	l by refe	rence in	the Feder	al Register	may be	obtained	at Ge	vernme	ent Insti	tutes	, 15200 N	IBN
15	Way, Blue Ridg	3e Sumn	nit, PA	17214 at	a cost o	of one thou	sand fiv	e hundr	ed six	ty seve	en dolla	rs an	d fifty c	ents
16	(\$1,567.50). Fee	leral Reg	jister ma	terials ar	e codifie	d once a ye	ar and r	nay be o	btaine	ed at the	e above	addr	ess for a	cost
17	of: 40 CFR 190	-259 thir	ty nine c	lollars a	nd sevent	ty five cent	s (\$39.7	'5), 40 C	FR 42	<u>25 699</u>	sixty d	ollars	and sev	enty
18	five cents (\$60	.75) or a t	t http://w	ww.gpo	access.ge	v/cfr.								
19														
20	History Note:	Author	ity G.S.	130A-29	1.1;									
21		Eff. Oc	tober 1,	2009;										
22		Pursua	ent to G.	S. 150B-	21.3A, ri	ule is neces	ssary wi	thout su	bstant	tive pul	blic inte	rest.	Eff. June	: 24,
23		2017. 2	<u>2017;</u>											
24		<u>Amend</u>	ed Eff. <mark>[.</mark>	<mark>lanuary</mark> j	<u>February</u>	<mark>v</mark> 1, 2019.								
25														

15A NCAC 13B .0831 is readopted with changes as published in 33:04 NCR 404 as follows:

-		
3	15A NCAC 13B	.0831 DEFINITIONS
4	In addition to the	e terms defined in G.S. 130A-290, as used in this Section the following terms are defined as follows:
5	have the followir	ng meanings:
6	(1)	"Agronomic rates" are defined as means those rates that provide the nitrogen and other nutrient
7		needs of the crop based on available realistic yield expectations (RYE) established for a soil series
8		through published Cooperative Extension Service bulletins, Natural Resources Conservation
9		Service publications publications, or county soil surveys, but do not overload the soil with nutrients
10		or other constituents which that may eventually leach to groundwater, limit crop growth, or degrade
11		adversely impact soil quality.
12	(2)	"Annual septage application rate" means the maximum amount, in gallons, of septage that can may
13		be applied to a unit area of land during a 365-day period.
14	(3)	"CFR" means Code of Federal Regulations.
15	(4)	"Department" means Department as defined in G.S. 143-212.
16	(5)	"Division" means the Division of Waste Management in the Department. All rules cited in this
17		Section, under the authority of the Division, may be obtained at 401 Oberlin Road, Raleigh, North
18		Carolina 27604, or at the Division's web page at www.wastenotnc.org.
19	(6)<u>(3)</u>	"Land application" shall mean means the spraying or spreading of septage onto the land surface; the
20		injection of septage below the land surface; or the incorporation of septage into the soil so that the
21		septage can condition conditions the soil or fertilize fertilizes crops or vegetation grown in the soil.
22	(7)<u>(4)</u>	"Licensed Geologist" means licensed geologist as defined in G.S. 89E-3. an individual who is
23		licensed to practice geology in accordance with G.S. 89E.
24	<u>(5)</u>	"Licensed Soil Scientist" means licensed soil scientist as defined in G.S. 89F-3.
25	(8)<u>(6)</u>	"Nutrient Management Plan" means a plan to define the management requirements and nutrient
26		needs of crops to be grown on a septage land application site, including the amount, sources,
27		placement placement, and timing of nutrient applications to maximize the nutrient uptake of the
28		crop. Plan implementation shall protect the environment and maintain crop productivity.
29	(9)<u>(7)</u>	"Place of business" means place of business as defined in G.S. 130A-334. any store, warehouse,
30		manufacturing establishment, place of amusement or recreation, service station, food handling
31		establishment, office, or any other place where people work or are served.
32	(10)<u>(8)</u>	"Place of public assembly" means place of public assembly as defined in G.S. 130A-334. any
33		fairground, auditorium, stadium, church, campground, theater, school, or any other place where
34		people gather or congregate.
35	(11)<u>(9)</u>	"Professional Engineer" means professional engineer as defined in G.S. 89C-3. an individual who
36		is licensed to practice engineering in accordance with G.S. 89C.

1	(12)<u>(10)</u> "Re	esidence" me	ans residence as defined in G.S. 130A-334. any habitable home, hotel, motel,
2	sun	nmer camp, la	bor work camp, mobile home, dwelling unit in a multiple family structure, or any
3	oth	er place wher	e people reside.
4	(13)<u>(11)</u> "Ro	ock" means tl	ne consolidated or partially consolidated mineral matter or aggregate, including
5	bed	lrock or weath	ered rock, not exhibiting the properties of soil.
6	(<u>14)(12)</u> "Se	asonal High V	Water Table" or "SHWT" is <u>means</u> the highest level <u>of the saturated zone in the soil</u>
7	dur	ing a year wi	<u>th normal rainfall.</u> t o which the soil is saturated, as <u>SHWT</u> may be determined <u>in</u>
8	the	field through	identification of redoximorphic features in the soil profile, monitoring of the water
9	<u>tabl</u>	le elevation,	or modeling of predicted groundwater elevations. profile including low chroma
10	mol	ttling. This do	es not include temporary perched conditions. Alternatively, the SHWT can also be
11	dete	ermined from	water level measurements or via soil/groundwater modeling.
12	(15)<mark>[(13)]</mark>	"Septag	<mark>e" means septage as defined in G.S. [130A-290(a)(32).]</mark> 130A-290(a)(32) and also
13	sha	ll include was	hings from the interior of septage handling containers, including pumper trucks.
14	(16)<mark>[(14)](1.</mark>	<u>3)</u> "Septag	e Management Facility" means land, personnel, and equipment used in the
15	mai	nagement of s	eptage, including but not limited to, septage management firms as defined in G.S.
16	<u>130</u>)A-290(a)(33)	, septage detention and treatment facilities, and septage land application sites.
17	(17)<mark>[(15)]</mark>(14	<mark>4)</mark> "Soil" 1	neans the unconsolidated mineral and organic material of the land surface. It
18	con	sists of sand,	silt, and clay minerals and variable amounts of organic materials.
19	(18) "So	il Scientist" n	neans an individual who is licensed to practice soil science in accordance with G.S.
20	891	.	
21	(19) [(16)](1:	<mark>5)</mark> "Soil te	xtural classes" means soil classification based upon size distribution of mineral
22	par	ticles in the f	ine-earth fraction less than two millimeters in diameter. The fine-earth fraction
23	incl	ludes sand (2.	0-0.05 mm in size), silt (0.05 mm -0.002 mm), and clay (less than 0.002 mm in
24	size	e) particles. T	he specific textural classes are shall be defined as follows:
25	(a)	"Sand"	means soil material that contains 85 percent or more of sand; the percentage of silt
26		plus 1.5	times the percentage of clay less than 15;
27	(b)	"Loamy	r sand" means soil material that contains at the upper limit 70 to 91 percent sand,
28		and the	percentage silt plus 1.5 times the percentage of clay is not less than 15,15; at the
29		<mark>lower li</mark>	mit contains not less than 70 to 85 percent sand, and the percentage of silt plus
30		twice th	e percentage of clay is less than 30;
31	(c)	"Sandy	loam" means soil material that contains either:
32		(i)	7 to 20 percent clay, <u>52 percent or more sand</u> , and the percentage of silt plus twice
33			the percentage of clay exceeds 30: 30, and contains 52 percent or more sand; or
34		(ii)	less than 7 percent clay, less than 50 percent silt, and more than 43 percent sand;
35	(d)	"Loam"	means soil material that contains 7 to 27 percent clay, 28 to 50 percent silt, and 52
36		percent	or less sand;
37	(e)	"Silt loa	m" means soil material that contains either:

1		(i)50 percent or more silt and 12 to 27 percent clay; or
2		(ii) <u>contains</u> 50 to 80 percent silt and less than 12 percent clay;
3	(f)	"Silt" means soil material that contains 80 percent or more silt and less than 12 percent
4		clay;
5	(g)	"Sandy clay loam" means soil material that contains 20 to 35 percent clay, elay and less
6		than 28 percent silt, and more than 45 percent sand;
7	(h)	"Clay loam" means soil material that contains 27 to 40 percent clay and more than 20 to
8		46 percent sand;
9	(i)	"Silty clay loam" means solid material that contains 27 to 40 percent clay and 20 percent
10		or less sand;
11	(j)	"Sandy clay" means soil material that contains 35 percent or more clay and 45 percent or
12		more sand;
13	(k)	"Silty clay" means soil material that contains 40 percent or more clay and 40 percent or
14		more silt; and
15	(l)	"Clay" means soil material that contains 45 percent or less sand, sand and less than 40
16		percent silt.
17	(20) "Tee	hnical specialist" means an individual designated by the Soil and Water Conservation
18	Corr	mission, pursuant to rules adopted by that Commission, to certify animal waste management
19	plan	S.
20	(21)<mark>[(17)](16</mark>	"Treatment of septage" means the preparation of septage for final use or disposal.
21	Trea	tment may include includes, but is not limited to, thickening, stabilization, and dewatering of
22	sept	age. Treatment does shall not include storage of septage.
23	Definitions in 40 CFR	503.9(d), (g), (h), (j), (k), (l), (r), (t), (u), (v), (w), (bb), and in 40 CFR 503.11(a), (b), (c), (d),
24	(f), (g), (h), (I), <u>(i),</u> (k), (l), (m), (n) are incorporated by reference including subsequent amendments and editions.
25	Copies of the Code of	Federal Regulations may be obtained from the Solid Waste Section at no cost.
26		
27	History Note: Auth	ority G.S. 130A-291.1;
28	Eff.	October 1, 2009. <u>2009;</u>
29	<u>Reau</u>	lopted Eff. <mark>[January]February</mark> 1, 2019.

15A NCAC 13B .0832 is readopted with changes as published in 33:04 NCR 404 as follows:

-		
3	15A NCAC 13H	3.0832 GENERAL PROVISIONS
4	(a) General per	mitting requirements.
5	(1)	No person shall manage septage, or any part of septage, or operate a Septage Management Firm
6		without first obtaining a permit from the Division as required under G.S. 130A-291.1(c);
7	(2)	The permit requirement of G.S. 130A-291.1(c) applies to persons who remove septage, and other
8		waste materials or spent media from wastewater systems permitted by the Department of Health and
9		Human Services, Division of Environmental Health, under the authority of Article 11, Chapter 130A
10		of the North Carolina General Statutes;
11	(3)	The permit requirement of G.S. 130A-291.1(c) applies to persons who manage septage generated
12		from properties which that they own, lease lease, or manage as part of a business, including but not
13		limited to such as mobile homes, mobile home parks, restaurants, and other residential and
14		commercial property;
15	(4)	The Division may deny a permit application, application in accordance with G.S. 130A-295.3(c);
16	(5)	The Division may require an applicant to demonstrate substantial compliance in accordance with
17		G.S. 130A-294(b2)(2);
18	(6)	All conditions for permits Permits issued in accordance with this Section shall be followed;
19	(7)	Where specified in this Section, permit applications or specific portions of applications shall be
20		prepared by a qualified environmental professional in accordance with Rule .0202(a)(3) of this
21		Subchapter; and
22	(8)	Initial septage land application site and detention and treatment facility permits shall be issued valid
23		for a maximum of one year. <u>Subsequent permits [may] shall</u> be valid for [up to] five years. The
24		Division may issue a subsequent permit for less than five years based on any of the following factors:
25		Renewal permits shall be issued for five years if the facility has not had a major violation and records
26		have been maintained in accordance with this Section.
27		(A) the duration of the landowner authorization or wastewater treatment plant authorization;
28		(B) the compliance history of the operator:
29		(C) if any of the information for the permit application was received after the due date; or
30		(D) to allow the due date for a subsequent permit application to be the same date as the septage
31		firm permit application due date.
32	(b) Portable san	itation permitting provisions.
33	(1)	A mobile or modular office that meets the criteria of G.S. 130A-291.2 shall be considered a chemical
34		or portable toilet as defined in G.S. 130A-290(a)(1c). Leaks or overflows of the <u>A</u> storage tank at a
35		mobile or modular office shall not release septage onto the ground. be considered illegal land
36		application. The <mark>office occupant and</mark> owner <u>and the lessee</u> of the mobile or modular office shall be

1		considered to be the responsible party parties and shall will be subject to the requirements of
2		Paragraph (a) of this Rule.
3	(2)	No person shall rent or lease portable toilet(s) or contract or subcontract to rent or lease portable
4		toilet(s) to another person or manage or dispose of waste from portable toilet(s), regardless of
5		ownership of the toilet(s) toilet(s), unless that person is permitted to operate a septage management
6		firm.
7	(3)	Placement of a chemical or portable toilet as defined in G.S. 130A-290(a)(1c) for potential use in
8		North Carolina shall be considered operation of a septage management firm which that requires a
9		permit.
10	(c) Recreationa	l vehicle waste provisions.
11	(1)	Domestic septage from a recreational vehicle shall be managed in accordance with this Section or
12		shall flow directly into a wastewater treatment system permitted by the Department of
13		Environmental Quality. Environment and Natural Resources.
14	(2)	Wastewater from recreational vehicles that are tied down, blocked up, or that are not relocated,
15		relocated on a regular basis, and that are not connected to an approved wastewater system shall be
16		managed in accordance with Article 11, Chapter 130A of the NC General Statutes.
17	(3)	Recreational vehicle dump stations that do not discharge directly to a wastewater treatment system
18		permitted by the Department of Environmental Quality Environment and Natural Resources shall
19		be permitted as a septage detention and treatment facility in accordance with Rule .0836 of this
20		Section.
21	(d) Alternate se	eptage management method limitations.
22	(1)	Grease septage, or any part of grease septage, shall not be introduced or reintroduced into a grease
23		trap, interceptor, separator, or other appurtenance used for the purpose of removing cooking oils,
24		fats, grease, and food debris from the waste flow generated from food handling, preparation, and
25		cleanup unless the Division has received written approval from the wastewater treatment plant
26		operator or the onsite wastewater system permitting authority that reintroduction is acceptable.
27	(2)	Septage, or any part of septage, shall not be reintroduced into an onsite wastewater system unless
28		approved pursuant to G.S. 130A-343(c).
29	(3)	Septage, or any part of septage, shall not be placed in containers at restaurants designated for yellow
30		grease.
31	(4)	Septage, or any part of septage, shall not be disposed of in a municipal solid waste landfill unless
32		the waste passes the paint filter test Paint Filter Liquids Test as defined by EPA S.W. 846 Test
33		Method 9095B which can be accessed at no cost at https://www.epa.gov/hw-sw846, and the landfill
34		receiving the waste has provided the Division written documentation that the specific material will
35		be accepted.
36	(5)	Septage, or any part of septage, shall not be disposed of in a dumpster unless the waste passes the
37		Paint Filter Liquids Test as defined by EPA S.W. 846 [Test] Method 9095B which can be accessed

1		at no cost at http://www.epa.gov/osw/hazard/testmethods/sw846/online/index.htm,
2		[https://www.epa.gov/hw 26 sw846,] and the landfill receiving the waste is a properly permitted
3		municipal solid waste landfill, in accordance with Section .1600 of this Subchapter. Subchapter, and
4		the landfill operator has provided the Division written documentation that the specific material will
5		be accepted.
6	(6)	Septage, or any part of septage, managed through subsurface disposal shall be considered a
7		treatment facility and shall require a permit in accordance with this Section and G.S. 130A-343.
8	(7)	Facilities receiving septage, or any part of septage, for composting shall be permitted in accordance
9		with Section .1400 of this Subchapter.
10	(e) All training	, training to meet the requirements of G.S. 130A-291.3(a) and (b), must (b) shall be pre-approved by
11	the Division. A	pproval by the Division shall be based on whether the training is in accordance with the Rules in this
12	Section.	
13	(f) Waste from	holding tanks not otherwise addressed in this Section, and from wastewater systems pumped more
14	often than every	30 days, shall not be considered domestic septage and shall not be land applied at a permitted septage
15	land application	site.
16	(g) Inspection a	and entry. The permit holder of a septage management firm or facility shall allow a representative of
17	the Division to:	
18	(1)	Enter enter the permit holder's premises where a regulated facility or activity is located or conducted;
19	(2)	Access access and copy any records required in accordance with this Section or conditions of the
20		permit;
21	(3)	Inspect inspect any facilities, equipment (including monitoring and control equipment), practices
22		practices, or operations regulated by the Division;
23	(4)	Sample sample or monitor for the purposes of assuring permit compliance or as otherwise authorized
24		by the Federal Clean Water Act or the North Carolina Solid Waste Management Act, any substances,
25		parameters parameters, or soils at any location; and
26	(5)	Photograph photograph for the purpose of documenting times of compliance or noncompliance at
27		septage management facilities or to require the permit holder to make such photos for the Division.
28	(h) <u>Washings</u>	from the interior of septage handling containers such as pump trucks shall be managed as septage.
29	Failure of a per-	son to follow a requirement in any rule set forth in this Section or the taking of any action prohibited
30	by any rule in th	nis Section shall constitute a violation of that rule.
31		
32	History Note:	Authority G.S. 130A-291.1, 130A-291.2, 130A-295.3(c), 130A-335;
33		<i>Eff. October 1, 2009;</i>
34		Amended Eff. January 1, 2014. 2014:
35		<u>Readopted Eff. [January]February</u> 1, 2019.

3

15A NCAC 13B .0833

15A NCAC 13B .0833 is readopted with changes as published in 33:04 NCR 404 as follows:

SEPTAGE MANAGEMENT FIRM PERMITS

4 (a) Septage management firm names must shall be distinguishable upon the records of the Division from the name of 5 other septage management firms, limited liability companies, non-profit corporations, business corporations, limited 6 partnerships, sole proprietors, general partners partners, and limited liability partnerships operating in North Carolina. 7 Naming preference shall be given to companies that are listed as incorporated with the NC Secretary of State's office. 8 (b) A person who has not operated a septage management firm during the previous calendar year shall obtain four 9 hours of new operator training from the Division prior to receiving a permit to operate a septage management firm. 10 (c) To apply for a permit, a person proposing to operate a septage management firm shall submit the following 11 information to the Division by January 1 of each year: 12 Owner's owner's name, address address, and phone number; (1)13 (2)Business business name, address address, and phone number; 14 (3) Operator operator name, address address, and phone number, if different from owner; 15 (4)Permit permit number, if existing firm; 16 (5) $\frac{1}{1}$ Type(s) of septage handled, and the quantity pumped the previous 12 months, if in operation; 17 Number number of pumper trucks; (6)18 (7)Capacity capacity and type of septage handled by each pumper truck; Vehicle vehicle license and serial numbers of each pumper truck; 19 (8) 20 (9) Counties counties in which the firm operates; 21 (10)Disposal disposal method(s) for septage; 22 (11)Permit permit number for each septage land application site to be used; 23 (12)Permit permit number for each septage detention and treatment facility to be used; 24 (13)Technical any other information that the Division may request that is pertinent to the operation of a 25 septage management firm; firm if it is necessary to determine compliance with the Rules of this 26 Section; 27 (14)Written written authorization on official letterhead or a notarized wastewater treatment plant 28 authorization form shall be submitted from an individual responsible for the operation of each 29 wastewater treatment plant used for disposal indicating: 30 (A) Type(s) type(s) of septage which can that may be discharged at the plant; 31 (B) Where where septage, including grease septage, can may be discharged at the plant or in 32 the collection system; 33 (C) Geographic geographic area from which septage will be accepted; and 34 Duration duration of authorization. authorization; (D) 35 (15)The the appropriate annual permit fee in accordance with G.S. 130A-291.1(e); and 36 The the date, location, number of hours, and provider of annual septage management firm training (16)37 required in accordance with G.S. 130A-291.3(a).

1	(d) Persons that	operate a septage land application site or a septage treatment and detention facility, but do not pump				
2	septage, shall sul	bmit the following information to the Division by January 1 of each year to apply for a permit:				
3	(1)	Facility facility name, address, phone number, and county;				
4	(2)	Owner's owner's name, address address, and phone number;				
5	(3)	Operator operator name, address address, and phone number, if different from owner;				
6	(4)	Permit permit number, if existing firm;				
7	(5)	Type(s) type(s) of septage managed;				
8	(6)	Facility facility types and their permit numbers;				
9	(7)	The the name and permit number of all permitted septage management firms using the facility;				
10	(8)	The the date, location, number of hours, and provider of annual training in accordance with G.S.				
11		130A-291.3(b); and				
12	(9)	The the appropriate annual permit fee in accordance with G.S. 130A-291.1(e1).				
13	(e) A septage m	anagement firm permit shall not be issued unless the applicant has submitted to the Division written				
14	documentation o	f authorized access to dispose or otherwise manage septage, or any part of septage, at a wastewater				
15	treatment plant, a permitted septage land application site, a permitted septage treatment facility, or other appropriately					
16	permitted solid waste management facility. Documentation from each plant, site, or other facility shall include the					
17	types and amount of septage which that may be discharged.					
18	(f) Septage man	agement firm permits shall not be issued until all parts of the application have been completed.				
19	(g) Prior to the	ssuance of a septage management firm permit to firms that pump septage, all pumper trucks for the				
20	<u>firm shall be ins</u>	pected and approved by the Division for compliance with Rule .0844 of this Section. A septage				
21	management firr	n permit shall not be issued to firms that pump septage until its pumper truck(s) have been inspected				
22	and approved.					
23	(h) Permits are non transferable. shall not be transferable.					
24	(i) Septage management firm permits are issued for up to one calendar year. Permits issued on or after January 1 shall					
25	be effective until December 31 of that calendar year.					
26						
27	History Note:	Authority G.S. 130A-291.1;				
28		Eff. November 1, 2009. <u>2009;</u>				
29		<u>Readopted Eff. [January]February</u> 1, 2019.				
30						

15A NCAC 13B .0835 is readopted with changes as published in 33:04 NCR 404 as follows:

- 3 15A NCAC 13B .0835 SEPTAGE LAND APPLICATION SITE PERMITS
- 4 (a) No person shall establish, or allow to be established upon any real property owned, operated, leased, or controlled
- 5 <u>by that person</u>, established on his land, a septage management facility to, to treat, manage, store, or dispose of septage,
- 6 or any component of septage, unless a permit has been obtained from the Division. Disposal of septage by trenching
- 7 or burial is prohibited under the rules of this Section. Septage shall not be disposed of by trenching or burial.
- 8 (b) Any person that has not operated as a septage land application site during the previous calendar year shall receive
- 9 at least three hours of new land application site operator training from the Division prior to receiving a permit to
- 10 operate a septage land application site.
- (c) To apply for a permit for a septage land application site, the following information shall be submitted to theDivision:
- 13 (1)Location of the site; 14 Name, name, address, and phone number of: (2)(1) 15 (A) the applicant; the land owner landowner or the owner's landowner's legal representative in control of the 16 **(B)** 17 site; and 18 (C) the proposed operator; 19 location of the site; <u>(2)</u> 20 (3) Written written authorization to operate a septage land application site signed by each landowner (if 21 other than the permit holder) or his the landowner's legal representative; Types types of septage (as defined in G.S. [130A 290] 130A 290) and the proposed annual volume 22 (4)23 of each type of septage proposed for land application per acre, based on the nutrient management 24 plan submitted in accordance with Subparagraph (c)(12) of this Rule; submitted. 25 (5) Substances substances other than septage previously disposed of at this location, and the amounts 26 of those substances; 27 (6)Aerial aerial photography extending for a distance of at least 2500 feet in all directions from the 28 site, with site property boundaries depicted; accurately depicted. Photograph scale shall be 1" = 400 29 feet or less; 30 (7)Alternative alternative plan for the detention or disposal of septage, during adverse weather conditions; conditions that cause the site to be unavailable for [use;] use, such as adverse weather 31 32 conditions; 33 Treatment treatment method for each type of septage to be discharged and the permit number of any (8) 34 treatment facilities; 35 (9) Vicinity vicinity map (county road map) showing the site location; 36 (10)A a written report that documents compliance with Rule .0837 of this Section including: Section, including, but not limited to the following: If required by G.S. 89F, G.S. 89C [89C,] and G.S. 89E, 37

1	a licer	used soil scientist, professional engineer, or licensed geologist shall prepare these documents.
2	[Note:	The North Carolina Board of Licensing of Soil Scientists, Board of Examiners for Engineers
3	and St	urveyors [Surveyors,] and the Board of Licensing of Geologists has determined, via letters
4	dated-	November 16, 2009, March 11, 2010 [2010,] and January 7, 2010, that preparation of
5	docun	nents pursuant to this Paragraph constitutes soil science, practicing engineering, or geology
6	under-	<mark>G.S. 89F, G.S.</mark> 89C [89C,] and G.S. 89E.]
7	(A)	A <u>a</u> representative soils analysis (i.e., <u>such as the</u> Standard Soil Fertility <u>Analysis</u> ,
8		Analysis), conducted within the last six months, on each proposed field of each proposed
9		land application site. The Standard Soil Fertility Analysis representative soils analysis shall
10		[include:] include shall include, but is not necessarily limited to: acidity, base saturation
11		(by calculation), calcium, cation exchange capacity, exchangeable sodium percentage (by
12		calculation), magnesium, manganese, percent humic matter, pH, phosphorus, potassium,
13		and sodium; sodium, and may include additional analyses;
14	(B)	A a total metal analysis for each proposed field shall be conducted for arsenic, cadmium,
15		copper, lead, nickel, selenium, and zinc. A North Carolina Department of Agriculture &
16		Consumer Services (NCDA & CS)(NCSA&CS) mehlich-3 extraction is shall be an
17		acceptable substitute for a total metal analysis. Mercury shall be sampled if the applicant
18		proposes to land apply domestic or industrial or commercial treatment plant septage, or if
19		warranted by previous site use;
20	(C)	Field field description of soil profile(s), based on examinations of excavation pits and auger
21		borings, within four feet of the land surface or to bedrock describing the following
22		parameters by individual diagnostic horizons: thickness of the horizon; texture; color and
23		other diagnostic features; structure; internal drainage; depth, thickness, and type of
24		restrictive horizon(s); and presence or absence and depth of evidence of any seasonal high
25		water table. Applicants may be required to dig pits when necessary for proper evaluation
26		of the soils at the site;
27	(D)	A a soil map, scale 1" = 400 feet or less, map delineating major soil mapping units within
28		each proposed land application site and showing all physical features, location of pits and
29		auger borings, applicable setbacks, setbacks required in accordance with this Section,
30		legends, scale, and a north arrow;
31	(E)	If if the annual application rate is proposed to exceed 125,000 gallons per acre per year,
32		year field descriptions to a depth of six feet feet, shall be required; and
33	(F)	Global Positioning System (GPS) data compatible with the Division's Department's
34		datalogger shall be provided for proposed sites 30 acres or more in size.
35	<u>If requ</u>	ired by G.S. 89F, G.S. 89C, and G.S. 89E, a licensed soil scientist, professional engineer, or
36	licens	ed geologist shall prepare these documents. [Note: The North Carolina Board of Licensing of
37	<u>Soil S</u>	cientists, Board of Examiners for Engineers and Surveyors, and the Board of Licensing of

1		Geologists has determined, via letters dated November 16, 2009, March 11, 2010, and January 7,
2		2010, that preparation of documents pursuant to this Paragraph constitutes soil science, practicing
3		engineering, or geology under G.S. 89F, G.S. 89C, and G.S. 89E.]
4	(11)	Applicants applicants proposing to land apply 200,000 gallons per acre per year or more shall
5		provide a plan for monitoring soil moisture levels and the depth to seasonal wetness to determine
6		when land application can may occur without impacting ground water groundwater or hydraulic
7		overloading. The plan shall include recommendations concerning annual and instantaneous loading
8		rates of liquids, solids, other wastewater constituents constituents, and amendments based on in-situ
9		measurement of saturated hydraulic conductivity in the most restrictive horizon. If required by G.S.
10		89C, G.S. 89F 89F, and G.S. 89E, a professional engineer, licensed soil scientist scientist, or
11		licensed geologist shall prepare these documents. [Note: The North Carolina Board of Examiners
12		for Engineers and Surveyors, Board of Licensing of Soil Scientists Scientists, and the Board of
13		Licensing of Geologists has determined, via letters dated March 11, 2010, November 16, 2009 2009,
14		and January 7, 2010, that preparation of documents pursuant to this Paragraph constitutes practicing
15		engineering, soil science <u>science</u> , or geology , <u>geology</u> under G.S. 89C, G.S. 89F <u>89F</u> , and G.S. 89E.]
16	(12)	Nutrient management plan, prepared by a Technical Specialist, including at least a nutrient
17		management plan prepared by an environmental professional that shall include the following: the
18		following:
19		(A) Crops crops that will be planted on the site, including cover crops, and where each crop
20		will be planted. Crop planting locations shall be depicted on an aerial photograph or on a
21		plat map; map (scale 1" = 400 feet or less);
22		(B) <u>Nitrogen nitrogen</u> needs of the crops based on the realistic yield expectations for the soils
23		on the site, and crop management practices proposed;
24		(C) Crop crop stand density required to meet the realistic yield expectations for the proposed
25		crop;
26		(D) Approximate <u>approximate</u> crop planting times and the seeding or sprigging rates for crops
27		to be established;
28		(E) Crop crop harvest frequency appropriate for the proposed realistic yield expectations and
29		nitrogen needs, and approximate crop harvest times;
30		(F) Approximate <u>approximate</u> monthly discharge rate to match the nitrogen needs and potential
31		uptake of the crop;
32		(G) Sites sites proposed to receive more than 50,000 gallons per acre per year of domestic
33		septage, or domestic or industrial or commercial treatment plant septage septage, or
34		domestic or grease septage that has been treated to remove solids, fats, oils, and grease
35		shall include nitrogen carry over when determining annual application rates;
36		(H) Weed weed control recommendations;
37		(I) Crop crop use or removal;

1		(J) Results results from at least four samples of treated septage if the application is proposing
2		an increased application rate for the land application of septage treated to reduce nutrients;
3		and
4		(K) the signature of the site operator. A Technical Specialist is not required for nutrient
5		management plans for subsequent applications that do not contain changes that would
6		affect nutrient uptake; and
7		(L) All nutrient management plans shall bear the signature of the site operator.
8		For the purposes of this Rule, an environmental professional means a person who has received a
9		post-secondary degree from a college or university [baccalaureate or post-graduate degree from a
10		university] and has training and experience in or related to agronomic principles utilized to manage
11		wastewater. Preparation by an environmental professional shall not be required for nutrient
12		management plans for renewal applications that do not contain changes that would affect nutrient
13		uptake.
14	(13)	Application application rates for sites proposed to receive treated septage shall be determined based
15		on the most limiting nutrient;
16	(14)	Erosion erosion and runoff management plan showing:
17		(A) Buffer <u>buffer</u> locations and widths based on the direction and amount of slope adjacent to
18		the land application site;
19		(B) Vegetation vegetation type and stand density in the buffer areas; and
20		(C) Buffer <u>buffer</u> maintenance fertility requirements.
21	(15)	Proposed proposed land application method, method;
22	(16)	Proposed proposed distribution plan if required in Paragraph (e) of Rule .0837 of this Section;
23	(17)	Sites sites proposing to use spray irrigation as a land application method shall include:
24		(A) The <u>the</u> location of all fixed irrigation heads or the location of traveling gun irrigation lanes;
25		(B) Irrigation irrigation head spacing and traveling gun lane spacing shall be determined based
26		on standards in NC Cooperative Extension Documents AG-553-6 and AG-553-7 which are
27		hereby incorporated by reference including subsequent amendments and additions;
28		[additions,] or other similar publications;
29		(C) The <u>the</u> size of all spray nozzles;
30		(D) System system operating pressure at the irrigation head;
31		(E) <u>Calculation calculation</u> of the wettable acres vs. permitted acreage;
32		(F) Calibration <u>calibration</u> methods and frequency; and
33		(G) Irrigation irrigation system operation and maintenance plan.
34	(18)	Demonstration [demonstration] documentation from the Department of Natural and Cultural
35		Resources from the appropriate State or Federal Government agency that the land application site
36		complies with Paragraph (g) of Rule .0837 Rule .0837(g) of this Section if any part of the site
37		specified for land application is not agricultural land;

1	(19)	The the date, location, number of hours, and provider of annual septage land application site operator				
2	(17)	training required in accordance with G.S. 130A-291.3(b);				
3	(20)	Technical any other information that the Division may request that is pertinent to the suitability of				
4	()	the proposed site; if it is necessary to determine compliance with this Section:				
5	(21)	An an applicant who proposes to land apply septage septage, as defined in G.S. 130A 290, on a				
6		public contact site, shall provide the Division evidence of adequate public notice and the applicant				
7		shall have successfully completed the Land Application of Residuals and Biosolids Course and				
8		maintain a Land Application of Residuals Certificate given issued by the Department of				
9		Environmental Quality; Environment and Natural Resources; and				
10	(22)	An an applicant who proposes to land apply commercial/industrial industrial or commercial				
11		treatment plant septage or domestic treatment plant septage septage, as defined in G.S. 130A 290,				
12		shall have successfully completed the Land Application of Residuals and Biosolids Course and				
13		maintain a Land Application of Residuals Certificate given issued by the Department of				
14		Environmental Quality; Environment and Natural Resources; and				
15	(23)	An an applicant who proposes to land apply septage septage, as defined in G.S. 130A-290, in excess				
16		of 50,000 gallons per acre per year shall provide the Division with evidence of adequate public				
17		notice which shall at a minimum be publication with a local news organization, in a local newspaper,				
18		and shall have successfully completed the Land Application of Residuals and Biosolids Course and				
19		maintain a Land Application of Residuals Certificate issued by the Department of Environmental				
20		Quality; and [Quality.] Environment and Natural Resources.				
21	<u>(24)</u>	an approval letter from the unit of local government having zoning authority over the area where				
22		the facility is to be located stating that the proposed facility meets all of the requirements of the local				
23		zoning ordinance, or that the site is not zoned.				
24	(d) <u>The Division</u>	on shall not issue a permit to land apply septage at a rate Application rates for septage in excess of				
25	50,000 gallons j	per acre per year <mark>and permits or a permit</mark> to land apply <u>domestic treatment plant septage domestic, or</u>				
26	industrial or cor	nmercial treatment plant septage <mark>shall not be granted to persons who have not demonstrated that they</mark>				
27		til the applicant has operated operate a septage land application site in accordance with this Section				
28	for at least a 12	month period.				
29	(e) Application	ns for permits issued in accordance with this Rule shall be submitted to the Division of Waste				
30	-	olid Waste Section, 1646 Mail Service Center, Raleigh NC 27699-1646. Applications for permits will				
31		until all parts of the application have been completed and submitted to the Division.				
32	(f) Applications for permits for sites or treatment methods which that do not meet the standards in accordance with					
33	this Section shall be denied.					
34	(g) Applications for renewal permits issued in accordance with this Rule shall be submitted to the Division at least					
35		the expiration date of the permit. The Division shall notify permit holders of facility permit expiration				
36	dates 120 days prior to permit expiration.					
37	(h) Application	s for permit modification shall be required for the following changes:				

1	(1)	Permitted permitted area or field boundaries;
2	(2)	Property property ownership;
3	(3)	Annual annual application rates;
4	(4)	Receiver receiver crop; or
5	(5)	Types types of septage discharged.
6	(i) Applications	for renewal permits submitted in accordance with Paragraph (g) of this Rule and applications for
7	permit modificat	ions shall not be required to resubmit the information required in Subparagraphs (c)(6), (8), (9), (10),
8	(16), (17), and (1	8) unless changes are made in those plans.
9	(j) Septage land	application site permits are <u>shall</u> not <u>be</u> transferable.
10	(k) Maximum p	ermit <u>Permit</u> duration <mark>including renewals</mark> is <u>shall be</u> five years. in accordance with Rule .0832(a)(8)
11	of this Section.	
12	(1) Issuance of	a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning
13	approvals prior to	o operation of the site.
14		
15	History Note:	Authority G.S. 130A-291.1;
16		Eff. April 1, 2010. <u>2010:</u>
17		<u>Readopted Eff. [January]February 1, 2019.</u>

15A NCAC 13B .0836 is readopted with changes as published in 33:04 NCR 404 as follows:

- 3 15A NCAC 13B .0836 SEPTAGE DETENTION AND TREATMENT FACILITY PERMITS
- 4 (a) No person, shall establish on his land, No person shall establish, or allow to be established upon any real property
- 5 <u>owned, operated, leased, or controlled by that person, on his land, a septage detention and treatment</u> facility, unless a
- 6 permit for the facility has been obtained from the Division or the facility is operating in accordance with a NPDES
- 7 permit issued by the NC Division of Water <u>Resources</u>. Quality.
- 8 (b) Septage detention and treatment facilities shall be designed, located, constructed, and operated in accordance with
- 9 the standards specified in Rule .0841 of this Section.
- 10 (c) To apply for a permit to operate for a septage detention or [and] treatment facility the applicant shall submit the
- 11 following information to the Division:

12	(1)	Name, name, address, and phone number of
13		(A) the applicant;
14		(B) <u>the landowner land owner</u> or the owner's <u>landowner's</u> legal representative in control of the
15		site; and
16		(C) the proposed operator;
17	(2)	Location location of the facility;
18	(3)	Vicinity vicinity map or county road map showing the site location;
19	(4)	Types types of septage to be stored or treated;
20	(5)	A <u>a</u> description of the facility including the size, number, and type of structures to be used at the site
21		and construction materials to be used;
22	(6)	An an explanation of the methods for discharge into and removal from the detention or treatment
23		facility, the methods for treating leaks or spills at the site, and methods for odor control;
24	(7)	Septage septage land application site permit number and the name of any wastewater treatment
25		plant(s) where the septage will be disposed;
26	(8)	Written written documentation of acceptable approved locations to manage any solid or liquid
27		wastes generated at a treatment facility;
28	(9)	An an aerial photograph, extending for a distance of at least 1,000 feet in all directions from the site
29		property lines; lines, scale 1" = 400 feet or less;
30	(10)	Written written authorization to operate a septage detention or treatment facility signed by each
31		landowner (if other than the permit holder) or his <u>the landowner's</u> legal representative; and
32	(11)	Technical any other information that the Division may request that is pertinent to the suitability of
33		the proposed facility. facility if it is necessary to determine compliance with this Section; and
34	<u>(12)</u>	an approval letter from the unit of local government having zoning authority over the area where
35		the facility is to be located, stating that the proposed facility meets all of the requirements of the
36		local zoning ordinance, or that the site is not zoned.

1	(d) Treatment of	f septage shall include aerobic or anaerobic digestion, dewatering or thickening, pressing, centrifuging,
2	the use of organ	nisms or enzymes, and pathogen reduction methods or vector attraction reduction methods other than
3	lime stabilizatio	on. To apply for a permit to construct a septage treatment facility and obtain an interim permit to
4	operate the [fac	<mark>sility]</mark> facility, <mark>for a period not to exceed 12 months, plans and specifications shall be submitted. If</mark>
5	required by G.S	5. 89C, a professional engineer shall prepare these documents. [Note: The North Carolina Board of
6	Examiners for	Engineers and Surveyors has determined, via letter and resolution dated March 11, 2010, that
7	preparation of e	ngineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S.
8	<mark>89C.]</mark>	
9	(e) Treatment s	whall [include] include, but not be limited to, aerobic or anaerobic digestion, dewatering or thickening,
10	pressing, centrit	fuging, the use of organisms or enzymes, and pathogen reduction methods or vector attraction reduction
11	methods other	than lime stabilization. To apply for a permit to operate a septage treatment facility, plans and
12	specifications s	hall be submitted. If required by G.S. 89C, a professional engineer shall prepare these documents.
13	The plans shall	include the information set forth in Paragraph (c) of this Rule and the following: In addition to the
14	requirements of	Paragraph (c) of this Rule, the plans [required by Paragraph (d) of this Rule] shall include:
15	(1)	Site site plan at a scale appropriate to show the detail of the facility, but in no case greater than 100
16		feet per inch;
17	(2)	Engineering engineering plans for the entire system, including treatment, storage, and disposal
18		equipment, and containment structures;
19	(3)	Detail [detailed] drawings that shall be at a scale appropriate to show pumps, tanks, valves, controls,
20		meters, pipes, and other items critical to the operation of the <mark>facility. facility; As-built drawings shall</mark>
21		be submitted if the facility construction is not consistent with the initial drawings:
22	(4)	An an operation and maintenance manual signed by the applicant outlining information and
23		instruction on how the facility is to be operated, equipment maintenance, minimization of odors,
24		required safety and personnel training, and an outline of reports to be submitted to the Division.
25		Contingency plans shall be included to address at least equipment failure, human error, inclement
26		weather, and spill and leak cleanup; and
27	(5)	A <u>a</u> quality assurance plan <u>signed by the applicant</u> for the process and final product if treatment
28		involves meeting pathogen reduction or vector attraction reduction standards.
29	<u>(6)</u>	compliance history for the facility showing no unresolved violations of Federal, State, or local laws,
30		rules, regulations, or ordinances; and
31	<u>(7)</u>	certification that the construction of the treatment facility is complete and consistent with the plans
32		submitted in accordance with this Paragraph;
33	[Note: The Nor	th Carolina Board of Examiners for Engineers and Surveyors has determined, via letter and resolution
34	dated March 1	1, 2010, that preparation of engineering design documents pursuant to this Paragraph constitutes
35	practicing engir	neering under G.S. 89C.]
36	(f) A permit to	operate a septage treatment facility shall be issued pending receipt of the following:

1	(1) Certification [certification] that the construction of the treatment facility is complete and consistent
2	with the plans approved as part of the permit to construct;
3	(2) An [an] updated operation and maintenance manual, including all the information required in
4	Subparagraph (e)(4) of this Rule;
5	(3) As built [as built] drawings if facility construction is not consistent with the approved plans;
6	(4) — Operation [operation] and maintenance manuals and quality assurance plans signed by the applicant;
7	and and a second s
8	(5) Acceptable compliance history for the facility. [facility showing no unresolved violations of Federal,
9	State, or local laws, rules, regulations, or ordinances.]
10	(f)(g) A permit to operate for a new septage detention or a septage and treatment facility shall not be issued until the
11	proposed site has been approved by the Division. Approval by the Division shall be based on whether the facility is
12	in accordance with the Rules of this Section.
13	(g)(h) Operation of a new septage detention or a new septage treatment facility shall not commence until the facility
14	has been inspected by the Division and found to be consistent with the permit application.
15	(h)(i) A permit to operate a treatment facility shall not be issued until the facility has been inspected by the Division
16	and found to be consistent with the permit application and operation has been found to be consistent with the operation
17	and maintenance manual.
18	(i)(j) Application packages for permit renewals for septage treatment facilities shall include:
19	(1) Updated drawings updated drawings, if there are changes to the <u>facility</u> ; facility,
20	(2) Updated site plans updated site plans, (if required as part of original submittal) if there are changes
21	to the <u>initial</u> site <u>plan;</u> plan,
22	(3) <u>A revised updated operation and maintenance manual, if there are changes to the operation and</u>
23	maintenance manual; and
24	(4) A revised updated quality assurance plan, if there are changes to the quality assurance plan. plan for
25	the process and final product if treatment involves meeting pathogen reduction or vector attraction
26	reduction standards.
27	(j)(k) Engineering plans and specifications for marina detention tanks that do not meet the minimum setbacks in
28	.0841(m) Rule .0841(m) of this Section or are located below grade shall be submitted. If required by G.S. 89C, a
29	professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers
30	and Surveyors has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design
31	documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.] The facilities shall be
32	certified to be constructed in substantial compliance with the plans and specifications. specifications submitted in
33	accordance with this Rule. If required by G.S. 89C, a professional engineer shall certify this compliance. [Note: The
34	North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter and resolution dated March
35	11, 2010, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing
36	engineering under G.S. 89C.]

1	(<u>k)(</u> Parts of a	detention and treatment facilities located below grade and lagoons shall be certified to be constructed		
2	in substantial co	in substantial compliance with the plans and specifications submitted in accordance with this Rule. specifications. I		
3	required by G.	S. 89C, a professional engineer shall certify this compliance. [the construction.] [Note: The North		
4	<u>Carolina Board</u>	of Examiners for Engineers and Surveyors has determined, via letter and resolution dated March 11,		
5	2010, that prepa	aration of engineering design documents pursuant to this Paragraph constitutes practicing engineering		
6	<u>under G.S. 89C</u>	.]		
7	(1)(m) Applicat	ions shall be submitted to the Division of Waste Management, Solid Waste Section, 1646 Mail Service		
8	Center, Raleigh	NC 27699-1646. Applications for permits will not be reviewed until all parts of the application have		
9	been completed	and submitted to the Division.		
10	(<u>m)(n)</u> Applica	tions for renewal permits shall be made submitted to the Division at least 90 days prior to the expiration		
11	of the permit. T	he Division will shall notify permit holders of facility permit expiration dates 120 days prior to permit		
12	expiration.			
13	(<u>n)(</u>) Applicat	ions for renewal permits submitted in accordance with Paragraphs (i) and (m) Paragraph (j) [and (n)]		
14	of this Rule and	d applications for permit modifications shall not be required to resubmit the information required in		
15	Subparagraphs	(c)(3) and (9), and Paragraph (d) <u>of this Rule</u> unless changes are made in those plans.		
16	(<u>0)(p)</u> Septage	detention and treatment facility permits are shall not be transferable.		
17	<u>(p)(q)</u> Maximu	m permit <u>Permit</u> duration <mark>including renewals</mark> is <u>shall be</u> five years. <u>in</u> accordance with Rule .0832(a)(8)		
17 18	(<u>p)(q)</u> Maximu of this Section.	m permit <u>Permit</u> duration <mark>including renewals</mark> is <u>shall be</u> five years. <u>in accordance with Rule .0832(a)(8)</u>		
	of this Section.	m permit <u>P</u>ermit duration including renewals is <u>shall be</u> five years. <u>in accordance with Rule .0832(a)(8)</u> ions for permit modifications shall be required for <u>the following changes:</u> changes in:		
18	of this Section.			
18 19	of this Section. (q)(r) Applicat	ions for permit modifications shall be required for the following changes: changes in:		
18 19 20	of this Section. (<u>q)(</u> +) Applicat (1)	ions for permit modifications shall be required for <u>the following changes: changes in: Property property</u> ownership;		
18 19 20 21	of this Section. (q)(r) Applicat (1) (2)	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property <u>property</u> ownership; Treatment <u>treatment</u> methods;		
18 19 20 21 22	<u>of this Section.</u> (<u>q)(</u>) (1) (2) (3) (4)	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property property ownership; Treatment <u>treatment</u> methods; Types <u>types</u> of septage to be stored or treated; or		
18 19 20 21 22 23	<u>of this Section.</u> (<u>q)(r)</u> Applicat (1) (2) (3) (4) (<u>r)(s)</u> Applicati	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property <u>property</u> ownership; Treatment <u>treatment</u> methods; Types <u>types</u> of septage to be stored or treated; or Size <u>size</u> and number of treatment or storage structures.		
 18 19 20 21 22 23 24 	of this Section. (q)(+) Applicat (1) (2) (3) (4) (r)(+) Application (s)(+)	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property <u>property</u> ownership; Treatment <u>treatment</u> methods; Types <u>types</u> of septage to be stored or treated; or Size <u>size</u> and number of treatment or storage structures. ons for facilities which that do not meet the standards set forth in this Section shall be denied.		
 18 19 20 21 22 23 24 25 	of this Section. (q)(r) Applicat (1) (2) (3) (4) (r)(s) Applicati (s)(t) An applicati (s)(t)	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property property ownership; Treatment <u>treatment</u> methods; Types <u>types</u> of septage to be stored or treated; or Size <u>size</u> and number of treatment or storage structures. ons for facilities which that do not meet the standards set forth in this Section shall be denied. cation requesting reduced setbacks in accordance with Rule .0841(m)(7) <u>of this Section</u> shall include a		
 18 19 20 21 22 23 24 25 26 	of this Section. (q)(r) Applicat (1) (2) (3) (4) (r)(s) Applicati (s)(t) An application letter from the application (u) Issuance of application (u) Issuance of application	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property <u>property</u> ownership; Treatment <u>treatment</u> methods; Types <u>types</u> of septage to be stored or treated; or <u>Size</u> <u>size</u> and number of treatment or storage structures. ons for facilities which that do not meet the standards set forth in this Section shall be denied. eation requesting reduced setbacks in accordance with Rule .0841(m)(7) <u>of this Section</u> shall include a appropriate local zoning office, <u>office</u> approving proposed reduced setbacks.		
 18 19 20 21 22 23 24 25 26 27 	of this Section. (q)(r) Applicat (1) (2) (3) (4) (r)(s) Applicati (s)(t) An application letter from the application (u) Issuance of application (u) Issuance of application	ions for permit modifications shall be required for <u>the following changes: changes in:</u> Property property ownership; Treatment treatment methods; Types types of septage to be stored or treated; or Size size and number of treatment or storage structures. ons for facilities which that do not meet the standards set forth in this Section shall be denied. cation requesting reduced setbacks in accordance with Rule .0841(m)(7) of this Section shall include a appropriate local zoning office, office approving proposed reduced setbacks. of a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning		
 18 19 20 21 22 23 24 25 26 27 28 	of this Section. (q)(r) Applicat (1) (2) (3) (4) (r)(s) Applicati (s)(t) An application letter from the application (u) Issuance of application (u) Issuance of application	ions for permit modifications shall be required for <u>the following changes: changes in:</u> Property property ownership; Treatment treatment methods; Types types of septage to be stored or treated; or Size size and number of treatment or storage structures. ons for facilities which that do not meet the standards set forth in this Section shall be denied. cation requesting reduced setbacks in accordance with Rule .0841(m)(7) of this Section shall include a appropriate local zoning office, office approving proposed reduced setbacks. of a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning		
 18 19 20 21 22 23 24 25 26 27 28 29 	of this Section. (q)(r) Applicat (1) (2) (3) (4) (r)(s) Applicati (s)(t) An application letter from the a (u) Issuance of approvals prior	ions for permit modifications shall be required for <u>the following changes</u> : changes in: Property property ownership; Treatment <u>treatment</u> methods; Types types of septage to be stored or treated; or Size <u>size</u> and number of treatment or storage structures. ons for facilities which that do not meet the standards set forth in this Section shall be denied. eation requesting reduced setbacks in accordance with Rule .0841(m)(7) <u>of this Section</u> shall include a appropriate local zoning office , <u>office</u> approving proposed reduced setbacks. If a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning to operation of the facility.		

15A NCAC 13B .0837 is readopted with changes as published in 33:04 NCR 404 as follows:

3	15A NCAC 13B .0837	7 LOCATION OF SEPTAGE LAND APPLICATION SITES
4	(a) Soil characteristics	s (Morphology) which that shall be evaluated are as follows:
5	(1) Text	ure – The relative proportions of the sand, silt, and clay sized mineral particles in the fine-earth
6	fract	ion of the soil are referred to as soil texture. The texture of the different horizons of soils shall
7	be cl	assified into three general groups and 12 soil textural classes based upon the relative proportions
8	of sa	nd, silt, and clay sized mineral particles.
9	(A)	Soil Group I - Sandy Texture Soils: The sandy group includes the sand and loamy sand
10		textural classes.
11	(B)	Soil Group II - Coarse Loamy and Fine Loamy Texture Soils: The coarse loamy and fine
12		loamy group includes sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, and
13		silty clay loam textural classes.
14	(C)	Soil Group III - Clayey Texture Soils: The clayey group includes sandy clay, silty clay,
15		and clay textural classes.
16	(2) The	soil textural class shall be determined in the field by hand texturing samples of each soil horizon
17	in th	e soil profile using the following criteria:
18	(A)	Sand: Sand has a gritty feel, does not stain the fingers, and does not form a ribbon or ball
19		when wet or moist;
20	(B)	Loamy Sand: Loamy sand has a gritty feel, stains the fingers, forms a weak ball, and cannot
21		be handled without breaking;
22	(C)	Sandy Loam: Sandy loam has a gritty feel and forms a ball that can be picked up with the
23		fingers and handled with care without breaking;
24	(D)	Loam: Loam may have a slightly gritty feel but does not show a fingerprint and forms only
25		short ribbons of from 0.25 inch to 0.50 inch in length. Loam <mark>will form forms</mark> a ball that can
26		be handled without breaking;
27	(E)	Silt Loam: Silt loam has a floury feel when moist and will show shows a fingerprint but
28		will <u>does</u> not <u>form a</u> ribbon and forms only a weak ball;
29	(F)	Silt: Silt has a floury feel when moist and sticky when wet but will-does not form a ribbon
30		and forms a ball that will tolerate tolerates some handling;
31	(G)	Sandy Clay Loam: Sandy clay loam has a gritty feel but contains enough clay to form a
32		firm ball and may form ribbons from ribbon to form 0.75 inch to one-inch long pieces;
33	(H)	Silty Clay Loam: Silty clay loam is sticky when moist and will-forms a ribbon from one to
34		two inches. Rubbing silty clay loam with the thumbnail produces a moderate sheen. Silty
35		clay loam produces a distinct fingerprint;

1		(I)	Clay Loam: Clay loam is sticky when moist. Clay loam forms a thin ribbon of one to two
2			inches in length and produces a slight sheen when rubbed with the thumbnail. Clay loam
3			produces a nondistinct fingerprint;
4		(J)	Sandy Clay: Sandy clay is plastic, gritty gritty, and sticky when moist and forms a firm ball
5			and produces a thin ribbon to over two inches in length;
6		(K)	Silty Clay: Silty clay is both plastic and sticky when moist and lacks gritty feeling. Silty
7			clay forms a ball and readily ribbons to over two inches in length;
8		(L)	Clay: Clay is both sticky and plastic when moist, produces a thin ribbon over two inches
9			in length, produces a high sheen when rubbed with the thumbnail, and forms a strong ball
10			resistant to breaking;
11		(M)	The Division may shall substitute allow laboratory determination of the soil textural class
12			as defined in this Section by particle-size analysis of the fine-earth fraction (less than 2.0
13			mm in size) using the sand, silt silt, and clay particle sizes as defined in this Section for
14			field testing when conducted in accordance with ASTM (American Society for Testing and
15			Materials) D-422 procedures standard test methods D6913 for sieve analysis or D7928 for
16			s ieve and hydrometer analysis. For fine loam and clayey soils (Group II and III) the
17			dispersion time shall be increased to 12 hours.
18	(3)	Wetnes	ss Condition:
19		(A)	Soil wetness conditions caused by a seasonal high water high water table, perched water
20			table, tidal water, or seasonally saturated soils shall be determined by observation of
21			common soil mottles of colors of chroma 2 or less, using the Munsell color chart, in mottle
22			or a solid mass. If drainage modifications have been made, the soil wetness conditions may
23			be determined by direct observation of the water surface in monitoring wells during periods
24			of typically high water elevations. However, colors of chroma 2 or less which that are relic
25			from minerals of the parent material shall not be considered indicative of a soil wetness
26			condition.
27		(B)	Soils which <u>that</u> do not meet the required depths to a soil wetness condition as set forth in
28			Subparagraphs (4) – (7) of this Paragraph shall be considered unsuitable and septage shall
29			not be applied, unless the required <u>depths <mark>separation distances</mark> can may be maintained.</u>
30			Water table monitoring wells may be utilized to determine the actual depth to a soil wetness
31			condition. The Division may limit discharges to certain months where soil wetness
32			conditions are marginal for use.
33		(C)	The required depth to a soil wetness condition is determined by the Soil Group Textural
34			Classification. Classification, as set forth in Subparagraphs (4) – (7) of this Paragraph.
35	(4)	Soil G	roup I soil shall be considered suitable where soil wetness conditions are deeper than 36
36		inches	below the point of septage application or incorporation.

1	(5)	Soil Group II soils shall be considered suitable where soil wetness conditions are deeper than 24
2		inches below the point of septage application or incorporation.
3	(6)	Soil Group III soils shall be considered suitable where soil wetness conditions are deeper than 18
4		inches below the point of septage application or incorporation.
5	(7)	Depth to rock: soil depth shall be considered suitable where depth to rock is deeper than 24 inches
6		below the point of septage application or incorporation or deeper than 18 inches if the septage is
7		pretreated to accomplish pathogen reduction and surface applied over vegetation.
8	(8)	Mine reclamation sites will shall be considered on a case by case case-by-case basis. based
9		on compliance with the Rules of this Section, the previous use of the mine, and the current condition
10		of the mine.
11	(b) Septage land	d application sites shall not be located in the watershed of a Class WS-I stream. New septage land
12	application sites	shall not be located in the water quality critical area of Class WS-II, WS-III, or WS-IV streams or
13	reservoirs. This j	prohibition does shall not apply to those portions of a water supply watershed that which are drained
14	by Class B or Cl	ass C streams.
15	(c) Setbacks. A	t the time of initial permitting, septage land application sites shall observe the minimum setback
16	distances specifi	ed in this Rule. Minimum setbacks shall be maintained throughout the life of the site only on land
17	owned, operated	operated, or controlled by the permittee or by the landowner(s) at the time of initial permitting. Any
18	sale, lease <u>lease,</u>	or other conveyance of land by the permittee, or by the landowner(s) if different from the permittee,
19	subsequent to the	he initial permitting of the site shall include restrictions to ensure continued maintenance of the
20	setbacks. Failure	to maintain required setbacks shall result in immediate permit revocation.
21	(d) All septage of	disposal sites shall be located at least the minimum distance specified for the following:
22	(1)	Residence residence:
23		(A) not occupied by the applicant $-500 \frac{\text{feet; feet,}}{1000 \text{ feet; feet,}}$
24		(B) residence occupied by the applicant -100 feet;
25	(2)	Place place of business, other than the septage management firm's office or related buildings, firm
26		office, or place of public assembly – 500 feet;
27	(3)	Well well or water supply spring – 500 feet;
28	(4)	Surface waters. Stream surface waters - stream classification shall be determined in accordance
29		with 15A NCAC 02B .0301 through .0317 Assignment of Stream Classifications;
30	(5)	Fresh fresh waters:
31		(A) Class WS-I, Class WS-II, or Class WS-III streams – 300 feet;
32		(B) Class B stream – 300 feet;
33		(C) Class C stream – 200 feet; and
34		(D) Other other streams and bodies of water -200 feet;
35	(6)	Tidal tidal salt waters:
36		(A) Class SA or Class SB – 300 feet from mean high water mark; and
37		(B) Class SC and other coastal waters – 200 feet from mean high water <u>mark</u> ; mark .

1	(7)	Supplemental supplemental classifications:
2		(A) Trout trout waters and swim waters – 200 feet; and
3		(B) Nutrient <u>nutrient</u> sensitive waters and outstanding resource waters – 300 <u>feet</u> ; feet .
4	(8)	Groundwater groundwater lowering ditches and devices – 100 feet;
5	(9)	Adjoining adjoining property under separate ownership or control – 50 feet;
6	(10)	Public public road right of ways – 100 feet;
7	(11)	Food food crops – 50 feet;
8	(12)	Wetlands wetlands – 50 feet;
9	(13)	Woods woods line - five feet, unless greater distance is required as part of an erosion and runoff
10		control plan;
11	(14)	Land land application site on the same tract of land, permitted to a different operator – 100 feet; and
12	(15)	Setbacks setbacks in Subparagraphs (d)(3), (4), (5), (6), (7), and (8) of this Rule may be reduced 50
13		percent when septage is pretreated to accomplish pathogen reduction and when the land within the
14		setback area is in permanent, established grass with at least 95 percent cover or when the setback
15		area is in forest with a continuous canopy and a 95 percent forest litter cover. Accurate property line
16		locations are shall be the responsibility of the site operator.
17	(e) Septage land	application sites less than five acres in size, individual fields of a site less than two acres in size, and
18	sites with compl	ex soil patterns or unusual shapes shall be permitted only if the applicant demonstrates to the Division
19	that the site ca	n will be properly managed for crop production and that septage will be applied with uniform
20	distribution over	the entire permitted application area. can be evenly distributed over the site.
21	(f) Septage land	application sites shall not be located where the slope of the land is greater than 12 percent unless all
22	of the conditions	s of this Paragraph are met:
23	(1)	The the site is in permanent, established grass with at least 95 percent cover or is in forest with a
24		continuous canopy and a 95 percent forest litter cover;
25	(2)	Plans <u>the erosion and runoff management plans</u> submitted to the Division are prepared in accordance
26		with Rule .0835(c)(14) of this Section accepted [approved] erosion and runoff control practices and
27		shall indicate the following:
28		(A) Management management practices and discharge methods which that will be used to
29		reduce the potential for run-off from the site and assure even septage distribution over the
30		site allow for the uniform distribution of septage over the entire permitted application area;
31		and
32		(B) Location location of potential surface water monitoring devices upslope and downslope
33		from the area proposed to be permitted and identification of sampling methods. Monitoring
34		may be required. if there is an indication that septage is entering surface waters.
35	(3)	The Division may increase setbacks or decrease application rates for the protection of surface
36		waters: Setbacks will be increased and application rates decreased as appropriate to protect any
37		nearby surface waters which are to be approved by the Division; and

1 (4) No no site shall include slopes in excess of 25 percent. 2 (g) A new septage land application site shall not jeopardize the continued existence of threatened or endangered 3 species or result in the destruction or adverse modification of a critical habitat, habitat protected under the Federal 4 Endangered Species Act of 1973. Agricultural land shall not be considered potential habitat. 5 (h) Septage, or any part of septage, as defined in G.S. 130A 290, treated to meet the standard for Class A sewage 6 sludge in accordance with the federal regulations for pathogen reduction and vector attraction reduction in 40 CFR 7 Part 503, Subpart D, may be permitted by the Division for application to a public contact site, home lawns and gardens, 8 or to be sold or given away in a bag or other container, provided it can be demonstrated that pollutant limits in 40 CFR 9 503.13(b)(3) 503.13(b)(1) Table 3 Pollutant Concentrations are not exceeded. Persons who prepare the septage, and 10 persons who derive material from the septage, shall comply with the applicable record keeping requirements in 40 CFR 503.17(a)(1), (2) or (6). Treatment verification, acceptable to the Division, shall be available. Documentation 11 and certification by the operator that the treatment method meets the Class A standard shall be available to the Division 12 13 upon request. All treatment methods and facilities shall obtain a permit from the Division in accordance with Rule 14 .0836 of this Section. .0836. 15 16 *History Note:* Authority G.S. 130A-291.1; 17 Eff. October 1, 2009. 2009;

18 <u>Readopted Eff. [January]February</u> 1, 2019.

15A NCAC 13B .0838 is readopted with changes as published in 33:04 NCR 404 as follows:

Z		
3	15A NCAC 13B	.0838 MANAGEMENT OF SEPTAGE LAND APPLICATION SITES
4	(a) General requ	irements for septage land application sites. sites shall include the following:
5	(1)	Only only domestic septage, as defined in G.S. 130A-290, shall be land applied or otherwise placed
6		on a septage land application site, unless specified in the permit;
7	(2)	Each each site shall be posted with visible and legible "NO TRESPASSING" signs. Access All
8		access roads or paths crossing or leading to the disposal area shall be posted "NO TRESPASSING"
9		and a visible and legible sign of at least two feet by two feet stating "SEPTAGE LAND
10		APPLICATION SITE" shall be maintained at each entrance to the land application area;
11	(3)	Each each site shall have an all weather access road;
12	(4)	No no hazardous wastes shall be permitted on the site;
13	(5)	No no site shall be permitted for land application of industrial or commercial septage unless the
14		applicant demonstrates to the Division that the strength of the organic and inorganic components of
15		the septage is within the normal range for domestic septage;
16	(6)	Treatment Plant Septage treatment plant septage generated by the operation of a wastewater system
17		permitted under Article 11 of Chapter 130A may be land applied at a septage land application site
18		permitted under this Section;
19	(7)	Septage septage shall be applied to the surface of the land from a moving vehicle in such a manner
20		as to have no standing liquid or soil disturbance resulting from the waste flow after the discharge is
21		complete;
22	(8)	Septage septage shall not be applied to a site if any liquid is ponded on the site or if the site is
23		flooded, frozen, or snow covered;
24	(9)	Septage septage shall not be applied to a site if the application method will result in ruts greater than
25		three inches in the soil surface;
26	(10)	Disposal disposal area boundaries shall be elearly marked on the ground while a site or any portion
27		of a site is in use; use. Markers shall be of adequate height and spacing such that they are [elearly]
28		visible and distinguishable from the surrounding landscape for determining the disposal boundaries
29		when the site is in use;
30	(11)	All all septage discharges shall be made at a location on the site consistent with the nutrient
31		management plan;
32	(12)	All all septage discharges, including aerial drift from discharges, shall be made within the permitted
33		boundaries of the land application site;
34	(13)	Land land application of septage shall be limited to a maximum daily hydraulic application rate of
35		one acre inch;
36	(14)	Grease septage from a grease trap, interceptor, separator, or other appurtenance used for the purpose
37		of removing cooking oils, fats, grease, and food debris from the waste flow generated from food

1		handling, preparation, and cleanup shall not be land applied unless the trap has been pumped within
2		the last 90 days or the grease septage adequately screened or dewatered to prevent damage to land
3		application site vegetation;
4	<u>(14)(15</u>) Grease grease septage shall be diluted at least 1:1 from its concentration when pumped with
5		domestic septage or water if land applied over perennial vegetation. This dilution shall be increased
6		if crop damage occurs. This dilution requirement shall not apply to the liquid portion of grease
7		septage that has been adequately treated to remove solids, fats, oils oils, and grease as long as crop
8		damage does not occur;
9	<u>(15)(16</u>) Solids solids resulting from septage treatment shall not be land applied unless the solids are treated
10		to meet pathogen reduction and vector attraction reduction requirements in 40 CFR 503, and the
11		permittee has satisfactorily demonstrated to the Division that the solids can be evenly land applied
12		will be land applied with uniform distribution over the entire permitted application area at
13		agronomic rates with standard agricultural spreading equipment;
14	<u>(16)(17</u>) The <u>the</u> site shall be managed in such a manner as to minimize soil erosion and surface water runoff.
15		Appropriate soil and water management practices shall be implemented and maintained in
16		accordance with the Division approved erosion and run-off control plan. management plan
17		submitted in accordance with Rule .0835(c)(14) of this Section. All water control structures shall be
18		designed, installed, and maintained to control the run-off resulting from a 10-year storm;
19	<u>(17)(18</u>) Approved approved nutrient management plans shall be followed;
20	<u>(18)(19</u>) Land land application sites or portions of land application sites that do not follow the approved
21		nutrient management plan shall not be used for land application until brought into compliance with
22		the nutrient management plan;
23	(20)	alternate plan for the storage or disposal of septage during periods when the permitted land
24		application site is not available;
25	<u>(19)</u> (21) Land land application sites permitted for the management of grease septage, or commercial or
26		industrial septage, shall have a septage detention facility available, of adequate size to meet the
27		requirement of Subparagraph <mark>(a)(15)(a)(14)</mark> of this Rule; and
28	<u>(20)(22</u>	A = a septage land application site permit holder or operator is responsible for the actions of any
29		septage management firm that the permit holder or operator allows to use [their] his or her his land
30		application site.
31	(b) Maximum la	and application rates for septage shall be determined based upon the following:
32	(1)	Domestic domestic septage land application rates shall be in accordance with 40 CFR Part
33		503.12(c);
34	(2)	Land land application of domestic treatment plant septage shall not exceed the rate in 40 CFR
35		503.14(d);
36	(3)	Pollutant pollutant limits for regulated metals in 40 CFR part 503.13 shall not be exceeded for any
37		type <u>of</u> septage;

1	(4)	Grease grease septage shall be land applied at a rate that is equal to or less than the agronomic rate,
2		but in no case shall the application of untreated grease septage exceed 25,000 gallons per acre per
3		year;
4	(5)	Sites sites permitted for the land application of grease septage shall meet the requirements of 40
5		CFR Part 257.3-5;
6	(6)	Land land application rates for septage treated to reduce solids, nutrients, or pollutants shall be
7		determined based on the analysis of the treated material;
8	(7)	At at least four analyses of treated liquid shall be required prior to receiving an adjusted land
9		application rate. Additional samples shall may be required for inconsistent analysis results; highly
10		variable material;
11	(8)	Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and
12		regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine;
13	(9)	After after an adjusted land application rate is approved, sampling shall be required every 60 days
14		for the <u>initial first</u> 12 months of operation;
15	(10)	After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly;
16		and
17	(11)	Land land application rates for industrial or commercial septage, or commercial or industrial
18		treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this
19		Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants.
20	(c) Septage trea	atment standards:
21	(1)	Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503
22		Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;
23	(2)	Grease grease septage, treated grease septage, commercial or industrial or commercial treatment
24		plant septage, and commercial/industrial industrial or commercial septage shall be treated in
25		accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR
26		503 Subpart D;
27	(3)	Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated
28		as grease septage; and
29	(4)	Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the
30		vector attraction reduction requirements in 40 CFR 503, Subpart 503 D.
31	(d) No one other	er than the permit holder shall land apply septage at a permitted site unless approved in writing by the
32	Division. The pe	ermit holder shall submit a written request and written authorization from the landowner(s), if different
33	from the permit	holder. The request shall include the name of the firm requesting approval and the type and amount
34	of septage prope	osed to be discharged. The Division may approve the request if the land application activity, the permit
35		firm requesting approval to land apply are in compliance with Rules of this Section.
36	(e) Permit hold	lers of septage land application sites shall develop and maintain records and reports to demonstrate
27	compliance with	a this Section and the normit requirements of each site

37 compliance with this Section and the permit requirements of each site.

1	(1)	Permit permit holders of sites receiving septage shall maintain a log which meets the requirements
2		of 40 CFR Part 503.17(b);
3	(2)	Permit permit holders of all septage land application sites shall have all records and certifications
4		and test results required in accordance with this Section to be kept available for review during any
5		announced site inspections by the Division or upon the Division's request: Division; and
6	(3)	The the permit holder of a site where more than one septage management firm has been authorized
7		by the Division to discharge septage shall submit a monthly report to the Division that which shall
8		include the following information for each discharge: the date and quantity of each discharge, the
9		type of septage discharged, and the name of the septage management firm discharging.
10	(4)	All test results for nutrients, metals, contaminants, and pathogens required in this Section shall be
11		maintained by the site operator or the preparer.
12	(f) Septage shall not be land applied at a new septage land application site until a representative of the Division has	
13	inspected the site to determine compliance with these rules and consistency with the permit application and all permit	
14	conditions.	
15	(g) Methods of	and application for which there are no standards in these rules shall be permitted only if it can be
16	demonstrated th	at the proposed method manages septage in a manner at least equivalent to these Rules and to protect
17	public health an	d the environment. Plans shall be submitted and prepared in accordance with professional engineering
18	principles.	
19		
20	History Note:	Authority G.S. 130A-291.1;
21		Eff. October 1, 2009. 2009:
22		<u>Readopted Eff. [January]February</u> 1, 2019.

1 15A NCAC 13B .0841 is readopted with changes as published in 33:04 NCR 404 as follows:

2

3 15A NCAC 13B.0841 STANDARDS FOR SEPTAGE DETENTION AND TREATMENT <u>FACILITIES</u> 4 FACILITES

5 (a) Septage detention facilities, facilities used to meet the requirements of Rule .0838(a)(19) .0838(a)(20) or (21) of 6 this Section, Section shall have a minimum size equal to two percent of the maximum annual application rate. The 7 Division shall increase the minimum size requirement for any increase in the maximum annual application rate or if 8 it is demonstrated during site operation that this volume is inadequate or if specific site considerations would warrant 9 such increases. [increases; and] The Division shall notify the owner or operator of the facility of the increase. the 10 average volume of septage pumped per week. This Paragraph does not limit the maximum capacity of a septage 11 detention facility. Capacity shall be increased if it is demonstrated during site operation that this volume is inadequate 12 or if specific site considerations would warrant such increases. 13 (b) Each site shall have an all weather access road. Septage detention facilities for sites permitted to land apply in 14 excess of 50,000 gallons per acre per year shall have a minimum size equal to two percent of the maximum annual 15 application rate. Facilities permitted as of the effective date of this rule shall have 12 months to meet this requirement. (c) Septage treatment and detention facility containers shall be structurally sound and constructed of steel, concrete, 16 plastic, or fiberglass; fiberglass; and shall be free of evidence of damage or weakness such as holes or cracks that may 17 18 allow the escape of septage. 19 If required by G.S. 89C, plans and specifications for proposed containers constructed of materials not specifically 20 addressed in this Rule shall be prepared by a professional engineer. [Note: The North Carolina Board of Examiners 21 for Engineers and Surveyors, has determined, via letter and resolution dated March 7, 11, 2010, that certification of 22 documents pursuant to this Paragraph constitutes practicing engineering, under G.S. 89C.] 23 (d) A septage treatment and detention facility Treatment and Detention Facility permit holder and operator are shall 24 be responsible for the actions of any septage management firm that uses the detention or treatment facility. 25 (e) Each detention and treatment facility shall be designed, constructed, and maintained in such a manner as to: 26 (1)Prevent prevent leaks or the flow of septage out of the facility into the seasonally high water table, 27 onto the ground surface, or into any surface waters; 28 (2) Minimize minimize the attraction or admittance of vectors; and 29 (3) Prevent prevent unauthorized entry into septage containers or lagoons. 30 (f) Septage detention and treatment facilities located below grade shall: If [if] required by G.S. 89C, a professional engineer shall certify that the construction was completed 31 (1)32 be constructed in substantial compliance with the plans and specifications prior to any waste being 33 introduced into the system. If required by G.S. 89C, a professional engineer shall certify this 34 compliance. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, has 35 determined, via letter and resolution dated March 11, 2010, that certification of documents pursuant 36 to this Paragraph constitutes practicing engineering, under G.S. 89C.]; 37 (2)Be be constructed to a traffic rated standard or protected from vehicular traffic; and

1	(3)	Not <u>not</u> be constructed of used metal tanks. Used metal tanks are allowed to <u>may</u> be located beside
2		a wall or embankment for gravity access as long as the entirety of the tank is visible.
3	(g) The permit l	nolder of a septage treatment or detention facility shall control minimize odors from the facility at the
4	property bounda	ry.
5	(h) Ground wat	er The Division may require that groundwater monitoring wells or a leak detection system may be
6	required be insta	alled around treatment or detention systems if necessary to assure for protection of public health and
7	the environment	- environment if there is evidence of a leaking tank.
8	(i) The area aro	und tanks shall be free of debris and vegetation to allow for access and inspection for a distance of at
9	least 5 feet.	
10	(j) Septage shall	l be transferred to and from a detention system in a safe and sanitary manner that prevents leaks or
11	spills of <mark>septage</mark>	, septage onto the ground surface or exterior surface of the detention system, including septage in
12	pipes used for tr	ansferring waste to and from vehicles.
13	(k) Access road	s or paths crossing or leading to the facility shall be posted with "NO TRESPASSING" signs.
14	(l) Requirement	ts for lined lagoons:
15	(1)	Lined lagoons shall be permitted only at sites where the construction and use of a lagoon shall does
16		not jeopardize the public health or environment.
17	(2)	Portions of lined lagoons may be located below grade shall be in accordance with Subparagraph
18		(f)(1) of this Rule. in substantial compliance with the plans and specifications prior to any waste
19		being introduced into the system. If required by G.S. 89C, a professional engineer shall certify this
20		compliance. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, has
21		determined, via letter and resolution dated March 11, 2010, that certification of documents pursuant
22		to this Paragraph constitutes practicing engineering, under G.S. 89C.];
23	(3)	Only lagoons designed, constructed and inspected in accordance with accepted engineering
24		principles providing for the protection of the underlying groundwater will be considered for use in
25		a septage treatment or detention system. If required by G.S. 89C, a professional engineer shall certify
26		that the construction was completed in substantial compliance with the plans and specifications prior
27		to any waste being introduced into the system. [Note: The North Carolina Board of Examiners for
28		Engineers and Surveyors, has determined, via letter and resolution dated March 11, 2010, that
29		certification of documents pursuant to this Paragraph constitutes practicing engineering under G.S.
30		89C.]
31	(4)	Liners shall be a minimum of 12 inches of clay compacted to a maximum permeability of 10 $^{-7}$
32		cm/sec or equivalent synthetic liner.
33	(5)	Synthetic liners shall have a minimum thickness of 30 mils. A synthetic liner shall have a
34		demonstrated water vapor transmission rate of not more than 0.03 $\text{gm/m}^2/\text{day}$. Liner material and
35		any seaming materials shall have chemical and physical resistance not adversely affected by
36		environmental exposure or waste placement.

1	(6)	Clay liners with a permeability more than 10^{-7} cm/sec may be used in conjunction with a synthetic	
2		liner to meet the maximum permeability of 10^{-7} cm/sec or equivalent.	
3	(7)	The surface of the supporting soil on which the liner will be installed shall be reasonably free of	
4		stones, organic matter, protrusions, loose soil, and any abrupt changes in grade that could affect the	
5		integrity of the liner.	
6	(8)	Lagoons shall be designed and maintained to have adequate storage to handle the additional water	
7		from a 25-year storm.	
8	(9)	Lagoons shall be protected from entry by unauthorized individuals by fencing or other appropriate	
9		means.	
10	(m) Septage detention and treatment facilities shall adhere to the following minimum setback requirements:		
11	(1)	Residence, residence, place of business, except septage firm business, or place of public assembly	
12		- 100 feet;	
13	(2)	Well well or water supply spring – 100 feet;	
14	(3)	Surface surface waters – 100 feet;	
15	(4)	Property property lines – 50 feet;	
16	(5)	Facilities facilities permitted after April 1, 2010 the effective date of this Rule shall not be located	
17		in the 100-year flood plain hazard area. area:	
18	(6)	Soil soil wetness, as determined in Part (a)(3)(A) of Rule .0837 .0837(a)(3)(A) of this Section - 12	
19		inches;	
20	(7)	Setbacks setbacks in Subparagraphs (1) and (4) of this Paragraph may be in accordance with local	
21		zoning ordinances if located in areas zoned for industrial use. use:	
22	(8)	Setbacks setbacks in Subparagraphs (1) through (4) of this Paragraph shall be increased 100% for	
23		lagoons; and	
24	(9)	Accurate accurate property line location is shall be the responsibility of the site operator.	
25	(n) All setback	s shall be maintained. At the time of initial permitting, septage detention and treatment facilities shall	
26	observe the minimum setback distances specified in this Rule. Minimum setbacks shall be maintained throughout the		
27	life of the facili	ty only on land owned, operated, or controlled by the permittee or by the landowner(s) at the time of	
28	initial permitting. Any sale, lease, or other conveyance of land by the permittee, or by the landowner(s) if different		
29	from the permittee, subsequent to the initial permitting of the facility shall include restrictions to ensure continued		
30	maintenance of the setbacks.		
31	(o) The setbacks in Subparagraph (m)(1) through (4) of this Rule shall be increased for storage facilities with a		
32	capacity in excess of 25,000 gallons permitted after April 1, 2010 the effective date of this Rule to prevent offsite		
33	contamination from major spills, or 100% containment shall be provided. Increased setbacks shall be up to twice the		
34	minimum distance as indicated in Subparagraph (m)(1) through (4) of this Rule. Rule, unless the permitted Permitted		
35	volume and the proximity to residences, wells or water supply springs, surface waters, and or property lines dictate a		
36	reduced setback determined by the Division on a case-by-case basis. will determine the setback.		
37	(p) Storage cor	ntainers for individual restaurants shall be:	

3 of 5

1	(1)	Located located above grade and protected from vehicular traffic;	
2	(2)	Maintained kept free of grease on the exterior surface of the container and the ground surface,	
3		maintained to be impervious to flies, and shall not attract vectors; [flies] fly tight and in a sanitary	
4		condition;	
5	(3)	Placed placed at a location and acceptable to standards and determined by the local health	
6		department and the NC Department of Health and Human Services; NC Division of Environmental	
7		Health; and	
8	(4)	No no greater than 200 gallons in size.	
9	(q) Setbacks for detention tanks at marinas may be reduced for storage capacity of 2000 gallons or less when the		
10	facility is designed to prevent leaks or spills or has containment equaling 100% of the storage volume plus rainfall		
11	from a 25-year s	storm event. Setbacks shall in no case be less than what is approved by applicable local government,	
12	state <u>State,</u> or fe	deral laws or rules.	
13	(r) <u>Permit hold</u>	ers of all septage detention and treatment facilities shall have all records required in accordance with	
14	this Section available for review during inspections by the Division or upon the Division's request. Septage shall not		
15	be stored in a de	etention or treatment facility for more than six months.	
16	(s) Septage sha	ll not be stored or treated at a new septage treatment or detention facility until a representative of the	
17	Division has inspected the facility to determine compliance with these Rules and consistency with the permit		
18	application and	all permit conditions.	
19	(t) Septage dete	ention and treatment facility closure shall include:	
20	(1)	a written notification of cease of operations submitted to the Division that shall include the permit	
21		number, the date of cease of operations, and the signature of the operator; A completed ceased	
22		operation form submitted to the Division;	
23	(2)	All all liquids and solids, resulting from septage detention or treatment, removed from all portions	
24		of the facility and properly managed or disposed at an appropriate, approved facility; and	
25	(3)	All all parts of the facility removed from property under separate ownership, unless all landowners	
26		provide the Division with written documentation that the facility may remain at the site.	
27	(u) Record keeping for detention facilities that receive septage from more than one septage management firm shall		
28	include:		
29	(1)	The the date that the septage is received at and removed from the facility;	
30	(2)	Name name of the septage management firm that delivered the septage;	
31	(3)	Type type and amount, in gallons, of septage received; and	
32	(4)	Where where septage is discharged.	
33	(v) Record keeping for treatment facilities shall include:		
34	(1)	Date date septage is received at the facility;	
35	(2)	Name name of the septage management firm that delivered the septage;	
36	(3)	Type type and amount, in gallons, of septage received;	
37	(4)	Date <u>date</u> processed material(s) is removed from the facility;	

1 (5) Type type and amount, in tons or gallons, of material removed from the facility; and 2 (6) Management management methods for each type of material removed by the facility. facility 3 (w) Alarms shall be required to detect high liquid levels, leaks and spills, or system operation parameters at detention 4 or treatment facilities when the location, design, capacity, or operational complexities of the facility warrant the 5 additional safety precautions. 6 7 History Note: Authority G.S. 130A-291.1; 8 Eff. April 1, 2010: 2010; 9 <u>Readopted Eff. [January]February 1, 2019.</u>

15A NCAC 13B .0843 is readopted with changes as published in 33:04 NCR 404 as follows:

3	15A NCAC 13B .0843 <u>LAND APPLICATION SITE</u> LAND USE AND SITE CLOSURE
4	(a) Adherence Upon closure of a land application site permitted in accordance with this Section, the site shall meet
5	the site restriction requirements set forth in 40 CFR 503.32(c)(1). to the site restrictions in 40 CFR [503.32] 503.32(c)
6	of Subpart D <mark>shall be required.</mark>
7	(b) Nursery and horticultural products, trees and other forest products, including but not limited to such as pine straw
8	and pine bark, shall not be harvested or gathered for 30 days after septage application.
9	(c) Public access is to be controlled in accordance with <u>40 CFR 503.32(c)(1). [503.32.]</u> 40 CFR 503.32(c) of Subpart
10	D.
11	(d) The permit holder or operator of the site shall submit a written notification to notify the Division at least 30 days
12	prior to final closure of a septage land application site in order to schedule a site inspection for determination of
13	compliance with this Section. The notification shall include the permit number, the date of cease of operations, and
14	the signature of the operator.
15	(e) Prior to final closure, the soil pH of the site shall be raised to 6.5, unless the fertility requirements for crops to be
16	grown in the following year dictate less.
17	
18	History Note: Authority G.S. 130A-291.1;
19	Eff. October 1, 2009. <u>2009;</u>
20	<u>Readopted Eff. <mark>[January]F</mark>ebruary 1, 2019.</u>

15A NCAC 13B .0844 is readopted with changes as published in 33:04 NCR 404 as follows:

2

3 15A NCAC 13B .0844 TRANSPORTATION OF SEPTAGE

- 4 (a) <u>Vehicles used for the transportation of septage shall be operated and maintained to prevent</u> All septage shall be
 5 transported in a safe, sanitary manner that prevents leaks and spills <u>of septage</u> and <u>shall</u> comply with the following:
- 6 (1) All all tanks shall be constructed of metal and permanently attached affixed to the truck bed with
 7 permanent fixtures such as bolts; bed, unless otherwise approved by the Division;
- 8 (2) All <u>all</u> valves shall be in proper working order and be completely closed during transportation;
- 9
 (3)
 All all access ports shall have proper fitting lids in good repair in accordance with manufacturer

 10
 specifications and be completely closed sealed during transportation;
- 11
 (4)
 Portable portable toilet pump units that slide into pickup truck beds shall be bolted to the trucks in

 12
 accordance with manufacturer specifications;
- (5) Boats boats used to pump or transport septage shall be United States Coast Guard approved or
 engineered construction plans shall be available indicating that the specific craft is stable in the
 water when fully loaded; loaded with septage, and if required by G.S. 89C, a professional engineer
 shall prepare these documents; and
- 17 (6) Tanks tanks that are mounted on trailers for the pumping or transportation of septage shall meet all
 18 applicable state State and federal requirements for highway use.

19 (b) All permitted septage management firms shall display decals or lettering on each side of every pumper vehicle

20 operated by the firm. The decals or lettering shall include the firm name, address (town name), town name, phone

21 number, and septage management firm permit number. number as shown on the firm application. All decals or lettering

22 required by this Rule on the pumper vehicle shall be no less than three inches in height and plainly [elearly legible]

23 legible, distinguishable from the background, and visible. not obstructed from view. Identification shall not be

24 removable (i.e. no magnetic signs). be permanently attached (i.e., no removable signs).

- 25 (c) Applicants for septage management firm permits which that were not permitted in the previous calendar year shall
- 26 have each pump truck inspected prior to the Division's issuance of a permit.
- 27 (d) Septage to be discharged at a wastewater treatment plant or any part of the collection system for that plant shall
- 28 be handled in accordance with the plant rules and policies.
- 29 (e) All vehicles used in the transportation of septage, including spare vehicles and tankers, shall meet the requirements
- 30 of this <u>Section</u> and be included in the permit application.
- 31 (f) Vehicles used in the transportation of septage, that are listed on an approved septage management firm permit
- 32 application, may remain loaded or partially loaded on land owned by the septage management firm for up to seven
- 33 days without obtaining a permit for a detention or treatment facility. Such vehicles shall comply with all parts of this
- 34 Rule.
- 35
- 36 History Note: Authority G.S. 130A-291.1;
 37 Eff. October 1, 2009: 2009;

<u>Readopted Eff. <mark>[January]</mark>February</u> 1, 2019.


STATE OF NORTH CAROLINA OFFICE OF ADMINISTRATIVE HEARINGS

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

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

December 13, 2018

Jennifer Everett, Rulemaking Coordinator Department of Public Safety Sent via email to jennifer.everett@ncdenr.gov

Re: Extension of the Period of Review for Rules 15A NCAC 13B .0830-.0846

Dear Ms. Everett:

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

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

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

Sincerely,

an

Amber C. May Commission Counsel

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

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

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

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

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

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

An Equal Employment Opportunity Employer

Burgos, Alexander N

Subject:

FW: Technical Change Requests

From: Montie, Jessica
Sent: Thursday, December 6, 2018 4:49 PM
To: May, Amber Cronk <amber.may@oah.nc.gov>
Cc: Burgos, Alexander N <alexander.burgos@oah.nc.gov>; Everett, Jennifer <jennifer.everett@ncdenr.gov>
Subject: RE: Technical Change Requests

Good afternoon,

Staff with DEQ would like to request an extension for the period of review regarding the technical change requests for EMC Rules 15A NCAC 13B Section .0800 Septage Management. We expect to have addressed the technical changes required and provide the rewritten rules to be considered at the January Rules Review Commission meeting.

Thank you for your review and assistance with these rules.



Jessica Montie Environmental Program Consultant Division of Waste Management North Carolina Department of Environmental Quality 919.707.8247 (Office) Jessica.Montie@ncdenr.gov

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0830

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In (b), please provide the cost of the materials and where they can be found.

1 15A NCAC 13B .0830 is amended as published in 33:04 NCR 404 as follows:

2		
3	15A NCAC 13B	3.0830 INCORPORATION BY REFERENCE
4	(a) All Sections	of the Code of Federal Regulations (CFR) cited in this Section are hereby incorporated by reference,
5	including subse	equent amendments or additions. additions, and may be obtained free of charge at
6	https://www.gpo	.gov/fdsys/.
7	(b) Copies of I	Federal statutes, US Environmental Protection Agency (EPA) and American Society for Testing
8	Materials (ASTN	<u><u>A</u>) test methods and procedures, and other published standards referenced in this Section are hereby</u>
9	incorporated by	reference, including subsequent amendments or additions.
10	(c) Copies of all	material incorporated by reference are available for inspection at the Department of Environmental
11	Quality Environ	ment and Natural Resources, Division of Waste Management, Solid Waste Section, <u>217 West Jones</u>
12	Street, Raleigh,	N.C. 27603 or the Division's website at https://deq.nc.gov/about/divisions/waste-management. 401
13	Oberlin Road, R	aleigh, N.C. 27699-1646.
14	(d) Material inco	prporated by reference in the Federal Register may be obtained at Government Institutes, 15200 NBN
15	Way, Blue Ridg	e Summit, PA 17214 at a cost of one thousand five hundred sixty seven dollars and fifty cents
16	(\$1,567.50). Fed	eral Register materials are codified once a year and may be obtained at the above address for a cost
17	of: 40 CFR 190	259 thirty nine dollars and seventy five cents (\$39.75), 40 CFR 425 699 sixty dollars and seventy
18	five cents (\$60.	.75) or at http://www.gpoaccess.gov/cfr.
19		
20	History Note:	Authority G.S. 130A-291.1;
21		Eff. October 1, 2009;
22		Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. June 24,
23		2017. <u>2017:</u>
24		Amended Eff. January 1, 2019.
25		

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0831

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In Item (12), how is it determined what a "year with normal rainfall" is? Please provide some additional information.

Given that you have already included all definitions in 130A-290 on line 4, please delete *Item* (13) as it is already defined in 130A-290(32).

The punctuation in Item (16) is inconsistent – I have made suggested changed below to make the punctuation consistent.

In (16)(a), please change the semi-colon after "more of sand" to a comma.

I'm not sure that I understand what is going on in (16)(b). The use of "the upper limit" and "the lower limit" while giving ranges doesn't make a lot of sense to me (you have the "upper limit" as 71-91 percent and "the lower limit" as 70-85. Do you mean the upper limit to be 86-91? Please consider the following for purposes of clarity:

(b) "Loamy sand" means soil material that contains <u>either</u>: at the upper limit

(i) 70 to 91 percent sand, and the percentage silt plus 1.5 times the percentage of clay is not less than 15; or at the lower limit contains not less than

(ii) 70 to 85 percent sand, and the percentage of silt plus twice the percentage of clay is less than 30;

Please consider breaking (c) and (e) out similar to what I have suggested in (b).

In (g), delete the "and" in between "clay" and "less than" and add a comma after "clay."

In (h), should "more than" before "20 to 46" be "between"? "more than" doesn't make sense with a range.

In (I), please remove the comma after "less sand"

15A NCAC 13B .0831 is readopted as published in 33:04 NCR 404 as follows:

3	15A NCAC 13B	.0831 DEFINITIONS
4	In addition to the	terms defined in G.S. 130A-290, as used in this Section the following terms are defined as follows:
5	have the followin	ig meanings:
6	(1)	"Agronomic rates" are defined as means those rates that provide the nitrogen and other nutrient
7		needs of the crop based on available realistic yield expectations (RYE) established for a soil series
8		through published Cooperative Extension Service bulletins, Natural Resources Conservation
9		Service publications publications, or county soil surveys, but do not overload the soil with nutrients
10		or other constituents which that may eventually leach to groundwater, limit crop growth, or degrade
11		adversely impact soil quality.
12	(2)	"Annual septage application rate" means the maximum amount, in gallons, of septage that can may
13		be applied to a unit area of land during a 365-day period.
14	(3)	"CFR" means Code of Federal Regulations.
15	(4)	"Department" means Department as defined in G.S. 143-212.
16	(5)	"Division" means the Division of Waste Management in the Department. All rules cited in this
17		Section, under the authority of the Division, may be obtained at 401 Oberlin Road, Raleigh, North
18		Carolina 27604, or at the Division's web page at www.wastenotnc.org.
19	(6)<u>(3)</u>	"Land application" shall mean means the spraying or spreading of septage onto the land surface; the
20		injection of septage below the land surface; or the incorporation of septage into the soil so that the
21		septage can condition conditions the soil or fertilize fertilizes crops or vegetation grown in the soil.
22	(7)<u>(4)</u>	"Licensed Geologist" means licensed geologist as defined in G.S. 89E-3. an individual who is
23		licensed to practice geology in accordance with G.S. 89E.
24	<u>(5)</u>	"Licensed Soil Scientist" means licensed soil scientist as defined in G.S. 89F-3.
25	(8)<u>(6)</u>	"Nutrient Management Plan" means a plan to define the management requirements and nutrient
26		needs of crops to be grown on a septage land application site, including the amount, sources,
27		placement placement, and timing of nutrient applications to maximize the nutrient uptake of the
28		crop. Plan implementation shall protect the environment and maintain crop productivity.
29	(9)<u>(7)</u>	"Place of business" means place of business as defined in G.S. 130A-334. any store, warehouse,
30		manufacturing establishment, place of amusement or recreation, service station, food handling
31		establishment, office, or any other place where people work or are served.
32	(10)<u>(8)</u>	"Place of public assembly" means place of public assembly as defined in G.S. 130A-334. any
33		fairground, auditorium, stadium, church, campground, theater, school, or any other place where
34		people gather or congregate.
35	<u>(11)(9)</u>	"Professional Engineer" means professional engineer as defined in G.S. 89C-3. an individual who
36		is licensed to practice engineering in accordance with G.S. 89C.

1	(12)<u>(10</u>)) "Reside	nce" means residence as defined in G.S. 130A-334. any habitable home, hotel, motel,
2		summer	camp, labor work camp, mobile home, dwelling unit in a multiple family structure, or any
3		other pl	ace where people reside.
4	(13)<u>(11</u>)	<u>)</u> "Rock"	means the consolidated or partially consolidated mineral matter or aggregate, including
5		bedrock	or weathered rock, not exhibiting the properties of soil.
6	(14)<u>(12</u>)) "Season	al High Water Table" or "SHWT" is means the highest level of the saturated zone in the soil
7		during a	a year with normal rainfall. to which the soil is saturated, as SHWT may be determined in
8		the field	through identification of redoximorphic features in the soil profile, monitoring of the water
9		table el	evation, or modeling of predicted groundwater elevations. profile including low chroma
10		mottling	g. This does not include temporary perched conditions. Alternatively, the SHWT can also be
11		determi	ned from water level measurements or via soil/groundwater modeling.
12	(15)<u>(13</u>)) "Septag	e" means septage as defined in G.S. <u>130A-290(a)(32)</u> . 130A 290(a)(32) and also shall
13		include	washings from the interior of septage handling containers, including pumper trucks.
14	(16)<u>(14</u>)) "Septag	e Management Facility" means land, personnel, and equipment used in the management of
15		septage,	including but not limited to, septage management firms as defined in G.S. 130A-290(a)(33),
16		<u>septage</u>	detention and treatment facilities, and septage land application sites.
17	(17)<u>(15</u>)	<u>)</u> "Soil" n	neans the unconsolidated mineral and organic material of the land surface. It consists of sand,
18		silt, and	clay minerals and variable amounts of organic materials.
19	(18)	"Soil Sc	ientist" means an individual who is licensed to practice soil science in accordance with G.S.
20		89F.	
21	(19)<u>(16</u>	<u>)</u> "Soil te:	xtural classes" means soil classification based upon size distribution of mineral particles in
22		the fine	-earth fraction less than two millimeters in diameter. The fine-earth fraction includes sand
23		(2.0 - 0.0)	.05 mm in size), silt (0.05 mm – 0.002 mm), and clay (less than 0.002 mm in size) particles.
24		The spe	cific textural classes are shall be defined as follows:
25		(a)	"Sand" means soil material that contains 85 percent or more of sand; the percentage of silt
26			plus 1.5 times the percentage of clay less than 15;
27		(b)	"Loamy sand" means soil material that contains at the upper limit 70 to 91 percent sand,
28			and the percentage silt plus 1.5 times the percentage of clay is not less than 15; at the lower
29			limit contains not less than 70 to 85 percent sand, and the percentage of silt plus twice the
30			percentage of clay is less than 30;
31		(c)	"Sandy loam" means soil material that contains 7 to 20 percent clay, and the percentage of
32			silt plus twice the percentage of clay exceeds 30, and contains 52 percent or more sand; or
33			less than 7 percent clay, less than 50 percent silt, and more than 43 percent sand;
34		(d)	"Loam" means soil material that contains 7 to 27 percent clay, 28 to 50 percent silt, and 52
35			percent or less sand;
36		(e)	"Silt loam" means soil material that contains 50 percent or more silt and 12 to 27 percent
37			clay; or contains 50 to 80 percent silt and less than 12 percent clay;

1		(f)	"Silt" means soil material that contains 80 percent or more silt and less than 12 percent
2			clay;
3		(g)	"Sandy clay loam" means soil material that contains 20 to 35 percent clay and less than 28
4			percent silt, and more than 45 percent sand;
5		(h)	"Clay loam" means soil material that contains 27 to 40 percent clay and more than 20 to
6			46 percent sand;
7		(i)	"Silty clay loam" means solid material that contains 27 to 40 percent clay and 20 percent
8			or less sand;
9		(j)	"Sandy clay" means soil material that contains 35 percent or more clay and 45 percent or
10			more sand;
11		(k)	"Silty clay" means soil material that contains 40 percent or more clay and 40 percent or
12			more silt; and
13		(1)	"Clay" means soil material that contains 45 percent or less sand, and less than 40 percent
14			silt.
15	(20)	"Techn	ical specialist" means an individual designated by the Soil and Water Conservation
16		Commi	ssion, pursuant to rules adopted by that Commission, to certify animal waste management
17		plans.	
18	(21)<u>(</u>17) "Treatr	nent of septage" means the preparation of septage for final use or disposal. Treatment may
19		include	includes, but is not limited to, thickening, stabilization, and dewatering of septage.
20		Treatm	ent does <u>shall</u> not include storage of septage.
21	Definitions in 40) CFR 50	3.9(d), (g), (h), (j), (k), (l), (r), (t), (u), (v), (w), (bb), and in 40 CFR 503.11(a), (b), (c), (d),
22	(f), (g), (h), (I),	<u>(i),</u> (k), (1), (m), (n) are incorporated by reference including subsequent amendments and editions.
23	Copies of the Co	de of Fe	deral Regulations may be obtained from the Solid Waste Section at no cost.
24			
25	History Note:	Author	ity G.S. 130A-291.1;
26		Eff. Oc	tober 1, 2009. <u>2009;</u>
27		<u>Readop</u>	ted Eff. January 1, 2019.
28			

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0832

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

Are (a)(2) and (3) necessary given that 130A-291.1(c) says that "no septage management firm shall commence or continue operation that does not have a permit issued by the Department" and 130A-290(a) (33) defines this firm as "a person engaged in the business of pumping, transporting, storing, treating or disposing septage." The statute seems extremely broad, so I'm not sure that I understand the intent of (a)(2) and (3).

Given that 130A-295.3(c) gives the factors to use in denying a permit, is (a)(4) necessary? This doesn't seem to add anything.

In (a)(5), I understand that 130A-294(b2)(2) gives you authority to issue a permit upon "substantial compliance." How will it be determined whether you all will require a demonstration of substantial compliance? What is the overall intent of (a)(5)? Is this intended to allow for you all to request some additional information? Is it necessary given 130A-294(b2)(2)?

In (a)(7), what is meant by "a qualified environmental professional"? .0202(a)(3) speaks to a professional engineer and a licensed geologist. Please be consistent with language used elsewhere in your Rules.

In (a)(8), how will it be determined how long a permit will initially be issued? Does this go to .0833(i)? My question here is related to "a maximum." Also, how will it be determined whether and for how long a subsequent permit will be valid? I assume that it will be renewed upon application and a showing that the permittee is in compliance with all applicable laws. Here, my question is related to "may" and "up to." Also, how does the allowance for a five year permit go with the requirement that information is submitted annually in .0833?

In (b)(1), what is meant by "illegal land application"? Do you simply mean that "The storage tank at a mobile or modular office shall not leak or overflow"?

In (b)(1), what is your authority to determine that "the office occupant or owner... shall be considered the responsible party"? 130A-291.2 speaks to the "owner or lessee..." I'm thinking that by "office occupant", you mean "lessee"? If so, please be consistent in your terminology.

In (b)(2), I assume that the intent here is to get to individuals who are providing the portable toilets; however, I read this to also include those who wish to rent the

portable toilets. So, I read this to say that I can't rent a portable toilet unless I am permitted to operate a septage management firm. Is this the intent?

Given 130A-291.2, is (c) necessary?

In (c)(2), what is considered to be "regular basis"?

In (d)(1), just so I understand how everything goes together, is the "wastewater system permitting authority" CPH?

In (d)(4) and (5), there is no need to incorporate the test method twice. Once is fine (especially when they are this close together.)

In (e), given 130A-291.3(d), I assume that the approval process for this training is set forth elsewhere in rule?

15A NCAC 13B .0832 is readopted as published in 33:04 NCR 404 as follows:

-		
3	15A NCAC 13	B .0832 GENERAL PROVISIONS
4	(a) General per	mitting requirements.
5	(1)	No person shall manage septage, or any part of septage, or operate a Septage Management Firm
6		without first obtaining a permit from the Division as required under G.S. 130A-291.1(c);
7	(2)	The permit requirement of G.S. 130A-291.1(c) applies to persons who remove septage, and other
8		waste materials or spent media from wastewater systems permitted by the Department of Health and
9		Human Services, Division of Environmental Health, under the authority of Article 11, Chapter 130A
10		of the North Carolina General Statutes;
11	(3)	The permit requirement of G.S. 130A-291.1(c) applies to persons who manage septage generated
12		from properties which that they own, lease lease, or manage as part of a business, including but not
13		limited to mobile homes, mobile home parks, restaurants, and other residential and commercial
14		property;
15	(4)	The Division may deny a permit application, application in accordance with G.S. 130A-295.3(c);
16	(5)	The Division may require an applicant to demonstrate substantial compliance in accordance with
17		G.S. 130A-294(b2)(2);
18	(6)	All conditions for permits Permits issued in accordance with this Section shall be followed;
19	(7)	Where specified in this Section, permit applications or specific portions of applications shall be
20		prepared by a qualified environmental professional in accordance with Rule .0202(a)(3) of this
21		Subchapter; and
22	(8)	Initial septage land application site and detention and treatment facility permits shall be issued valid
23		for a maximum of one year. Subsequent permits may be valid for up to five years. Renewal permits
24		shall be issued for five years if the facility has not had a major violation and records have been
25		maintained in accordance with this Section.
26	(b) Portable sam	nitation permitting provisions.
27	(1)	A mobile or modular office that meets the criteria of G.S. 130A-291.2 shall be considered a chemical
28		or portable toilet as defined in G.S. 130A-290(a)(1c). Leaks or overflows of the storage tank at a
29		mobile or modular office shall be considered illegal land application. The office occupant and owner
30		of the mobile or modular office shall be considered to be the responsible party and $\frac{\text{shall}}{\text{will}}$ be
31		subject to the requirements of Paragraph (a) of this Rule.
32	(2)	No person shall rent or lease portable toilet(s) or contract or subcontract to rent or lease portable
33		toilet(s) or manage or dispose of waste from portable toilet(s), regardless of ownership of the
34		toilet(s) unless that person is permitted to operate a septage management firm.
35	(3)	Placement of a chemical or portable toilet as defined in G.S. 130A-290(a)(1c) for potential use in
36		North Carolina shall be considered operation of a septage management firm which that requires a
37		permit.

1	(c) Recreational	vehicle waste provisions.
2	(1)	Domestic septage from a recreational vehicle shall be managed in accordance with this Section or
3		shall flow directly into a wastewater treatment system permitted by the Department of
4		Environmental Quality. Environment and Natural Resources.
5	(2)	Wastewater from recreational vehicles that are tied down, blocked up, or that are not relocated on a
6		regular basis, and that are not connected to an approved wastewater system shall be managed in
7		accordance with Article 11, Chapter 130A of the NC General Statutes.
8	(3)	Recreational vehicle dump stations that do not discharge directly to a wastewater treatment system
9		permitted by the Department of Environmental Quality Environment and Natural Resources shall
10		be permitted as a septage detention and treatment facility in accordance with Rule .0836 of this
11		Section.
12	(d) Alternate sep	otage management method limitations.
13	(1)	Grease septage, or any part of grease septage, shall not be introduced or reintroduced into a grease
14		trap, interceptor, separator, or other appurtenance used for the purpose of removing cooking oils,
15		fats, grease, and food debris from the waste flow generated from food handling, preparation, and
16		cleanup unless the Division has received written approval from the wastewater treatment plant
17		operator or the onsite wastewater system permitting authority that reintroduction is acceptable.
18	(2)	Septage, or any part of septage, shall not be reintroduced into an onsite wastewater system unless
19		approved pursuant to G.S. 130A-343(c).
20	(3)	Septage, or any part of septage, shall not be placed in containers at restaurants designated for yellow
21		grease.
22	(4)	Septage, or any part of septage, shall not be disposed of in a municipal solid waste landfill unless
23		the waste passes the paint filter test Paint Filter Liquids Test as defined by EPA S.W. 846 Test
24		Method 9095B which can be accessed at no cost at https://www.epa.gov/hw-sw846, and the landfill
25		receiving the waste has provided the Division written documentation that the specific material will
26		be accepted.
27	(5)	Septage, or any part of septage, shall not be disposed of in a dumpster unless the waste passes the
28		Paint Filter Liquids Test as defined by EPA S.W. 846 Test Method 9095B which can be accessed
29		at no cost at http://www.epa.gov/osw/hazard/testmethods/sw846/online/index.htm,
30		https://www.epa.gov/hw-26 sw846, and the landfill receiving the waste is a properly permitted
31		municipal solid waste landfill, in accordance with Section .1600 of this Subchapter. Subchapter, and
32		the landfill operator has provided the Division written documentation that the specific material will
33		be accepted.
34	(6)	Septage, or any part of septage, managed through subsurface disposal shall be considered a
35		treatment facility and shall require a permit in accordance with this Section and G.S. 130A-343.
36	(7)	Facilities receiving septage, or any part of septage, for composting shall be permitted in accordance
37		with Section .1400 of this Subchapter.

1	(e) All training,	training to meet the requirements of G.S. 130A-291.3(a) and (b), must (b) shall be pre-approved by
2	the Division.	
3	(f) Waste from	holding tanks not otherwise addressed in this Section, and from wastewater systems pumped more
4	often than every	30 days, shall not be considered domestic septage and shall not be land applied at a permitted septage
5	land application	site.
6	(g) Inspection a	nd entry. The permit holder of a septage management firm or facility shall allow a representative of
7	the Division to:	
8	(1)	Enter enter the permit holder's premises where a regulated facility or activity is located or conducted;
9	(2)	Access access and copy any records required in accordance with this Section or conditions of the
10		permit;
11	(3)	Inspect inspect any facilities, equipment (including monitoring and control equipment), practices
12		practices, or operations regulated by the Division;
13	(4)	Sample sample or monitor for the purposes of assuring permit compliance or as otherwise authorized
14		by the Federal Clean Water Act or the North Carolina Solid Waste Management Act, any substances,
15		parameters parameters, or soils at any location; and
16	(5)	Photograph photograph for the purpose of documenting times of compliance or noncompliance at
17		septage management facilities or to require the permit holder to make such photos for the Division.
18	(h) <u>Washings f</u>	rom the interior of septage handling containers such as pump trucks shall be managed as septage.
19	Failure of a pers	on to follow a requirement in any rule set forth in this Section or the taking of any action prohibited
20	by any rule in th	is Section shall constitute a violation of that rule.
21		
22	History Note:	Authority G.S. 130A-291.1, 130A-291.2, 130A-295.3(c), 130A-335;
23		<i>Eff. October 1, 2009;</i>
24		Amended Eff. January 1, 2014. 2014:
25		<u>Readopted Eff. January 1, 2019.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0833

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

Just so I'm clear as to what is going on in (c) and (d), an operator is required to submit these applications each year, regardless of whether it is a renewal application or a regular application, the information required is the same? If that's correct, how does this go with the ability to get a renewal permit for up to 5 years in .0832(a)(8)?

In (c)(13), what kind of other information may be necessary? I understand the need for a catch all, but can you give some kind of guidance as to when that information may be necessary? For example, will you this kind of thing be requested when you all need additional information to determine whether the site is in compliance with your Rules?

Given (c)(14) of this Rule, is (e) necessary? It appears to say the same thing in a different way.

In (g), please consider turning this into an affirmative statement. A suggestion would be something like "Prior to the issurance of a septage management firm permit to firms that pump septage, all pumper trucks shall be inspected and approved." Also, I assume that the requirements for approval of the trucks are set forth elsewhere in rule or statute?

Just to make sure that I understand, in (i), the permit will be issued for one year unless it is issued on or after January 1, in which case it would be valid until December 31?

29

32

33

- 15A NCAC 13B .0833 is readopted as published in 33:04 NCR 404 as follows:
- 3 15A NCAC 13B .0833 SEPTAGE MANAGEMENT FIRM PERMITS

4 (a) Septage management firm names must shall be distinguishable upon the records of the Division from the name of

5 other septage management firms, limited liability companies, non-profit corporations, business corporations, limited

6 partnerships, sole proprietors, general partners partners, and limited liability partnerships operating in North Carolina.

7 Naming preference shall be given to companies that are listed as incorporated with the NC Secretary of State's office.

8 (b) A person who has not operated a septage management firm during the previous calendar year shall obtain four

- 9 hours of new operator training from the Division prior to receiving a permit to operate a septage management firm.
- 10 (c) To apply for a permit, a person proposing to operate a septage management firm shall submit the following

11 information to the Division by January 1 of each year:

- 12 (1) Owner's owner's name, address address, and phone number;
- 13 (2) Business business name, address address, and phone number;
- 14 (3) Operator operator name, address address, and phone number, if different from owner;
- 15 (4) Permit permit number, if existing firm;
- 16 (5) Type(s) type(s) of septage handled, and the quantity pumped the previous 12 months, if in operation;
- 17 (6) <u>Number number</u> of pumper trucks;
- 18 (7) Capacity <u>capacity</u> and type of septage handled by each pumper truck;
- 19 (8) Vehicle vehicle license and serial numbers of each pumper truck;
- 20 (9) Counties counties in which the firm operates;
- 21 (10) Disposal disposal method(s) for septage;
- 22 (11) <u>Permit permit number for each septage land application site to be used;</u>
- 23 (12) <u>Permit permit number for each septage detention and treatment facility to be used;</u>
- (13) Technical any other information that the Division may request that is pertinent to the operation of a
 septage management firm;
- (14) Written written authorization on official letterhead or a notarized wastewater treatment plant
 authorization form shall be submitted from an individual responsible for the operation of each
 wastewater treatment plant used for disposal indicating:
 - (A) Type(s) type(s) of septage which can that may be discharged at the plant;
- 30 (B) Where where septage, including grease septage, can may be discharged at the plant or in
 31 the collection system;
 - (C) Geographic geographic area from which septage will be accepted; and
 - (D) <u>Duration</u> duration of authorization. authorization;
- 34 (15) The the appropriate annual permit fee in accordance with G.S. 130A-291.1(e); and
- 35 (16) The the date, location, number of hours, and provider of annual septage management firm training
 36 required in accordance with G.S. 130A-291.3(a).

1	(d) Dansans that	anometer a contact land annihilation site on a contact treatment and detention facility, but do not nume		
1		operate a septage land application site or a septage treatment and detention facility, but do not pump		
2	1 0	omit the following information to the Division by January 1 of each year to apply for a permit:		
3	(1)	Facility facility name, address, phone number, and county;		
4	(2)	Owner's owner's name, address address, and phone number;		
5	(3)	Operator operator name, address address, and phone number, if different from owner;		
6	(4)	Permit permit number, if existing firm;		
7	(5)	Type(s) type(s) of septage managed;		
8	(6)	Facility facility types and their permit numbers;		
9	(7)	The the name and permit number of all permitted septage management firms using the facility;		
10	(8)	The the date, location, number of hours, and provider of annual training in accordance with G.S.		
11		130A-291.3(b); and		
12	(9)	The the appropriate annual permit fee in accordance with G.S. 130A-291.1(e1).		
13	(e) A septage management firm permit shall not be issued unless the applicant has submitted to the Division written			
14	documentation of authorized access to dispose or otherwise manage septage, or any part of septage, at a wastewater			
15	treatment plant, a permitted septage land application site, a permitted septage treatment facility, or other appropriately			
16	permitted solid waste management facility. Documentation from each plant, site, or other facility shall include the			
17	types and amoun	t of septage which that may be discharged.		
18	(f) Septage mana	agement firm permits shall not be issued until all parts of the application have been completed.		
19	(g) A septage management firm permit shall not be issued to firms that pump septage until its pumper truck(s) have			
20	been inspected and approved.			
21	(h) Permits are r	ton transferable. shall not be transferable.		
22	(i) Septage mana	gement firm permits are issued for up to one calendar year. Permits issued on or after January 1 shall		
23	be effective until	December 31 of that calendar year.		
24				
25	History Note:	Authority G.S. 130A-291.1;		
26		Eff. November 1, 2009. <u>2009:</u>		
27		<u>Readopted Eff. January 1, 2019.</u>		

15A NCAC 13B .0834 is readopted as published in 33:04 NCR 404 as follows:

3 15A NCAC 13B .0834 PERMIT FEES

- 4 (a) Every septage management firm shall pay an annual permit fee by January 1 of each year in accordance with G.S.
- 5 130A-291.1(e) or (e1), unless the firm notifies the Division prior to January 1 that the firm will not operate during the
- 6 next year. Fees shall be paid to the Division of Waste Management, Solid Waste Section, 1646 Mail Service Center,
- 7 Raleigh, NC 27699-1646. This fee may be paid by check or money order made payable to the Division of Waste

8 Management.

- 9 (b) Annual fees are not pro-rated and shall not be refunded or credited to a subsequent year.
- 10 (c) Failure to apply for permit renewal or failure to pay the permit fee by January 1 shall result in assessment of a late
- 11 fee in accordance with G.S. 130A-291.1(e2). Failure to pay the appropriate fees within 45 days after January 1 shall
- result in an additional administrative penalty pursuant to G.S. 130A-22(a) of ten dollars (\$10.00) per day for each day
- 13 thereafter that the fees are not paid.
- 14 (d) Annual permit renewal, including fee payment, shall be the responsibility of the operator of the septage

15 management firm. If the operator did not receive annual permit renewal forms, it shall not be a defense to assessment

- 16 of late fees.
- 17 (e) A food service facility that is permitted to operate a septage detention facility in accordance with Rules .0836 and
- 18 .0833 of this Section and that has paid the fee specified in G.S. 130A-291.1(e1) shall be allowed to empty their own
- 19 grease interceptors, separators, traps, or other appurtenances used for the purpose of removing cooking oils, fats,
- 20 grease, and food debris from the waste flow generated from food handling, preparation, and cleanup, that have a
- volume of 25 gallons or less, into the permitted detention facility. The permitted facility shall be constructed and
- 22 located in accordance with the requirements of Rule .0841 of this Section and emptied at least quarterly by a permitted
- 23 septage management firm.
- 24

25	History Note:	Authority G.S. 130A-291.1;
26		Eff. October 1, 2009.<u>2009;</u>
27		<u>Readopted Eff. January 1, 2019</u>
28		

- 29
- 30

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0835

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In (a), please consider changing "Disposal of septage by trenching or burial is prohibited by the rules of this Section" to "Septage shall not disposed of by trenching or burial."

In .0836(c)(1)(B), you have said "landowner" as opposed to "land owner." Please be consistent

In (c)(4), please delete "defined in G.S. 130A-290" as you have used the word "septage elsewhere" without providing the cross-reference.

In (c)(7), what is meant by "conditions that cause the site to be unavailable for use"? Can you provide some examples? I understand that you replaced "adverse weather conditions" with this to provide some additional information, but I think it would be more clear if you kept both. Perhaps something like "... conditions that cause the site to be unavailable for use, such as adverse weather conditions."

In (c)(10), lines 35-4 on page 2 (If required... G.S. 89E) seem out of place. Please consider moving these to the end of this paragraph without an indent.

In (c)(10)(A), please delete the colon after "include" on line 8, page 2. Also, please change the semi-colon on line 11 after "sodium" to a comma.

In (c)(10)(A), what is meant by "and may include additional analyses"? Is this at the discretion of the soil scientist and the intent here is just to say that it's no problem for you all if more is included, but you all have to have the information provided?

In (c)(10)(C), please delete or define "proper" in "proper evaluation"

In (c)(10)(D), what are the "applicable setbacks"? Are these set forth elsewhere?

In (c)(17)(B), please provide the cost and where these can be found. Also, what is meant by "other similar publications"?

In (c)(18), what is "the appropriate State or Federal Government agency"? How does your regulated public know?

In (c)(20), what kind of other information may be necessary? I understand the need for a catch all, but can you give some kind of guidance as to when that information may be necessary?

In (c)(21), what is considered to be "adequate public notice"? Please delete or define "adequate"?

Please delete "and" at the end of (c)(22)

Please change the period to a semi colon at the end of (c)(23) and add an "and"

What is the overall intent of (d)? Is this to say that in order to apply septage in excess of 50,000 gallons per acre per year must first demonstrate that they have operated a septage land application permit for at least 12 months? If so, please say that. As written, I'm a bit confused as to the overall intent.

In (k), how is the duration determined?

15A NCAC 13B .0835 is readopted with changes as published in 33:04 NCR 404 as follows:

3 15A NCAC 13B .0835 SEPTAGE LAND APPLICATION SITE PERMITS

4 (a) No person shall establish, or allow to be established upon any real property owned, operated, leased, or controlled

5 <u>by that person, established on his land</u>, a septage management facility to, to treat, manage, store, or dispose of septage,

- 6 or any component of septage, unless a permit has been obtained from the Division. Disposal of septage by trenching
- 7 or burial is prohibited under the rules of this Section.

8 (b) Any person that has not operated as a septage land application site during the previous calendar year shall receive

9 at least three hours of new land application site operator training from the Division prior to receiving a permit to10 operate a septage land application site.

- (c) To apply for a permit for a septage land application site, the following information shall be submitted to theDivision:
- 13 (1)Location of the site; 14 Name, name, address, and phone number of: (2)(1) 15 (A) the applicant; 16 **(B)** the land owner or the owner's legal representative in control of the site; and the proposed operator; 17 (C) 18 location of the site; (2)19 (3) Written written authorization to operate a septage land application site signed by each landowner (if 20 other than the permit holder) or his the landowner's legal representative; 21 Types types of septage (as defined in G.S. 130A-290 130A-290) and the proposed annual volume (4) 22 of each type of septage proposed for land application per acre, based on the nutrient management 23 plan submitted in accordance with Subparagraph (c)(12) of this Rule; submitted. 24 (5) Substances substances other than septage previously disposed of at this location, and the amounts 25 of those substances; 26 (6) Aerial aerial photography extending for a distance of at least 2500 feet in all directions from the 27 site, with site property boundaries depicted; accurately depicted. Photograph scale shall be 1" = 400 28 feet or less; 29 (7)Alternative alternative plan for the detention or disposal of septage, during adverse weather 30 conditions; conditions that cause the site to be unavailable for use; 31 (8) Treatment treatment method for each type of septage to be discharged and the permit number of any 32 treatment facilities; 33 (9) <u>Vicinity</u> <u>vicinity</u> map (county road map) showing the site location; 34 (10)A a written report that documents compliance with Rule .0837 of this Section including: Section, 35 including, but not limited to the following: If required by G.S. 89F, G.S. 89C, and G.S. 89E, a 36 licensed soil scientist, professional engineer, or licensed geologist shall prepare these documents. 37 [Note: The North Carolina Board of Licensing of Soil Scientists, Board of Examiners for Engineers

1		and Surveyors Surveyors, and the Board of Licensing of Geologists has determined, via letters dated
2		November 16, 2009, March 11, 2010 2010, and January 7, 2010, that preparation of documents
3		pursuant to this Paragraph constitutes soil science, practicing engineering, or geology under G.S.
4		89F, G.S. 89C <u>89C,</u> and G.S. 89E.]
5		(A) A <u>a</u> representative soils analysis (i.e., <u>such as the</u> Standard Soil Fertility <u>Analysis</u> ,
6		Analysis), conducted within the last six months, on each proposed field of each proposed
7		land application site. The Standard Soil Fertility Analysis representative soils analysis shall
8		include: shall include, but is not necessarily limited to: acidity, base saturation (by
9		calculation), calcium, cation exchange capacity, exchangeable sodium percentage (by
10		calculation), magnesium, manganese, percent humic matter, pH, phosphorus, potassium,
11		and sodium; and may include additional analyses;
12		(B) A <u>a</u> total metal analysis for each proposed field shall be conducted for arsenic, cadmium,
13		copper, lead, nickel, selenium, and zinc. A North Carolina Department of Agriculture &
14		Consumer Services (NCDA & CS)(NCSA&CS) mehlich-3 extraction is shall be an
15		acceptable substitute for a total metal analysis. Mercury shall be sampled if the applicant
16		proposes to land apply domestic or industrial or commercial treatment plant septage, or if
17		warranted by previous site use;
18		(C) Field field description of soil profile(s), based on examinations of excavation pits and auger
19		borings, within four feet of the land surface or to bedrock describing the following
20		parameters by individual diagnostic horizons: thickness of the horizon; texture; color and
21		other diagnostic features; structure; internal drainage; depth, thickness, and type of
22		restrictive horizon(s); and presence or absence and depth of evidence of any seasonal high
23		water table. Applicants may be required to dig pits when necessary for proper evaluation
24		of the soils at the site;
25		(D) A <u>a</u> soil map, scale $1'' = 400$ feet or less, map delineating major soil mapping units within
26		each proposed land application site and showing all physical features, location of pits and
27		auger borings, applicable setbacks, legends, scale, and a north arrow;
28		(E) If <u>if</u> the annual application rate is proposed to exceed 125,000 gallons per acre per <u>year</u> .
29		year field descriptions to a depth of six feet feet, shall be required; and
30		(F) Global Positioning System (GPS) data compatible with the <u>Division's</u> Department's
31		datalogger shall be provided for proposed sites 30 acres or more in size.
32	(11)	Applicants applicants proposing to land apply 200,000 gallons per acre per year or more shall
33		provide a plan for monitoring soil moisture levels and the depth to seasonal wetness to determine
34		when land application can may occur without impacting ground water groundwater or hydraulic
35		overloading. The plan shall include recommendations concerning annual and instantaneous loading
36		rates of liquids, solids, other wastewater constituents constituents, and amendments based on in-situ
37		measurement of saturated hydraulic conductivity in the most restrictive horizon. If required by G.S.

1		89C, (G.S. 89F 89F, and G.S. 89E, a professional engineer, licensed soil scientist scientist, or		
2		license	ed geologist shall prepare these documents. [Note: The North Carolina Board of Examiners		
3		for Er	ngineers and Surveyors, Board of Licensing of Soil Scientists Scientists, and the Board of		
4		Licens	Licensing of Geologists has determined, via letters dated March 11, 2010, November 16, 2009 2009,		
5		and Ja	and January 7, 2010, that preparation of documents pursuant to this Paragraph constitutes practicing		
6			eering, soil science science, or geology, geology under G.S. 89C, G.S. 89F, and G.S. 89E.]		
7	(12)	-	ont management plan, prepared by a Technical Specialist, including at least a nutrient		
8			gement plan prepared by an environmental professional that shall include the following: the		
9		follow	/ing:		
10		(A)	Crops crops that will be planted on the site, including cover crops, and where each crop		
11			will be planted. Crop planting locations shall be depicted on an aerial photograph or on a		
12			plat map; map (scale 1" = 400 feet or less);		
13		(B)	Nitrogen nitrogen needs of the crops based on the realistic yield expectations for the soils		
14			on the site, and crop management practices proposed;		
15		(C)	Crop crop stand density required to meet the realistic yield expectations for the proposed		
16			crop;		
17		(D)	Approximate approximate crop planting times and the seeding or sprigging rates for crops		
18			to be established;		
19		(E)	Crop crop harvest frequency appropriate for the proposed realistic yield expectations and		
20			nitrogen needs, and approximate crop harvest times;		
21		(F)	Approximate approximate monthly discharge rate to match the nitrogen needs and potential		
22			uptake of the crop;		
23		(G)	Sites sites proposed to receive more than 50,000 gallons per acre per year of domestic		
24			septage, or domestic or industrial or commercial treatment plant septage septage, or		
25			domestic or grease septage that has been treated to remove solids, fats, oils, and grease		
26			shall include nitrogen carry over when determining annual application rates;		
27		(H)	Weed weed control recommendations;		
28		(I)	Crop crop use or removal;		
29		(J)	Results results from at least four samples of treated septage if the application is proposing		
30			an increased application rate for the land application of septage treated to reduce nutrients;		
31			and		
32		(K)	the signature of the site operator. A Technical Specialist is not required for nutrient		
33			management plans for subsequent applications that do not contain changes that would		
34			affect nutrient uptake; and		
35		(L)	All nutrient management plans shall bear the signature of the site operator.		
36		<u>For th</u>	e purposes of this Rule, an environmental professional means a person who has received a		
37		post-s	econdary degree from a college or university [baccalaureate or post graduate degree from a		

1		university] and has training and experience in or related to agronomic principles utilized to manage
2		wastewater. Preparation by an environmental professional shall not be required for nutrient
3		management plans for renewal applications that do not contain changes that would affect nutrient
4		uptake.
5	(13)	Application application rates for sites proposed to receive treated septage shall be determined based
6		on the most limiting nutrient;
7	(14)	Erosion erosion and runoff management plan showing:
8		(A) Buffer <u>buffer</u> locations and widths based on the direction and amount of slope adjacent to
9		the land application site;
10		(B) Vegetation vegetation type and stand density in the buffer areas; and
11		(C) Buffer <u>buffer</u> maintenance fertility requirements.
12	(15)	Proposed proposed land application method, method;
13	(16)	Proposed proposed distribution plan if required in Paragraph (e) of Rule .0837 of this Section;
14	(17)	Sites sites proposing to use spray irrigation as a land application method shall include:
15		(A) The <u>the</u> location of all fixed irrigation heads or the location of traveling gun irrigation lanes;
16		(B) Irrigation irrigation head spacing and traveling gun lane spacing shall be determined based
17		on standards in NC Cooperative Extension Documents AG-553-6 and AG-553-7 which are
18		hereby incorporated by reference including subsequent amendments and additions, or other
19		similar publications;
20		(C) The the size of all spray nozzles;
21		(D) <u>System system operating pressure at the irrigation head;</u>
22		(E) <u>Calculation</u> of the wettable acres vs. permitted acreage;
23		(F) <u>Calibration</u> methods and frequency; and
24		(G) Irrigation irrigation system operation and maintenance plan.
25	(18)	Demonstration demonstration from the appropriate State or Federal Government agency that the
26		land application site complies with Paragraph (g) of Rule .0837 Rule .0837(g) of this Section if any
27		part of the site specified for land application is not agricultural land;
28	(19)	The the date, location, number of hours, and provider of annual septage land application site operator
29		training required in accordance with G.S. 130A-291.3(b);
30	(20)	Technical any other information that the Division may request that is pertinent to the suitability of
31		the proposed site;
32	(21)	An an applicant who proposes to land apply septage septage, as defined in G.S. 130A 290, on a
33		public contact site, shall provide the Division evidence of adequate public notice and the applicant
34		shall have successfully completed the Land Application of Residuals and Biosolids Course and
35		maintain a Land Application of Residuals Certificate given issued by the Department of
36		Environmental Quality; Environment and Natural Resources; and

1	(22)	An an applicant who proposes to land apply commercial/industrial industrial or commercial	
2		treatment plant septage or domestic treatment plant septage septage, as defined in G.S. 130A-290,	
3		shall have successfully completed the Land Application of Residuals and Biosolids Course and	
4		maintain a Land Application of Residuals Certificate given issued by the Department of	
5		Environmental Quality: Environment and Natural Resources; and	
6	(23)	An an applicant who proposes to land apply septage septage, as defined in G.S. 130A-290, in excess	
7		of 50,000 gallons per acre per year shall provide the Division with evidence of adequate public	
8		notice which shall at a minimum be publication with a local news organization, in a local newspaper,	
9		shall have successfully completed the Land Application of Residuals and Biosolids Course and	
10		maintain a Land Application of Residuals Certificate issued by the Department of Environmental	
11		Quality. Environment and Natural Resources.	
12	<u>(24)</u>	an approval letter from the unit of local government having zoning authority over the area where	
13		the facility is to be located stating that the proposed facility meets all of the requirements of the local	
14		zoning ordinance, or that the site is not zoned.	
15	(d) Application	rates for septage in excess of 50,000 gallons per acre per year and permits to land apply domestic, or	
16	industrial or con	nmercial treatment plant septage shall not be granted to persons who have not demonstrated that they	
17	can properly ope	erate a septage land application site in accordance with this Section for at least a 12 month period.	
18	(e) Application	as for permits issued in accordance with this Rule shall be submitted to the Division of Waste	
19	Management, So	olid Waste Section, 1646 Mail Service Center, Raleigh NC 27699-1646. Applications for permits will	
20	not be reviewed	until all parts of the application have been completed and submitted to the Division.	
21	(f) Applications	s for permits for sites or treatment methods which that do not meet the standards in accordance with	
22	this Section shal	l be denied.	
23	(g) Application	s for renewal permits issued in accordance with this Rule shall be submitted to the Division at least	
24	90 days prior to	the expiration date of the permit. The Division shall notify permit holders of facility permit expiration	
25	dates 120 days p	prior to permit expiration.	
26	(h) Application	s for permit modification shall be required for the following changes:	
27	(1)	Permitted permitted area or field boundaries;	
28	(2)	Property property ownership;	
29	(3)	Annual annual application rates;	
30	(4)	Receiver receiver crop; or	
31	(5)	Types types of septage discharged.	
32	(i) Applications	s for renewal permits submitted in accordance with Paragraph (g) of this Rule and applications for	
33	permit modificat	tions shall not be required to resubmit the information required in Subparagraphs (c)(6), (8), (9), (10),	
34	(16), (17), and (18) unless changes are made in those plans.		
35	(j) Septage land	application site permits are <u>shall</u> not <u>be</u> transferable.	
36	(k) Maximum p	ermit duration including renewals is <u>shall be</u> five years.	

1 (1) Issuance of a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning

2	approvals prior	to operation of the site.
3		
4	History Note:	Authority G.S. 130A-291.1;
5		Eff. April 1, 2010. <u>2010;</u>
6		<u>Readopted Eff. January 1, 2019.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0836

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In .0835(c)(1)(B), you have said "land owner" as opposed to "landowner." Please be consistent

In (c)(11), what kind of other information may be necessary? I understand the need for a catch all, but can you give some kind of guidance as to when that information may be necessary?

Please end (c)(11) with a semi-colon and "and", rather than a period.

Just so I understand what is going on here applicants get a permit to construct and an interim permit to operate before getting a full operations permit? So, an applicant would do the application for a septage detention and treatment facility in (c), but if he or she wanted to go ahead and get going, he or she could also do the permit to construct and the interim permit in (d)? Please review and clarify.

In (d), how will it be determined for how long an interim permit will be allowed? Is it at the request of the applicant so long as it doesn't exceed 12 months?

In (e), treatment of what? Is this missing some information?

Please consider moving the last part of (e) regarding the requirements of the plans to Paragraph (d) (and move the PE information to the end of that paragraph.) I would suggest something like the following:

(d) To apply for a permit to construct a septage treatment facility and obtain an interim permit to operate the <u>facility</u> facility, for a period not to exceed 12 months, plans and specifications shall be submitted. If required by G.S. 89C, a professional engineer shall prepare these documents. The plans shall include the information set forth in Paragraph (c) of this Rule and the following:

 (1) Site site plan at a scale appropriate to show the detail of the facility, but in no case

- (1) She she plan at a scale appropriate to show the detail of the facility, but in to case greater than 100 feet per inch;
 (2) Engineering engineering plans for the entire system, including treatment, storage, and disposal equipment, and containment structures;
 (3) Detail detailed drawings shall be at a scale appropriate to show pumps, tanks, valves, controls, meters, pipes, and other items critical to the operation of the facility;
 (4) An an operation and maintenance manual outlining information and instruction on how the facility is to be operated, equipment maintenance, minimization of
 - on how the facility is to be operated, equipment maintenance, minimization of odors, required safety and personnel training, and an outline of reports to be submitted to the Division. Contingency plans shall be included to address at least

equipment failure, human error, inclement weather, and spill and leak cleanup; and

(5) A a quality assurance plan for the process and final product if treatment involves meeting pathogen reduction or vector attraction reduction standards.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

(e) Treatment shall <u>include</u> include, but not be limited to, aerobic or anaerobic digestion, dewatering or thickening, pressing, centrifuging, the use of organisms or enzymes, and pathogen reduction methods or vector attraction reduction methods other than lime stabilization. In addition to the requirements of Paragraph (e) of this Rule, the plans [required by Paragraph (d) of this Rule] shall include:

(1)	Site <u>site plan at a scale appropriate to show the detail of the facility, but in no case</u>
	greater than 100 feet per inch;
(2)	Engineering engineering plans for the entire system, including treatment, storage,
	and disposal equipment, and containment structures;
(3)	Detail <u>detailed</u> drawings shall be at a seale appropriate to show pumps, tanks,
	valves, controls, meters, pipes, and other items critical to the operation of the
	facility;
(4)	An an operation and maintenance manual outlining information and instruction
	on how the facility is to be operated, equipment maintenance, minimization of
	odors, required safety and personnel training, and an outline of reports to be
	submitted to the Division. Contingency plans shall be included to address at least
	equipment failure, human error, inclement weather, and spill and leak cleanup;
	and
(5)	A a quality assurance plan for the process and final product if treatment involves
	meeting pathogen reduction or vector attraction reduction standards.

In (e)(3), please delete "detailed"

In (f), do you mean "pending receipt" or "upon receipt"? I think you mean "upon receipt"

In (g), how will it be determined whether the site will be approved? Is the criteria set forth elsewhere in rule or statute?

What is the difference in (h) and (i)? Is (h) just saying that you can't operate until you get a permit and then (i) covers the permit?

In (j), when are renewals required? Can you combine (n) and (j) to make it clear that renewal applications shall be submitted at least 90 days prior to the expiration of the permit?

In (k) and (l), what does it mean that "the facilities shall be certified to be constructed in substantial compliance with plans and specifications"? What plans and specifications? The ones submitted in accordance with this Rule? Also, who makes this determination? The PE?

In (q), how is the duration determined?

In (r), what is to be included in the application for permit modification? Are the contents of this form set forth elsewhere in rule or statute?

In (s), please change "which" to "that" in "which do not meet..."

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

Amber May Commission Counsel Date submitted to agency: November 28, 2018

15A NCAC 13B .0836 is readopted as published in 33:04 NCR 404 as follows:

- 3 15A NCAC 13B .0836 SEPTAGE DETENTION AND TREATMENT FACILITY PERMITS
- 4 (a) No person, shall establish on his land, No person shall establish, or allow to be established upon any real property
- 5 <u>owned, operated, leased, or controlled by that person, on his land, a septage detention and treatment</u> facility, unless a
- 6 permit for the facility has been obtained from the Division or the facility is operating in accordance with a NPDES
- 7 permit issued by the NC Division of Water <u>Resources.</u> Quality.
- 8 (b) Septage detention and treatment facilities shall be designed, located, constructed, and operated in accordance with
- 9 the standards specified in Rule .0841 of this Section.
- 10 (c) To apply for a permit for a septage detention or <u>and</u> treatment facility the applicant shall submit the following
- 11 information to the Division:

12	(1)	Name, <u>name</u> , address, and phone number of	
13		(A) the applicant;	
14		(B) <u>the landowner land owner</u> or the owner's <u>landowner's</u> legal representative in control of the	
15		site; and	
16		(C) the proposed operator;	
17	(2)	Location location of the facility;	
18	(3)	Vicinity vicinity map or county road map showing the site location;	
19	(4)	Types types of septage to be stored or treated;	
20	(5)	A <u>a</u> description of the facility including the size, number, and type of structures to be used at the site	
21		and construction materials to be used;	
22	(6)	An an explanation of the methods for discharge into and removal from the detention or treatment	
23		facility, the methods for treating leaks or spills at the site, and methods for odor control;	
24	(7)	Septage septage land application site permit number and the name of any wastewater treatment	
25		plant(s) where the septage will be disposed;	
26	(8)	Written written documentation of acceptable approved locations to manage any solid or liquid	
27		wastes generated at a treatment facility;	
28	(9)	An an aerial photograph, extending for a distance of at least 1,000 feet in all directions from the site	
29		property lines; lines, scale 1" = 400 feet or less;	
30	(10)	Written written authorization to operate a septage detention or treatment facility signed by each	
31		landowner (if other than the permit holder) or his the landowner's legal representative; and	
32	(11)	Technical any other information that the Division may request that is pertinent to the suitability of	
33		the proposed facility.	
34	<u>(12)</u>	an approval letter from the unit of local government having zoning authority over the area where	
35		the facility is to be located, stating that the proposed facility meets all of the requirements of the	
36		local zoning ordinance, or that the site is not zoned.	

1	(d) To apply fo	r a permit to construct a septage treatment facility and obtain an interim permit to operate the facility	
2	facility, for a pe	riod not to exceed 12 months, plans and specifications shall be submitted. If required by G.S. 89C, a	
3	professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineer		
4	and Surveyors h	has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design	
5	documents purs	uant to this Paragraph constitutes practicing engineering under G.S. 89C.]	
6	(e) Treatment shall include include, but not be limited to, aerobic or anaerobic digestion, dewatering or thickening,		
7	pressing, centrif	uging, the use of organisms or enzymes, and pathogen reduction methods or vector attraction reduction	
8	methods other than lime stabilization. In addition to the requirements of Paragraph (c) of this Rule, the plans required		
9	by Paragraph (d) of this Rule shall include:		
10	(1)	Site site plan at a scale appropriate to show the detail of the facility, but in no case greater than 100	
11		feet per inch;	
12	(2)	Engineering engineering plans for the entire system, including treatment, storage, and disposal	
13		equipment, and containment structures;	
14	(3)	Detail detailed drawings shall be at a scale appropriate to show pumps, tanks, valves, controls,	
15		meters, pipes, and other items critical to the operation of the facility;	
16	(4)	An an operation and maintenance manual outlining information and instruction on how the facility	
17		is to be operated, equipment maintenance, minimization of odors, required safety and personnel	
18		training, and an outline of reports to be submitted to the Division. Contingency plans shall be	
19		included to address at least equipment failure, human error, inclement weather, and spill and leak	
20		cleanup; and	
21	(5)	A <u>a</u> quality assurance plan for the process and final product if treatment involves meeting pathogen	
22		reduction or vector attraction reduction standards.	
23	(f) A permit to	operate a septage treatment facility shall be issued pending receipt of the following:	
24	(1)	Certification certification that the construction of the treatment facility is complete and consistent	
25		with the plans approved as part of the permit to construct;	
26	(2)	An an updated operation and maintenance manual, including all the information required in	
27		Subparagraph (e)(4) of this Rule;	
28	(3)	As built as-built drawings if facility construction is not consistent with the approved plans;	
29	(4)	Operation operation and maintenance manuals and quality assurance plans signed by the applicant;	
30		and	
31	(5)	Acceptable compliance history for the facility. facility showing no unresolved violations of Federal,	
32		State, or local laws, rules, regulations, or ordinances.	
33	(g) A permit fo	r a new septage detention or a septage and treatment facility shall not be issued until the proposed site	
34	has been approv	yed by the Division.	
35	(h) Operation of	f a new septage detention or a new septage treatment facility shall not commence until the facility has	
36	been inspected	by the Division and found to be consistent with the permit application.	

(i) A permit to operate a treatment facility shall not be issued until the facility has been inspected by the Division and
 found to be consistent with the permit application and operation has been found to be consistent with the operation

3 and maintenance manual.

5

4 (j) Application packages for permit renewals shall include:

- (1) Updated drawings updated drawings, if there are changes to the facility; facility;
- 6 (2) Updated site plans updated site plans, (if required as part of original submittal) if there are changes
 7 to the initial site plan; plan,
- 8 (3) <u>A revised updated operation and maintenance manual, if there are changes to the operation and</u> 9 <u>maintenance manual; and</u>
- 10
 (4)
 A revised updated quality assurance plan, if there are changes to the quality assurance plan. plan for

 11
 the process and final product if treatment involves meeting pathogen reduction or vector attraction

 12
 reduction standards.

13 (k) Engineering plans and specifications for marina detention tanks that do not meet the minimum setbacks in

14 .0841(m) <u>Rule .0841(m) of this Section</u> or are located below grade shall be submitted. If required by G.S. 89C, a

15 professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers

and Surveyors has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design

documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.] The facilities shall be

18 certified to be constructed in substantial compliance with the plans and specifications.

19 (1) Parts of detention and treatment facilities located below grade and lagoons shall be certified to be constructed in

20 substantial compliance with the plans and specifications. If required by G.S. 89C, a professional engineer shall certify

21 the construction. [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via

22 letter and resolution dated March 11, 2010, that preparation of engineering design documents pursuant to this

23 Paragraph constitutes practicing engineering under G.S. 89C.]

24 (m) Applications shall be submitted to the Division of Waste Management, Solid Waste Section, 1646 Mail Service

- 25 Center, Raleigh NC 27699-1646. Applications for permits will not be reviewed until all parts of the application have
- 26 been completed and submitted to the Division.
- 27 (n) Applications for renewal permits shall be made <u>submitted to the Division</u> at least 90 days prior to the expiration
- of the permit. The Division will shall notify permit holders of facility permit expiration dates 120 days prior to permit
 expiration.
- 30 (o) Applications for renewal permits submitted in accordance with Paragraph (j) and (n) of this Rule and applications

for permit modifications shall not be required to resubmit the information required in Subparagraphs (c)(3) and (9),

- 32 and Paragraph (d) unless changes are made in those plans.
- 33 (p) Septage detention and treatment facility permits are <u>shall</u> not <u>be</u> transferable.
- 34 (q) Maximum permit duration including renewals is shall be five years.
- 35 (r) Applications for permit modifications shall be required for <u>the following changes</u>: changes in:
- 36 (1) Property property ownership;
- 37 (2) Treatment treatment methods;

- 1 (3) <u>Types types</u> of septage to be stored or treated; or
- 2 (4) <u>Size size and number of treatment or storage structures.</u>
- 3 (s) Applications for facilities which do not meet the standards set forth in this Section shall be denied.
- 4 (t) An application requesting reduced setbacks in accordance with Rule .0841(m)(7) of this Section shall include a
- 5 letter from the appropriate local zoning office, office approving proposed reduced setbacks.
- 6 (u) Issuance of a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning
- 7 approvals prior to operation of the facility.
- 8
- 9 History Note: Authority G.S. 130A-291.1;
- 10 *Eff. April 1, 2010. 2010:*
- 11 <u>Readopted Eff. January 1, 2019.</u>
- 12

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0837

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

(a)(1) references both the soil textures in (a)(1), but also references the textures set forth in (a)(2). I don't understand the reference to textures here.

In (a)(2)(D), please change "will form a ball" to "forms a ball"

In (a)(2)(E), please change "will show a fingerprint" to "shows a fingerprint," Also, please change will not to "does not"

In (a)(2)(F), please change "will not ribbon" to "does not ribbon" or "does not form a ribbon" and "will tolerate" to "tolerates"

In (a)(2)(H), please change "will ribbon" to "ribbons" or "will form a ribbon"

In (a)(2)(M), by "may", do you mean "shall" in "may allow laboratory..." Also, what is the ASTM for sieve and hydrometer analysis?

In (a)(3)(B) and (a)(3)(C), what are the required depths? Those in (a)(4) through (7)?

In (a)(3)(B), what are the "required separation distances"?

In (a)(3)(B), what is meant by "The Division may limit discharges to certain months were soil wetness conditions are marginal for use"?

In (a)(8), what factors will be used in making a "case by case basis" of mine reclamations?

In (e), what is considered to be an "unusual shape"?

In (e), what is meant by "only if the applicant demonstrates to the division that the site will be..." When are they to "demonstrate"? During the application process? If so, isn't this already covered since you've said elsewhere that a permit will be denied if a site does not comply with your Rules? Is the intent here to say something like "Septage land applications sites less than give acres in size, individual fields or a site less than two acres in size, and sites with complex soil patterns or unusual size shall manage for crop production and septage shall be applied with uniform distribution over the entire permitted application area"?

In (f)(2), what is meant by "approved erosion and runoff control practices"?

In (h), delete "as defined in G.S. 130A-290"

Amber May Commission Counsel Date submitted to agency: November 28, 2018 In (h), what is meant by "Treatment verification, acceptable to the Division, shall be available"?

15A NCAC 13B .0837 is readopted as published in 33:04 NCR 404 as follows:

3	15A NCAC 13B .	0837	LOCATION OF SEPTAGE LAND APPLICATION SITES
4	(a) Soil characteri	istics (M	forphology) which that shall be evaluated are as follows:
5	(1)	Texture	- The relative proportions of the sand, silt, and clay sized mineral particles in the fine-earth
6	:	fraction	of the soil are referred to as soil texture. The texture of the different horizons of soils shall
7	1	be classi	ified into three general groups and 12 soil textural classes based upon the relative proportions
8		of sand,	silt, and clay sized mineral particles.
9		(A)	Soil Group I – Sandy Texture Soils: The sandy group includes the sand and loamy sand
10			textural classes.
11		(B)	Soil Group II - Coarse Loamy and Fine Loamy Texture Soils: The coarse loamy and fine
12			loamy group includes sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, and
13			silty clay loam textural classes.
14		(C)	Soil Group III - Clayey Texture Soils: The clayey group includes sandy clay, silty clay,
15			and clay textural classes.
16	(2)	The soil	textural class shall be determined in the field by hand texturing samples of each soil horizon
17	:	in the sc	oil profile using the following criteria:
18		(A)	Sand: Sand has a gritty feel, does not stain the fingers, and does not form a ribbon or ball
19			when wet or moist;
20		(B)	Loamy Sand: Loamy sand has a gritty feel, stains the fingers, forms a weak ball, and cannot
21			be handled without breaking;
22		(C)	Sandy Loam: Sandy loam has a gritty feel and forms a ball that can be picked up with the
23			fingers and handled with care without breaking;
24		(D)	Loam: Loam may have a slightly gritty feel but does not show a fingerprint and forms only
25			short ribbons of from 0.25 inch to 0.50 inch in length. Loam will form a ball that can be
26			handled without breaking;
27		(E)	Silt Loam: Silt loam has a floury feel when moist and will show a fingerprint but will not
28			ribbon and forms only a weak ball;
29		(F)	Silt: Silt has a floury feel when moist and sticky when wet but will not ribbon and forms a
30			ball that will tolerate some handling;
31		(G)	Sandy Clay Loam: Sandy clay loam has a gritty feel but contains enough clay to form a
32			firm ball and may form ribbons from ribbon to form 0.75 inch to one-inch long pieces;
33		(H)	Silty Clay Loam: Silty clay loam is sticky when moist and will ribbon from one to two
34			inches. Rubbing silty clay loam with the thumbnail produces a moderate sheen. Silty clay
35			loam produces a distinct fingerprint;

1		(I)	Clay Loam: Clay loam is sticky when moist. Clay loam forms a thin ribbon of one to two
2		(1)	inches in length and produces a slight sheen when rubbed with the thumbnail. Clay loam
3			produces a nondistinct fingerprint;
4		(J)	Sandy Clay: Sandy clay is plastic, gritty gritty, and sticky when moist and forms a firm ball
5		(3)	and produces a thin ribbon $\frac{1}{100}$ over two inches in length;
6		(K)	Silty Clay: Silty clay is both plastic and sticky when moist and lacks gritty feeling. Silty
0 7		(13)	clay forms a ball and readily ribbons to over two inches in length;
8		(L)	Clay: Clay is both sticky and plastic when moist, produces a thin ribbon over two inches
8 9		(L)	
			in length, produces a high sheen when rubbed with the thumbnail, and forms a strong ball
10			resistant to breaking;
11		(M)	The Division may substitute allow laboratory determination of the soil textural class as
12			defined in this Section by particle-size analysis of the fine-earth fraction (less than 2.0 mm
13			in size) using the sand, silt silt, and clay particle sizes as defined in this Section for field
14			testing when conducted in accordance with ASTM (American Society for Testing and
15			Materials) D-422 procedures methods for sieve and hydrometer analysis. For fine loam and
16			clayey soils (Group II and III) the dispersion time shall be increased to 12 hours.
17	(3)	Wetne	ss Condition:
18		(A)	Soil wetness conditions caused by a seasonal high water high water table, perched water
19			table, tidal water, or seasonally saturated soils shall be determined by observation of
20			common soil mottles of colors of chroma 2 or less, using the Munsell color chart, in mottle
21			or a solid mass. If drainage modifications have been made, the soil wetness conditions may
22			be determined by direct observation of the water surface in monitoring wells during periods
23			of typically high water elevations. However, colors of chroma 2 or less which that are relic
24			from minerals of the parent material shall not be considered indicative of a soil wetness
25			condition.
26		(B)	Soils which that do not meet the required depths to a soil wetness condition shall be
27			considered unsuitable and septage shall not be applied, unless the required separation
28			distances can may be maintained. Water table monitoring wells may be utilized to
29			determine the actual depth to a soil wetness condition. The Division may limit discharges
30			to certain months where soil wetness conditions are marginal for use.
31		(C)	The required depth to a soil wetness condition is determined by the Soil Group Textural
32			Classification.
33	(4)	Soil G	roup I soil shall be considered suitable where soil wetness conditions are deeper than 36
34			below the point of septage application or incorporation.
35	(5)		roup II soils shall be considered suitable where soil wetness conditions are deeper than 24
36	~ /		below the point of septage application or incorporation.
-			1 1 0 11 F
1	(6)	Soil Group III soils shall be considered suitable where soil wetness conditions are deeper than 18	
----	---------------------------------------	--	
2		inches below the point of septage application or incorporation.	
3	(7)	Depth to rock: soil depth shall be considered suitable where depth to rock is deeper than 24 inches	
4		below the point of septage application or incorporation or deeper than 18 inches if the septage is	
5		pretreated to accomplish pathogen reduction and surface applied over vegetation.	
6	(8)	Mine reclamation sites will shall be considered on a case by case case-by-case basis.	
7	(b) Septage lan	d application sites shall not be located in the watershed of a Class WS-I stream. New septage land	
8	application sites	shall not be located in the water quality critical area of Class WS-II, WS-III, or WS-IV streams or	
9	reservoirs. This	prohibition does shall not apply to those portions of a water supply watershed that which are drained	
10	by Class B or Cl	ass C streams.	
11	(c) Setbacks. A	at the time of initial permitting, septage land application sites shall observe the minimum setback	
12	distances specifi	ied in this Rule. Minimum setbacks shall be maintained throughout the life of the site only on land	
13	owned, operated	operated, or controlled by the permittee or by the landowner(s) at the time of initial permitting. Any	
14	sale, lease <u>lease</u> ,	or other conveyance of land by the permittee, or by the landowner(s) if different from the permittee,	
15	subsequent to the	he initial permitting of the site shall include restrictions to ensure continued maintenance of the	
16	setbacks. Failure	e to maintain required setbacks shall result in immediate permit revocation.	
17	(d) All septage	disposal sites shall be located at least the minimum distance specified for the following:	
18	(1)	Residence residence:	
19		(A) not occupied by the applicant -500 feet; feet,	
20		(B) residence occupied by the applicant -100 feet;	
21	(2)	Place place of business, other than the septage management firm's office or related buildings, firm	
22		office, or place of public assembly -500 feet;	
23	(3)	Well well or water supply spring – 500 feet;	
24	(4)	Surface waters. Stream surface waters - stream classification shall be determined in accordance	
25		with 15A NCAC 02B .0301 through .0317 Assignment of Stream Classifications;	
26	(5)	Fresh <u>fresh</u> waters:	
27		(A) Class WS-I, Class WS-II, or Class WS-III streams – 300 feet;	
28		(B) Class B stream – 300 feet;	
29		(C) Class C stream – 200 feet; and	
30		(D) Other other streams and bodies of water -200 feet;	
31	(6)	Tidal tidal salt waters:	
32		(A) Class SA or Class SB – 300 feet from mean high water mark; and	
33		(B) Class SC and other coastal waters – 200 feet from mean high water <u>mark</u> ; mark .	
34	(7)	Supplemental supplemental classifications:	
35		(A) Trout trout waters and swim waters – 200 feet; and	
36		(B) <u>Nutrient nutrient sensitive waters and outstanding resource waters – 300 feet; feet.</u>	
37	(8)	Groundwater groundwater lowering ditches and devices – 100 feet;	

1	(9)	Adjoining adjoining property under separate ownership or control – 50 feet;
2	(10)	Public public road right of ways – 100 feet;
3	(11)	Food food crops – 50 feet;
4	(12)	Wetlands wetlands – 50 feet;
5	(13)	Woods woods line - five feet, unless greater distance is required as part of an erosion and runoff
6		control plan;
7	(14)	Land land application site on the same tract of land, permitted to a different operator -100 feet; and
8	(15)	Setbacks setbacks in Subparagraphs (d)(3), (4), (5), (6), (7), and (8) of this Rule may be reduced 50
9		percent when septage is pretreated to accomplish pathogen reduction and when the land within the
10		setback area is in permanent, established grass with at least 95 percent cover or when the setback
11		area is in forest with a continuous canopy and a 95 percent forest litter cover. Accurate property line
12		locations are shall be the responsibility of the site operator.
13	(e) Septage land	application sites less than five acres in size, individual fields of a site less than two acres in size, and
14	sites with compl	ex soil patterns or unusual shapes shall be permitted only if the applicant demonstrates to the Division
15	that the site car	a will be properly managed for crop production and that septage will be applied with uniform
16	distribution over	the entire permitted application area. can be evenly distributed over the site.
17	(f) Septage land	application sites shall not be located where the slope of the land is greater than 12 percent unless all
18	of the conditions	s of this Paragraph are met:
19	(1)	The the site is in permanent, established grass with at least 95 percent cover or is in forest with a
20		continuous canopy and a 95 percent forest litter cover;
21	(2)	Plans plans submitted to the Division are prepared in accordance with accepted approved erosion
22		and runoff control practices and indicate the following:
23		(A) Management management practices and discharge methods which that will be used to
24		reduce the potential for run-off from the site and assure even septage distribution over the
25		site allow for the uniform distribution of septage over the entire permitted application area;
26		and
27		(B) Location location of potential surface water monitoring devices upslope and downslope
28		from the area proposed to be permitted and identification of sampling methods. Monitoring
29		may be required. if there is an indication that septage is entering surface waters.
30	(3)	The Division may increase setbacks or decrease application rates for the protection of surface
31		waters: Setbacks will be increased and application rates decreased as appropriate to protect any
32		nearby surface waters which are to be approved by the Division; and
33	(4)	No no site shall include slopes in excess of 25 percent.
34	(g) A new sept	age land application site shall not jeopardize the continued existence of threatened or endangered
35	species or result	in the destruction or adverse modification of a critical habitat, habitat protected under the Federal

36 Endangered Species Act of 1973. Agricultural land shall not be considered potential habitat.

1	(h) Septage, or	any part of septage, as defined in G.S. 130A-290, treated to meet the standard for Class A sewage
2	sludge in accord	dance with the federal regulations for pathogen reduction and vector attraction reduction in 40 CFR
3	Part 503, Subpa	rt D, may be permitted by the Division for application to a public contact site, home lawns and gardens,
4	or to be sold or	given away in a bag or other container, provided it can be demonstrated that pollutant limits in 40 CFR
5	<u>503.13(b)(3)</u> 50	3.13(b)(1) Table 3 Pollutant Concentrations are not exceeded. Persons who prepare the septage, and
6	persons who de	rive material from the septage, shall comply with the applicable record keeping requirements in 40
7	CFR 503.17(a)	(1), (2) or (6). Treatment verification, acceptable to the Division, shall be available. All treatment
8	methods and fac	cilities shall obtain a permit from the Division in accordance with Rule <u>.0836 of this Section.</u> .0836.
9		
10	History Note:	Authority G.S. 130A-291.1;
11		Eff. October 1, 2009. 2009:
12		<u>Readopted Eff. January 1, 2019.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0838

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In (a)(10), please delete "clearly."

In (a)(14), please delete "adequately"

In (a)(19), please check you cross-reference to (a)(15). Is this correct?

In (a)(20), please change "their" to "his or her"

In (b)(7), what is considered to be "highly variable material"? Is this an industry term?

In (b)(9), when would an adjusted rate be approved? I assume that this is set forth elsewhere in rule or statute?

In (d), how will it be determined whether approval will be granted? What factors will be used in making this determination?

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

15A NCAC 13B .0838 is readopted as published in 33:04 NCR 404 as follows:

2		
3	15A NCAC 13	B .0838 MANAGEMENT OF SEPTAGE LAND APPLICATION SITES
4	(a) General req	uirements for septage land application sites. sites shall include the following:
5	(1)	Only only domestic septage, as defined in G.S. 130A-290, shall be land applied or otherwise placed
6		on a septage land application site, unless specified in the permit;
7	(2)	Each each site shall be posted with visible and legible "NO TRESPASSING" signs. Access All
8		access roads or paths crossing or leading to the disposal area shall be posted "NO TRESPASSING"
9		and a visible and legible sign of at least two feet by two feet stating "SEPTAGE LAND
10		APPLICATION SITE" shall be maintained at each entrance to the land application area;
11	(3)	Each each site shall have an all weather access road;
12	(4)	No no hazardous wastes shall be permitted on the site;
13	(5)	No no site shall be permitted for land application of industrial or commercial septage unless the
14		applicant demonstrates to the Division that the strength of the organic and inorganic components of
15		the septage is within the normal range for domestic septage;
16	(6)	Treatment Plant Septage treatment plant septage generated by the operation of a wastewater system
17		permitted under Article 11 of Chapter 130A may be land applied at a septage land application site
18		permitted under this Section;
19	(7)	Septage septage shall be applied to the surface of the land from a moving vehicle in such a manner
20		as to have no standing liquid or soil disturbance resulting from the waste flow after the discharge is
21		complete;
22	(8)	Septage septage shall not be applied to a site if any liquid is ponded on the site or if the site is
23		flooded, frozen, or snow covered;
24	(9)	Septage septage shall not be applied to a site if the application method will result in ruts greater than
25		three inches in the soil surface;
26	(10)	Disposal disposal area boundaries shall be elearly marked on the ground while a site or any portion
27		of a site is in use; use. Markers shall be of adequate height and spacing such that they are clearly
28		visible for determining the disposal boundaries when the site is in use;
29	(11)	All all septage discharges shall be made at a location on the site consistent with the nutrient
30		management plan;
31	(12)	All all septage discharges, including aerial drift from discharges, shall be made within the permitted
32		boundaries of the land application site;
33	(13)	Land land application of septage shall be limited to a maximum daily hydraulic application rate of
34		one acre inch;
35	(14)	Grease septage from a grease trap, interceptor, separator, or other appurtenance used for the purpose
36		of removing cooking oils, fats, grease, and food debris from the waste flow generated from food
37		handling, preparation, and cleanup shall not be land applied unless the trap has been pumped within

1	ŧ	he last 90 days or the grease septage adequately screened or dewatered to prevent damage to land
2		application site vegetation;
3		Grease grease septage shall be diluted at least 1:1 from its concentration when pumped with
4	d	lomestic septage or water if land applied over perennial vegetation. This dilution shall be increased
5	i	f crop damage occurs. This dilution requirement shall not apply to the liquid portion of grease
6	S	septage that has been adequately treated to remove solids, fats, oils oils, and grease as long as crop
7	d	lamage does not occur;
8	<u>(15)(16)</u>	Solids solids resulting from septage treatment shall not be land applied unless the solids are treated
9	te	o meet pathogen reduction and vector attraction reduction requirements in 40 CFR 503, and the
10	p	permittee has satisfactorily demonstrated to the Division that the solids can be evenly land applied
11	<u>v</u>	vill be land applied with uniform distribution over the entire permitted application area at
12	a	agronomic rates with standard agricultural spreading equipment;
13	<u>(16)(17)</u> 7	The <u>the</u> site shall be managed in such a manner as to minimize soil erosion and surface water runoff.
14	A	Appropriate soil and water management practices shall be implemented and maintained in
15	a	accordance with the Division approved erosion and run-off control plan. management plan
16	<u>s</u>	submitted in accordance with Rule .0835(c)(14) of this Section. All water control structures shall be
17	d	designed, installed, and maintained to control the run-off resulting from a 10-year storm;
18	<u>(17)(18)</u> 4	Approved approved nutrient management plans shall be followed;
19	<u>(18)(19)</u> I	Land land application sites or portions of land application sites that do not follow the approved
20	n	nutrient management plan shall not be used for land application until brought into compliance with
21	t	he nutrient management plan;
22	(20) a	alternate plan for the storage or disposal of septage during periods when the permitted land
23	a	application site is not available;
24	<u>(19)(21)</u> I	Land land application sites permitted for the management of grease septage, or commercial or
25	i	ndustrial septage, shall have a septage detention facility available, of adequate size to meet the
26	r	requirement of Subparagraph (a)(15) of this Rule; and
27	<u>(20)(22)</u> 4	A <u>a</u> septage land application site permit holder or operator is responsible for the actions of any
28	S	septage management firm that the permit holder or operator allows to use their his land application
29	S	site.
30	(b) Maximum land	d application rates for septage shall be determined based upon the following:
31	(1) I	Domestic domestic septage land application rates shall be in accordance with 40 CFR Part
32	5	503.12(c);
33	(2) 4	Land land application of domestic treatment plant septage shall not exceed the rate in 40 CFR
34		503.14(d);
35		Pollutant pollutant limits for regulated metals in 40 CFR part 503.13 shall not be exceeded for any
36	t	ype <u>of</u> septage;

2 but in no case shall the application of untreated grease septage exceed 25,000 gallons per acre per year; 4 (5) Sites sites permitted for the land application of grease septage shall meet the requirements of 40 CFR Part 257.3-5; 6 (6) Land land application rates for septage treated to reduce solids, nutrients, or pollutants shall be determined based on the analysis of the treated material; 8 (7) At at least four analyses of treated liquid shall be required prior to receiving an adjusted land application rate. Additional samples shall be required for highly variable material; 10 (8) Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestie domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 21 Grease grease septage, tre	
4 (5) Sites sites permitted for the land application of grease septage shall meet the requirements of 40 5 CFR Part 257.3-5; 6 (6) Land land application rates for septage treated to reduce solids, nutrients, or pollutants shall be determined based on the analysis of the treated material; 8 (7) At at least four analyses of treated liquid shall be required prior to receiving an adjusted land application rate. Additional samples shall be required for highly variable material; 10 (8) Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and 16 (11) Land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this 18 Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 <tr< td=""></tr<>	
5 CFR Part 257.3-5; 6 (6) Land application rates for septage treated to reduce solids, nutrients, or pollutants shall be determined based on the analysis of the treated material; 8 (7) At at least four analyses of treated liquid shall be required prior to receiving an adjusted land application rate. Additional samples shall be required for highly variable material; 10 (8) Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and 16 (11) Land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease s	
6(6)Land land application rates for septage treated to reduce solids, nutrients, or pollutants shall be7At at least four analyses of treated liquid shall be required prior to receiving an adjusted land9application rate. Additional samples shall be required for highly variable material;10(8)Each cach analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and11regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine;12(9)After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first1312 months of operation;14(10)After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly;15and16(11)Land application rates for industrial or commercial septage, or commercial or industrial17treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this18Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants.19(c) Septage treatment standards:20(1)Demestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 50321Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;22(2)Grease grease septage, treated grease septage, emmercial or industrial or commercial septage shall be treated in23accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR24accordance with 40 CFR 257.3-6 or tr	
7 determined based on the analysis of the treated material; 8 (7) At at least four analyses of treated liquid shall be required prior to receiving an adjusted land application rate. Additional samples shall be required for highly variable material; 10 (8) Eash each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and 15 and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, enomercial or industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an	
8 (7) At at least four analyses of treated liquid shall be required prior to receiving an adjusted land application rate. Additional samples shall be required for highly variable material; 10 (8) Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this 18 Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR part 503 Subpart D; 26 (3) <td< td=""></td<>	
9 application rate. Additional samples shall be required for highly variable material; 10 (8) Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and 16 (11) Land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, eonomercial septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D; 23 plant septage, and eonomercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 25 .503 Subpart D; 26 (3) Grease grease sept	
10 (8) Each each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 11 regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 13 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; 15 and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, eonmercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 25 23 uplant septage, and eonmercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by a	
11 regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine; 12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 13 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; 15 and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial 17 treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this 18 Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, commercial or commercial septage shall be treated in accordance with 40 CFR Part 503 23 plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 25 503 Subpart D; 26 (3	
12 (9) After after an adjusted rate is approved, sampling shall be required every 60 days for the initial first 13 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; 15 and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial 17 treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this 18 Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 25 503 Subpart D; 26 (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and 28 (4) Domestic domestic t	
13 12 months of operation; 14 (10) After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; 15 and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial 17 treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this 18 Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 25 503 Subpart D; 26 (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and 28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
14(10)After after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and15and16(11)Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants.19(c) Septage treatment standards:20(1)Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;22(2)Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 2525503 Subpart D;26(3)Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and28(4)Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
15 and 16 (11) Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 21 Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 503 Subpart D; 26 (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and 28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
16(11)Land land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants.19(c) Septage treatment standards:20(1)Domestie domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;22(2)Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 503 Subpart D;26(3)Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and28(4)Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
17 treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this 18 Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants. 19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 503 Subpart D; 26 (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and 28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
18Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants.19(c) Septage treatment standards:20(1)Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 50321Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;22(2)Grease grease septage, treated grease septage, commercial or industrial or commercial treatment23plant septage, and commercial/industrial industrial or commercial septage shall be treated in24accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR25503 Subpart D;26(3)Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated27as grease septage; and28(4)Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
19 (c) Septage treatment standards: 20 (1) Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 503 21 Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated; 22 (2) Grease grease septage, treated grease septage, commercial or industrial or commercial treatment 23 plant septage, and commercial/industrial industrial or commercial septage shall be treated in 24 accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 25 503 Subpart D; 26 (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and 28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
20(1)Domestic domestic septage shall be treated in accordance with the requirements in 40 CFR Part 50321Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;22(2)Grease grease septage, treated grease septage, commercial or industrial or commercial treatment23plant septage, and commercial/industrial industrial or commercial septage shall be treated in24accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR25503 Subpart D;26(3)27Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated27as grease septage; and28(4)29(4)	
21Subpart D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;22(2)Grease grease septage, treated grease septage, commercial or industrial or commercial treatment23plant septage, and commercial/industrial industrial or commercial septage shall be treated in24accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR25503 Subpart D;26(3)Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated27as grease septage; and28(4)Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
 (2) Grease grease septage, treated grease septage, commercial or industrial or commercial treatment plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 503 Subpart D; (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the 	
 plant septage, and commercial/industrial industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 503 Subpart D; Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the 	
24accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR25503 Subpart D;26(3)Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated27as grease septage; and28(4)Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
25503 Subpart D;26(3)Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated27as grease septage; and28(4)Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
 26 (3) Grease grease septage, or any part of grease septage, mixed with domestic septage shall be treated 27 as grease septage; and 28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the 	
27 as grease septage; and 28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
28 (4) Domestic domestic treatment plant septage shall be treated to meet the pathogen reduction and the	
29 vector attraction requirements in 40 CFR 503, Subpart 503 D.	
0 (d) No one other than the permit holder shall land apply septage at a permitted site unless approved in writing by the	
Division. The permit holder shall submit a written request and written authorization from the landowner(s), if different	
32 from the permit holder. The request shall include the name of the firm requesting approval and the type and amount	
33 of septage proposed to be discharged.	
34 (e) Permit holders of septage land application sites shall develop and maintain records and reports to demonstrate	
35 compliance with this Section and the permit requirements of each site.	
36 (1) <u>Permit permit holders of sites receiving septage shall maintain a log which meets the requirements</u>	
······································	

1	(2)	Permit permit holders of all septage land application sites shall have all records and certifications
2		and test results required in accordance with this Section to be kept available for review during any
3		announced site inspections by the Division or upon the Division's request; Division; and
4	(3)	The the permit holder of a site where more than one septage management firm has been authorized
5		by the Division to discharge septage shall submit a monthly report to the Division that which shall
6		include the following information for each discharge: the date and quantity of each discharge, the
7		type of septage discharged, and the name of the septage management firm discharging.
8	(4)	All test results for nutrients, metals, contaminants, and pathogens required in this Section shall be
9		maintained by the site operator or the preparer.
10	(f) Septage sha	ll not be land applied at a new septage land application site until a representative of the Division has
11	inspected the sit	te to determine compliance with these rules and consistency with the permit application and all permit
12	conditions.	
13	(g) Methods of	Eland application for which there are no standards in these rules shall be permitted only if it can be
14	demonstrated th	at the proposed method manages septage in a manner at least equivalent to these Rules and to protect
15	public health an	d the environment. Plans shall be submitted and prepared in accordance with professional engineering
16	principles.	
17		
18	History Note:	Authority G.S. 130A-291.1;
19		<i>Eff. October 1</i> , 2009. <u>2009;</u>
20		<u>Readopted Eff. January 1, 2019.</u>

- 1 15A NCAC 13B .0839 is readopted as published in 33:04 NCR 404 as follows:
- 3 15A NCAC 13B .0839 RECORD KEEPING FOR SEPTAGE MANAGEMENT FIRMS
- 4 (a) Each permit holder shall maintain a log which that includes at least the following information for each septage
 5 pumping event:
- 6 (1) The the date, type, quantity, and location of septage pumped; pumped; the location for tanks shall
 7 be a street address and the location for portable toilets shall be a route; and
 8 (2) Location location of the discharge of the septage.
 9 (b) A septage management firm shall make all records records, documents, or logs required in accordance with this
- 10 Section or conditions of the permit available for inspection by a representative of review by the Division at the time
- 11 and place of an inspection of the firm's septage pumper truck(s) or upon <u>the Division's</u> request.
- 12

- 13 History Note: Authority G.S. 130A-291.1;
- 14 Eff. October 1, 2009: 2009:
- 15 <u>Readopted Eff. January 1, 2019.</u>
- 16

- 1
- 15A NCAC 13B .0840 is readopted as published in 33:04 NCR 404 as follows:
- 2

3 15A NCAC 13B .0840 SAMPLING AND ANALYSIS

- 4 (a) Monitoring or sample collection, <u>handling</u>, handling and analysis required by this <u>Section</u>, <u>Section</u> and all costs
- 5 involved, are involved shall be the responsibility of the septage management firm permit holder.
- 6 (b) The permit holder of a septage land application site shall obtain representative soil samples once every two years
- 7 from each field, as designated in permit, during the last quarter of the calendar year.
- 8 (c) Soil samples shall be analyzed for cation exchange capacity, pH, phosphorus, potassium, calcium, manganese,
- 9 magnesium, zinc, and copper. If the results for zinc analysis are equal to or above 30 pounds per acre or the results
- 10 for copper analysis are equal to or above 35 pounds per acre, analysis for the metals listed in Rule .0835(c)(10)(B) of
- 11 this Section shall be required. Sites permitted to receive septage other than domestic septage shall be analyzed for
- 12 cadmium to determine compliance with 40 CFR 257.3-5.
- 13 (d) Domestic septage and grease septage shall be monitored in accordance with 40 CFR Part-503.16(b).
- 14 (e) Domestic treatment plant septage proposed to be land applied at a permitted septage land application site shall be

sampled before the initial application, and annually thereafter, prior to being removed from a treatment facility.Samples shall be analyzed for:

17

(1) Metals listed in 40 CFR 503.13; and

18 19 Total solids, pH, ammonia, nitrates, total kjeldahl nitrogen (TKN), biochemical oxygen demand
 (BOD), chemical oxygen demand (COD), total phosphorus, potassium, sodium, and magnesium.

(f) Industrial or commercial septage proposed to be land applied at a permitted septage land application site shall be
 sampled prior to being removed from a wastewater system. Analytical results shall be submitted to the Division prior
 to the issuance of a permit or approval to land apply the septage. Samples shall be analyzed for:

23

(1)

- Metals listed in 40 CFR 503.13;
- 24 (2) Total solids, pH, ammonia, nitrates, TKN, BOD, COD, total phosphorus, potassium, sodium, and
 25 magnesium; and
- (3) Organic chemicals, using a complete EPA Test Method 1311 Toxicity Characteristic Leaching
 Procedure or other appropriate analysis, such as EPA Test Method 8260 Volatile Organic
 Compounds by Gas Chromatography/Mass Spectrometry or 8270 Semivolatile Organic Compounds
 by Gas Chromatography/Mass Spectrometry, unless an examination of the industrial process and
 the material used indicates less extensive analysis is acceptable.

(g) Sample analysis required by this Section shall be performed either by the North Carolina Department of
 Agriculture and Consumer Services laboratory or by a laboratory certified by the North Carolina Division of Water
 Resources for waste analysis. Analysis for inorganic constituents shall be conducted in accordance with 40 CFR Part
 503.8.

- 35
- 36 History Note: Authority G.S. 130A-291.1;
- 37 *Eff. October 1, 2009;*

1	Amended Eff. May 1, 2017.<u>2017;</u>
2	<u>Readopted Eff. January 1, 2019.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0841

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In (a), please consider ending lines 6-9 after "such increases;" If not, please change your semi-colon to a period and begin the next line as a new sentence with "The division shall notify"

In (b), is the requirement that each site have an all weather access road currently in rule or statute and it was just moved here? Why was this added after publication?

In (c), what is meant by "structurally sound"? Please delete or define.

In (f)(1), in order to match the introductory language, please consider revising as follows:

- (f) Septage detention and treatment facilities located below grade shall:
- If <u>if</u> required by G.S. 89C, a professional engineer shall certify that the construction was <u>be</u> completed in substantial compliance with the plans and specifications prior to any waste being introduced into the system. <u>If required by G.S. 89C, a professional engineer shall certify this compliance</u>. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, has determined, via letter and resolution dated March 11, 2010, that certification of documents pursuant to this Paragraph constitutes practicing engineering, under G.S. 89C.];

In (f)(3), please change "are allowed to be located" to "may be located"

In (j), please delete "safe and sanitary" Is this set forth elsewhere?

In (I), please change "shall not jeopardize" to "does not jeopardize"

In (I)(2), I don't understand the cross-reference to (f)(1). Is this saying that below grade lagoons are okay if found to be in substantial compliance by a PE?

In (I)(9), please delete or define "appropriate"

In (o), I understand that this determination will be made on a case-by-case basis, but how? What factors will be used?

In (p)(2), what is meant by "sanitary condition"? Is this set forth elsewhere in rule or statute?

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

1 15A NCAC 13B .0841 is readopted as published in 33:04 NCR 404 as follows:

2

3	15A NCAC 13B .0841	STANDARDS FOR SEPTAGE DETENTION AND TREATMENT FACILITIES
4		FACILITES

5 (a) Septage detention facilities, facilities used to meet the requirements of Rule .0838(a)(19) .0838(a)(20) or (21) of 6 this Section, Section shall have a minimum size equal to two percent of the maximum annual application rate. The 7 Division shall increase the minimum size requirement for any increase in the maximum annual application rate or if 8 it is demonstrated during site operation that this volume is inadequate or if specific site considerations would warrant 9 such increases; and shall notify the owner or operator of the facility of the increase. the average volume of septage 10 pumped per week. This Paragraph does not limit the maximum capacity of a septage detention facility. Capacity shall 11 be increased if it is demonstrated during site operation that this volume is inadequate or if specific site considerations 12 would warrant such increases. 13 (b) Each site shall have an all weather access road. Septage detention facilities for sites permitted to land apply in 14 excess of 50,000 gallons per acre per year shall have a minimum size equal to two percent of the maximum annual application rate. Facilities permitted as of the effective date of this rule shall have 12 months to meet this requirement. 15 16 (c) Septage treatment and detention facility containers shall be structurally sound and constructed of steel, concrete, 17 plastic, or fiberglass. If required by G.S. 89C, plans and specifications for proposed containers constructed of materials 18 not specifically addressed in this Rule shall be prepared by a professional engineer. [Note: The North Carolina Board 19 of Examiners for Engineers and Surveyors, has determined, via letter and resolution dated March 7, 11, 2010, that 20 certification of documents pursuant to this Paragraph constitutes practicing engineering, under G.S. 89C.] 21 (d) A septage treatment and detention facility Treatment and Detention Facility permit holder and operator are shall 22 be responsible for the actions of any septage management firm that uses the detention or treatment facility. 23 (e) Each detention and treatment facility shall be designed, constructed, and maintained in such a manner as to: 24 (1)Prevent prevent leaks or the flow of septage out of the facility into the seasonally high water table, 25 onto the ground surface, or into any surface waters; 26 (2)Minimize minimize the attraction or admittance of vectors; and 27 (3) Prevent prevent unauthorized entry into septage containers or lagoons. 28 (f) Septage detention and treatment facilities located below grade shall: 29 (1)If if required by G.S. 89C, a professional engineer shall certify that the construction was completed 30 in substantial compliance with the plans and specifications prior to any waste being introduced into 31 the system. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, has 32 determined, via letter and resolution dated March 11, 2010, that certification of documents pursuant 33 to this Paragraph constitutes practicing engineering, under G.S. 89C.]; 34 Be be constructed to a traffic rated standard or protected from vehicular traffic; and (2)35 (3) Not not be constructed of used metal tanks. Used metal tanks are allowed to be located beside a wall 36 or embankment for gravity access as long as the entirety of the tank is visible.

3 (h) Ground water The Division may require that groundwater monitoring wells or a leak detection system may be 4 required be installed around treatment or detention systems if necessary to assure for protection of public health and 5 the environment. environment if there is evidence of a leaking tank. 6 (i) The area around tanks shall be free of debris and vegetation to allow for access and inspection for a distance of at 7 least 5 feet. 8 (j) Septage shall be transferred to and from a detention system in a safe and sanitary manner that prevents leaks or 9 spills of septage, including septage in pipes used for transferring waste to and from vehicles. 10 (k) Access roads or paths crossing or leading to the facility shall be posted with "NO TRESPASSING" signs. 11 (l) Requirements for lined lagoons: 12 Lined lagoons shall be permitted only at sites where the construction and use of a lagoon shall not (1)13 jeopardize the public health or environment. 14 (2) Portions of lined lagoons may be located below grade in accordance with Subparagraph (f)(1) of 15 this Rule. 16 (3) Only lagoons designed, constructed and inspected in accordance with accepted engineering 17 principles providing for the protection of the underlying groundwater will be considered for use in 18 a septage treatment or detention system. If required by G.S. 89C, a professional engineer shall certify 19 that the construction was completed in substantial compliance with the plans and specifications prior 20 to any waste being introduced into the system. [Note: The North Carolina Board of Examiners for 21 Engineers and Surveyors, has determined, via letter and resolution dated March 11, 2010, that 22 certification of documents pursuant to this Paragraph constitutes practicing engineering under G.S. 23 89C.] 24 (4)Liners shall be a minimum of 12 inches of clay compacted to a maximum permeability of 10^{-7} 25 cm/sec or equivalent synthetic liner. 26 (5) Synthetic liners shall have a minimum thickness of 30 mils. A synthetic liner shall have a 27 demonstrated water vapor transmission rate of not more than 0.03 gm/m²/day. Liner material and 28 any seaming materials shall have chemical and physical resistance not adversely affected by 29 environmental exposure or waste placement. Clay liners with a permeability more than 10^{-7} cm/sec may be used in conjunction with a synthetic 30 (6)liner to meet the maximum permeability of 10^{-7} cm/sec or equivalent. 31 32 (7)The surface of the supporting soil on which the liner will be installed shall be reasonably free of 33 stones, organic matter, protrusions, loose soil, and any abrupt changes in grade that could affect the 34 integrity of the liner. 35 (8) Lagoons shall be designed and maintained to have adequate storage to handle the additional water 36 from a 25-year storm. 86 2 of 5

(g) The permit holder of a septage treatment or detention facility shall control minimize odors from the facility at the

1

2

property boundary.

1	(9)	Lagoons shall be protected from entry by unauthorized individuals by fencing or other appropriate
2	() C	
3 4		tention and treatment facilities shall adhere to the following minimum setback requirements: Residence, residence, place of business, except septage firm business, or place of public assembly
	(1)	
5	(2)	- 100 feet; Well well on water symply enring - 100 feet:
6 7	(2)	Well well or water supply spring – 100 feet; Surface surface waters – 100 feet;
7 8	(3)	
8 9	(4)	Property property lines – 50 feet;
9 10	(5)	Facilities facilities permitted after April 1, 2010 the effective date of this Rule shall not be located
		in the 100-year flood plain hazard area. area: S_{i} it is the flood plain hazard area. S_{i} is the flood plane of the f
11	(6)	Soil soil wetness, as determined in Part (a)(3)(A) of Rule $.0837 (a)(3)(A)$ of this Section – 12
12		inches;
13	(7)	Setbacks setbacks in Subparagraphs (1) and (4) of this Paragraph may be in accordance with local
14	(0)	zoning ordinances if located in areas zoned for industrial use. use:
15	(8)	Setbacks setbacks in Subparagraphs (1) through (4) of this Paragraph shall be increased 100% for
16	$\langle 0 \rangle$	lagoons; and
17	(9)	Accurate accurate property line location is shall be the responsibility of the site operator.
18		s shall be maintained. At the time of initial permitting, septage detention and treatment facilities shall
19		nimum setback distances specified in this Rule. Minimum setbacks shall be maintained throughout the
20		ty only on land owned, operated, or controlled by the permittee or by the landowner(s) at the time of
21	-	ag. Any sale, lease, or other conveyance of land by the permittee, or by the landowner(s) if different
22	-	ttee, subsequent to the initial permitting of the facility shall include restrictions to ensure continued
23	maintenance of	
24		eks in Subparagraph (m)(1) through (4) of this Rule shall be increased for storage facilities with a
25	1	ess of 25,000 gallons permitted after April 1, 2010 the effective date of this Rule to prevent offsite
26	contamination f	from major spills, or 100% containment shall be provided. Increased setbacks shall be up to twice the
27	minimum dista	nce as indicated in Subparagraph (m)(1) through (4) of this Rule. Rule, unless the permitted Permitted
28	volume and the	proximity to residences, wells or water supply springs, surface waters, and or property lines dictate a
29	reduced setback	determined by the Division on a case-by-case basis. will determine the setback.
30	(p) Storage cor	ntainers for individual restaurants shall be:
31	(1)	Located located above grade and protected from vehicular traffic;
32	(2)	Maintained maintained to be impervious to flies fly tight and in a sanitary condition;
33	(3)	Placed placed at a location and acceptable to standards and determined by the local health
34		department and the NC Department of Health and Human Services: NC Division of Environmental
35		Health; and
36	(4)	No no greater than 200 gallons in size.

1	(q) Setbacks for	r detention tanks at marinas may be reduced for storage capacity of 2000 gallons or less when the	
2	facility is designed to prevent leaks or spills or has containment equaling 100% of the storage volume plus rainfall		
3	from a 25-year s	torm event. Setbacks shall in no case be less than what is approved by applicable local government,	
4	state <u>State,</u> or fee	deral laws or rules.	
5	(r) <u>Permit holde</u>	ers of all septage detention and treatment facilities shall have all records required in accordance with	
6	this Section avai	lable for review during inspections by the Division or upon the Division's request. Septage shall not	
7	be stored in a de	tention or treatment facility for more than six months.	
8	(s) Septage shal	l not be stored or treated at a new septage treatment or detention facility until a representative of the	
9	Division has in	spected the facility to determine compliance with these Rules and consistency with the permit	
10	application and a	all permit conditions.	
11	(t) Septage deter	ntion and treatment facility closure shall include:	
12	(1)	a written notification of cease of operations submitted to the Division that shall include the permit	
13		number, the date of cease of operations, and the signature of the operator; A completed ceased	
14		operation form submitted to the Division;	
15	(2)	All all liquids and solids, resulting from septage detention or treatment, removed from all portions	
16		of the facility and properly managed or disposed at an appropriate, approved facility; and	
17	(3)	All all parts of the facility removed from property under separate ownership, unless all landowners	
18		provide the Division with written documentation that the facility may remain at the site.	
19	(u) Record keeping for detention facilities that receive septage from more than one septage management firm shall		
20	include:		
21	(1)	The the date that the septage is received at and removed from the facility;	
22	(2)	Name name of the septage management firm that delivered the septage;	
23	(3)	Type type and amount, in gallons, of septage received; and	
24	(4)	Where where septage is discharged.	
25	(v) Record keeping for treatment facilities shall include:		
26	(1)	Date date septage is received at the facility;	
27	(2)	Name name of the septage management firm that delivered the septage;	
28	(3)	Type type and amount, in gallons, of septage received;	
29	(4)	Date date processed material(s) is removed from the facility;	
30	(5)	Type type and amount, in tons or gallons, of material removed from the facility; and	
31	(6)	Management management methods for each type of material removed by the facility. facility	
32	(w) Alarms shall be required to detect high liquid levels, leaks and spills, or system operation parameters at detention		
33	or treatment facilities when the location, design, capacity, or operational complexities of the facility warrant the		
34	additional safety	precautions.	
35			
36	History Note:	Authority G.S. 130A-291.1;	
37		Eff. April 1, 2010. <u>2010:</u>	

Readopted Eff. January 1, 2019.

1

1 15A NCAC 13B .0842 is readopted as published in 33:04 NCR 404 as follows:

2		
3	15A NCAC 13	B.0842 INNOVATIVE OR ALTERNATIVE TREATMENT OR STORAGE METHODS
4	(a) Application	as for permits for innovative or alternative treatment treatment, storage, or land application methods
5	that do not fit t	he criteria outlined in this section will Section shall be reviewed in accordance with N.C.G.S. G.S.
6	130A-291.1(i).	
7	(b) Application	s shall include: If required by G.S. 89C, a professional engineer shall prepare these documents. [Note:
8	The North Caro	lina Board of Examiners for Engineers and Surveyors has determined, via letter dated March 11, 2010,
9	that preparation	of engineering design documents for alternative treatment methods that do not fit the criteria outlined
10	in this Section c	constitutes practicing engineering under G.S. 89C.]
11	(1)	The the information required in Rule .0836(c) of this Section;
12	(2)	An an operation and maintenance manual consistent with the requirements of Rule .0836(e)(4) of
13		this Section: Rule .0836(e)(4);
14	(3)	Means means of demonstrating that the proposed method of treatment or storage will meet the
15		appropriate standards for vector attraction reduction and pathogen reduction in this Section; and
16	(4)	Testing testing methods and schedule to document Subparagraph (3) of this Paragraph.
17	If required by C	G.S. 89C, a professional engineer shall prepare these documents. [Note: The North Carolina Board of
18	Examiners for	Engineers and Surveyors has determined, via letter dated March 11, 2010, that preparation of
19	engineering des	ign documents for alternative treatment methods that do not fit the criteria outlined in this Section
20	constitutes prac	ticing engineering under G.S. 89C.]
21	(c) Innovative	or alternative design criteria shall be approved in cases where the applicant can demonstrate that the
22	alternative desig	gn criteria will provide the following:
23	(1)	Equal equal or better treatment of the waste;
24	(2)	Equal equal or better protection of the waters of the state; and
25	(3)	No no increased potential for nuisance conditions from noise, odor odor, or vermin.
26		
27	History Note:	Authority G.S. 130A-291.1;
28		Eff. April 1, 2010. <u>2010:</u>
29		<u>Readopted Eff. January 1, 2019.</u>

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0843

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In (a), rather than "adherence to the site restrictions in 40 CFR 503.32 shall be required", say something like "Upon closure of a land application site permitted in accordance with this Section, the site shall meet all requirements set forth in 40 CFR 503.32."

Is (c) necessary given that you've already included all requirements of 40 CFR 503.32 in (a)? This appears to be repetitive.

In (e), what is the requirement if the fertility requirements for crops dictate less? Is the requirement then whatever the fertility requirement is? Perhaps this is simply because I don't fully understand the process, but this appears to have a potential ambiguity issue.

Also, how do the pH requirements in 40 CFR 503.32 and (e) go together? Since all of 40 CFR 503.32 have been incorporated in (a), I'm a bit confused as to how all of this goes together.

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

15A NCAC 13B .0843 is readopted as published in 33:04 NCR 404 as follows:

2

3 15A NCAC 13B .0843 <u>LAND APPLICATION SITE</u> LAND USE AND SITE CLOSURE

- 4 (a) Adherence Upon closure of a land application site permitted in accordance with this Section, adherence to the site
- 5 restrictions in 40 CFR 503.32 503.32(c) of Subpart D shall be required.
- 6 (b) Nursery and horticultural products, trees and other forest products, including but not limited to such as pine straw
- 7 and pine bark, shall not be harvested or gathered for 30 days after septage application.
- 8 (c) Public access is to be controlled in accordance with <u>40 CFR 503.32</u>. 40 CFR 503.32(c) of Subpart D.
- 9 (d) The permit holder or operator of the site shall <u>submit a written notification to</u> notify the Division at least 30 days
- 10 prior to final closure of a septage land application site in order to schedule a site inspection for determination of
- 11 compliance with this Section. The notification shall include the permit number, the date of cease of operations, and
- 12 the signature of the operator.
- 13 (e) Prior to final closure, the soil pH of the site shall be raised to 6.5, unless the fertility requirements for crops to be
- 14 grown in the following year dictate less.
- 15
- 16 History Note: Authority G.S. 130A-291.1;
- 17 *Eff. October 1*, 2009. <u>2009:</u>
- 18 <u>Readopted January 1, 2019.</u>
- 19

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 13B .0844

DEADLINE FOR RECEIPT: Friday, December 7, 2018

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

In (a)(3), what is meant by "good repair"? Is this defined elsewhere?

In (b), line 22, please delete "clearly"

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

15A NCAC 13B .0844 is readopted as published in 33:04 NCR 404 as follows:

2

3 15A NCAC 13B .0844 TRANSPORTATION OF SEPTAGE

- 4 (a) <u>Vehicles used for the transportation of septage shall be operated and maintained to prevent</u> All septage shall be
 5 transported in a safe, sanitary manner that prevents leaks and spills <u>of septage</u> and <u>shall</u> comply with the following:
- 6 (1) All all tanks shall be constructed of metal and permanently attached affixed to the truck bed with 7 permanent fixtures such as bolts; bed, unless otherwise approved by the Division;
- 8 (2) All <u>all</u> valves shall be in proper working order and be completely closed during transportation;
- 9 (3) All all access ports shall have proper fitting lids in good repair and be completely closed sealed
 10 during transportation;
- 11
 (4)
 Portable portable toilet pump units that slide into pickup truck beds shall be bolted to the trucks in

 12
 accordance with manufacturer specifications;
- (5) Boats boats used to pump or transport septage shall be United States Coast Guard approved or
 engineered construction plans shall be available indicating that the specific craft is stable in the
 water when fully loaded; loaded with septage, and if required by G.S. 89C, a professional engineer
 shall prepare these documents; and
- 17 (6) Tanks tanks that are mounted on trailers for the pumping or transportation of septage shall meet all
 18 applicable state State and federal requirements for highway use.
- 19 (b) All permitted septage management firms shall display decals or lettering on each side of every pumper vehicle
- 20 operated by the firm. The decals or lettering shall include the firm name, address (town name), town name, phone
- 21 number, and septage management firm permit number. number as shown on the firm application. All decals or lettering
- 22 required by this Rule on the pumper vehicle shall be no less than three inches in height and plainly clearly legible and
- visible. not obstructed from view. Identification shall not be removable (i.e. no magnetic signs). be permanently
 attached (i.e., no removable signs).
- 25 (c) Applicants for septage management firm permits which that were not permitted in the previous calendar year shall
- 26 have each pump truck inspected prior to the Division's issuance of a permit.
- 27 (d) Septage to be discharged at a wastewater treatment plant or any part of the collection system for that plant shall
- 28 be handled in accordance with the plant rules and policies.
- 29 (e) All vehicles used in the transportation of septage, including spare vehicles and tankers, shall meet the requirements
- 30 of this <u>Section</u> and be included in the permit application.
- 31 (f) Vehicles used in the transportation of septage, that are listed on an approved septage management firm permit
- 32 application, may remain loaded or partially loaded on land owned by the septage management firm for up to seven
- 33 days without obtaining a permit for a detention or treatment facility. Such vehicles shall comply with all parts of this

34 Rule.

- 35
- 36 History Note: Authority G.S. 130A-291.1;
 37 Eff. October 1, 2009: 2009;

Readopted January 1, 2019.

1

1 15A NCAC 13B .0845 is repealed through readoption as published in 33:04 NCR 404 as follows:

2		
3	15A NCAC 13B	.0845 REVOCATION OF PERMITS
4		
5	History Note:	Authority G.S. 130A-291.1;
6		Eff. October 1, 2009. <u>2009;</u>
7		<u>Repealed Eff. January 1, 2019.</u>

1	15A NCAC 13B .0846 is readopted as published in 33:04 NCR 404 as follows:		
2			
3	15A NCAC 13B	.0846 APPEALS	
4	Appeals shall be made in accordance with Article 3 G.S. 150B.		
5			
6	History Note:	Authority G.S. 130A-291.1;	
7		Eff. October 1, 2009.2009;	
8		<u>Readopted Eff. January 1, 2019.</u>	