

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T - throughout these rules

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

“Applicant” and “permittee” are frequently capitalized in these rules. Generally, only proper names are to be capitalized. Defined terms are capitalized only in rules that define them.

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0101 is readopted as published in 32:06 NCR 524-525 as follows:

2
3 **CHAPTER 02 - ENVIRONMENTAL MANAGEMENT**

4
5 **SUBCHAPTER 02T – WASTE NOT DISCHARGED TO SURFACE WATERS**

6
7 **SECTION .0100 – GENERAL REQUIREMENTS**

8
9 **15A NCAC 02T .0101 PURPOSE**

10 The rules in this Subchapter ~~set forth the requirements and procedures for application and issuance of permits~~ shall
11 govern application for and issuance of permits for the following systems ~~which~~ that do not discharge to surface waters
12 of the state:

- 13 (1) sewer systems;
14 (2) disposal systems;
15 (3) treatment works;
16 (4) residual and residue disposal/utilization systems;
17 (5) animal waste management systems;
18 (6) treatment of contaminated soils; and
19 (7) stormwater management systems pursuant to 15A NCAC ~~2H~~ 02H .1000.

20
21 *History Note: Authority G.S. 143-215.1; 143-215.3(a)(1);*

22 *Eff. September 1, ~~2006~~ 2006;*

23 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0102

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add a comma before “or residual”

Line 6 – replace “disposal/utilization” with either “disposal and utilization” or “disposal or utilization”

Line 7 – capitalize “State” if you mean North Carolina.

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0102 is readopted as published in 32:06 NCR 525 as follows:

2
3 **15A NCAC 02T .0102 SCOPE**

4 The rules in this Subchapter shall apply to all persons proposing to construct, alter, extend, or operate any sewer
5 system, treatment works, disposal system, ~~contaminates~~ contaminated soil treatment system, animal waste
6 management system, stormwater management system or residual disposal/utilization ~~system which~~ system, that does
7 not discharge to surface waters of the ~~state, including systems which discharge waste onto or below land surface.~~
8 However, these Rules ~~do~~ shall not apply to sanitary sewage systems or solid waste management facilities ~~which~~ that
9 are permitted under the authority of the Commission for Public Health. The provisions for stormwater NPDES systems
10 that discharge to waters of the State are codified ~~management systems can be found~~ in 15A NCAC 02H .1000. The
11 rules in this Section are general requirements that shall apply to all program rules (~~found in individual sections~~) in this
12 Subchapter.

13
14 *History Note: Authority G.S. 130A-335; 143-215.1; 143-215.3(a)(1);*
15 *Eff. September 1, ~~2006~~ 2006;*
16 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0103

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – replace “is defined as” with “means”

Page 2, line 25 – add “and” after the semicolon

Page 3, line 5 – add a comma after “municipality”

Page 3, line 9 – add a comma after “facility”

Page 3, line 10 – add a comma after “semi-solids”

Page 3, line 13 – add a comma after “non-hazardous”

Page 3, line 23 – replace “soil/groundwater” with “soil or groundwater”

Page 3, line 27 – underline “includes” and remove the strikethrough, if that is what is intended.

Page 3, line 32 – replace “not considered to be” with “that is not”

Page 4, line 4 – add a comma after “design”

Page 4, line 9 – add a comma after “261.24”

Page 4, line 12 – replace “which” with “that”

Page 4, line 13 – capitalize “State” if you mean North Carolina

Page 4, line 16 – why is “G.S.” highlighted?

Page 4, line 19 – replace “considered as” with “deemed to be”

Page 4, line 20 – delete the quotation marks that surround the second “waters”

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0103 is readopted with changes as published in 32:06 NCR 525-527 as follows:

2
3 **15A NCAC 02T .0103 DEFINITIONS**

4 The terms used in this Subchapter ~~shall be as defined~~ shall have the meanings set forth in G.S. 143-212 and ~~143-213~~
5 G.S. 143-213, in this Rule, and except as provided in this Rule and in definitions provided in program-specific program
6 specific rules in this Subchapter; Subchapter and as follows:

- 7 (1) "Agronomic rate" is defined as the amount of waste and other materials applied to soil to meet the
8 nitrogen needs of the crop, but does not overload the soil with nutrients or other constituents that
9 cause or contribute to a contravention of surface water or groundwater standards, limit crop growth,
10 or adversely impact soil quality. Nitrogen needs of the crop shall be based on realistic yield
11 expectations (RYE) established for a soil series through published Cooperative Extension Service
12 bulletins, Natural Resources Conservation Service publications, county soil surveys, or site specific
13 agronomist reports.
- 14 (2) "Animal waste" means livestock or poultry excreta or a mixture of excreta with feed, bedding, litter
15 or other materials generated at a feedlot.
- 16 (3) "Bedrock" is ~~as~~ defined in 15A NCAC 02L .0102.
- 17 (4) "Buffer" means a natural or vegetated area as defined in 15A NCAC 02B .0202.
- 18 (5) "CFR" means Code of Federal Regulations. ~~All CFRs cited herein may be obtained at Government~~
19 ~~Institutes, Inc., 4 Research Place, Suite 200, Rockville, Md, 20850-1714 for a cost of thirty six~~
20 ~~dollars (\$36.00) each plus four dollars (\$4.00) shipping and handling or at~~
21 ~~<http://www.gpoaccess.gov/cfr/>. Copies are also available for review at 512 North Salisbury Street,~~
22 ~~Raleigh, North Carolina 27604.~~
- 23 (6) "Commission" ~~as is~~ defined in G.S. 143-212 or their delegate.
- 24 (7) "Compliance boundary" is ~~as~~ defined in 15A NCAC 02L .0102.
- 25 (8) "Deemed permitted" means that a facility is considered ~~as having to have~~ to have a needed permit and ~~being~~
26 to be compliant with the permitting requirements of G.S. ~~143-215.1(a), 143-215.1(a)~~ even though it
27 has not received an individual permit for its construction or operation.
- 28 (9) "Department" ~~as is~~ defined in G.S. 143-212.
- 29 (10) "Director" means the Director of the Division or its delegate.
- 30 (11) "Division" means the Division of Water Quality Resources in the Department. ~~All rules cited in this~~
31 ~~Section under the authority of the Division may be obtained at 512 North Salisbury Street, Raleigh,~~
32 ~~North Carolina 27604 or at the Division's web page at www.newaterquality.org at no charge.~~
- 33 (12) "Effluent" means wastewater discharged ~~following all treatment processes~~ following all treatment processes from a water pollution
34 control facility following all treatment processes or from other point source whether treated or
35 untreated.

- (13) "Engineer" ~~is~~ means an individual who is currently licensed by the North Carolina Board of Examiners For Engineers and Land Surveyors or is authorized to practice under G.S. 89C as an engineer.
- (14) "EPA" means the United States Environmental Protection Agency.
- (15) "Ephemeral (stormwater) stream" ~~means a stream as~~ is defined in 15A NCAC 02B .0233.
- (16) "Essential treatment unit" means any unit associated with the wastewater treatment process whose loss would likely render the facility incapable of meeting the required performance ~~criteria~~ criteria, including aeration units or other main treatment units, clarification equipment, filters, disinfection equipment, pumps and blowers.
- (17) "General Permit" means a permit issued ~~under~~ pursuant to G.S. 143-215.1(b)(3), 143-215.1(b)(4) or 143-215.10C.
- (18) "Groundwaters" ~~means those waters in the saturated zone of the earth as~~ is defined in 15A NCAC 02L .0102.
- (19) "Groundwater standards" means groundwater standards as established in 15A NCAC 02L .0200.
- (20) "Industrial wastewater" means all wastewater other than sewage or animal ~~waste~~ waste, and includes:
- (a) wastewater resulting from any process of industry or manufacture, or from the development of any natural resource;
 - (b) wastewater resulting from processes of trade or business, including wastewater from laundromats and ~~vehicle/equipment~~ vehicle or equipment washes, but ~~not~~ excluding wastewater from restaurants;
 - (c) stormwater that is contaminated with an industrial wastewater;
 - (d) any combination of sewage and industrial wastewater;
 - (e) municipal ~~wastewater~~ wastewater, unless it can be demonstrated ~~to the satisfaction of the Division~~ that the wastewater contains no industrial wastewater;
 - (f) contaminated groundwater extracted as part of an approved groundwater remediation system approved by the Division in accordance with 15A NCAC 02L .0100.
- (21) "Intermittent stream" ~~means a stream as~~ is defined in 15A NCAC 02B .0233.
- (22) "NPDES" means National Pollutant Discharge Elimination System.
- (23) "Perennial stream" ~~means a stream as~~ is defined in 15A NCAC 02B .0233.
- (24) "Perennial waterbody" ~~means a waterbody as~~ is defined in 15A NCAC 02B .0233.
- (25) "Pollutant" means waste as defined in G.S. 143-213.
- (26) "Potable waters" ~~means water as~~ is defined in 15A NCAC 02L .0102.
- (27) "Private well" means any potable or irrigation well not directly controlled by a public authority or a public utility authorized by the North Carolina Public Utilities Commission. This may include a private individual or community well as defined in the public water supply rules ~~contained~~ codified in 15A NCAC 18C.

- (28) "Professional engineer" means a person who is presently registered and licensed as a professional engineer by the North Carolina Board of Examiners For Engineers and Land Surveyors.
- (29) "Public or community sewage system" means a single system of sewage collection, treatment, or disposal owned and operated by a sanitary district, a metropolitan sewage district, a water and sewer authority, a county, a municipality or a public utility authorized to operate by the North Carolina Utilities Commission.
- (30) "Residuals" means any solid, semisolid, or liquid waste, other than effluent or residues from agricultural products and processing, generated from a wastewater treatment facility, water supply treatment facility or air pollution control facility permitted under the authority of the Commission.
- (31) "Residues from agricultural products and processing" means solids, semi-solids or liquid residues from food and beverage processing and ~~handling, silviculture, agriculture, handling, silviculture, agriculture,~~ and aquaculture operations permitted under the authority of the Commission that are non-toxic, non-hazardous and contain no domestic wastewater.
- (32) "Restrictive horizon" is the layer in a soil profile that is capable of reducing the downward water movement to the minimum rate, as evidenced by lowest saturated hydraulic conductivity among all the soil layers. Restrictive horizon is often capable of perching ground water or wastewater effluent and is characterized by accumulation of finer soil particles (such as aluminum, clay, iron, silica, organic matter, or other compounds) or compaction due to heavy ~~equipments,~~ equipment.
- (33) "Review boundary" is ~~as~~ defined in 15A NCAC 02L .0102.
- (34) "Seasonal High Water Table" or "SHWT" is the highest level to which the soil is saturated, as may be determined through the identification of redoximorphic features in the soil ~~profile~~ profile, including low chroma mottling. This does not include temporary perched conditions. Alternatively, the SHWT can also be determined from water level measurements or via soil/groundwater modeling.
- (35) "Secretary" ~~as is~~ defined in G.S. 143-212 ~~or its delegate,~~ and includes the Secretary's delegate.
- (36) "Setback" means the ~~minimum~~ separation in linear feet, measured on a horizontal plane, required between a treatment works, disposal system, or utilization system and [includes] physical features such as ~~building~~ buildings, roads, property lines, or water bodies.
- (37) "Sewage" means the liquid and solid human ~~waste,~~ waste and liquid waste generated by domestic water-using fixtures and ~~appliances,~~ appliances from any residence, place of business, or place of public assembly. Sewage does not include wastewater that is totally or partially industrial ~~wastewater,~~ wastewater or any other wastewater not considered to be domestic waste.
- (38) "Soil scientist" means an individual who is currently licensed or authorized to practice soil science ~~under~~ pursuant to G.S. 89F by the North Carolina Board for Licensing of Soil Scientists.
- (39) "Staff" means the staff of the Division.
- (40) "Surface waters" means all waters as defined in G.S. 143-212 except underground waters.
- (41) "Surface water standards" means surface water standards ~~as~~ established in 15A NCAC 02B .0200.

- (42) "Technical specialist" means an individual designated by the Soil and Water Conservation Commission, pursuant to rules adopted by that Commission, to certify animal waste management plans or specific parts of a certified animal waste management plan. Commission to certify that the planning, design and implementation of Best Management Practices, including all or part of an animal waste management plan, meet the standards and specifications of the Soil and Water Conservation Commission or the U.S. Department of Agriculture, Natural Resources Conservation Service.
- (43) "Toxicity test" means a test for toxicity conducted using the procedures contained in 40 CFR 261, 40 CFR 261.24 Appendix H [H.], which is hereby incorporated by reference including any subsequent amendments and editions.
- (44) "Treatment works or disposal system ~~which~~ that does not discharge to surface waters" means any treatment works, facility, utilization system, or disposal system which is designed to:
- (a) operate as closed system with no discharge to waters of the ~~state~~, state; or
 - (b) ~~dispose/utilize of~~ dispose of or use wastes, including residuals, residues, contaminated soils and animal waste, ~~to on~~ on the surface of the ~~land~~, land; or
 - (c) dispose of wastes through a subsurface disposal system pursuant to G.S. 143-215.1(b)(4).143-215.1(a4).
- (45) "Waste oil" means any used nonhazardous petroleum product other than crankcase oil. Crankcase oil mixed with other used nonhazardous petroleum products shall be considered as waste oil.
- (46) "Wetlands" are "waters" as defined in G.S. 143-212 and are areas that are inundated or saturated by an accumulation of surface or ground water as defined in 15A NCAC 02B .0202.

*History Note: Authority G.S. 130A-335; 143-213; 143-215.3(a)(1);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0104

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 1 – add “through readoption” after “repealed”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0104 is repealed as published in 32:06 NCR 527 as follows:

2

3 **15A NCAC 02T .0104 ACTIVITIES WHICH REQUIRE A PERMIT**

4

5 *History Note: Authority G.S. 130A-335; 143-215.1; 143-215.3(a)(1);*

6 *Eff. September 1, ~~2006~~2006;*

7 *Repealed Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0105

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 16 – do you mean “may” or “shall”? If “may”, what standards, factors, or circumstances determine whether certification is accepted? If shall, consider revising as follows:

The Division shall accept certification that the design meets or exceeds minimum design criteria applicable to the project if the certification is provided by a licensed or certified professional, such as a professional engineer, licensed soil scientist, licensed geologist, or technical specialist.

Lines 26, 29, 32, 33; page 2, lines 1, 7, 14, 18, 20, and 21 – do not capitalize the first word on these lines

Line 26 – delete “shall include the number”

Lines 28, 31, 32, 35; page 2, lines 3, 13, 17, 19, and 20 – replace the periods with semicolons

Page 2, lines 11-13 – what standards, factors, or circumstances determine whether an “application is considered incomplete” or a permit is “contingent”?

Page 2, line 20 – add “and” after the semicolon

Page 2, line 21 – replace “utilizing” with “using”

Page 2, line 23 – add “is” before “for the purpose”

Page 2, line 32 – replace “under” with “pursuant to”

Page 2, line 35 – replace “under” with “governed by”

Page 3, line 5 – replace “which” with “that”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

Page 3, line 7 – what does “be cause for” mean? If the Department “may” revoke the permit, what standards, factors, or circumstances determine whether a permit is revoked?

Page 3, line 13 – add “the” before “rules”

Page 3, line 20 – add a comma after “species”

Page 3, line 21 – add a comma after “.0110”

Page 3, line 25 – replace “under” with “by”

Page 3, line 33 – replace “in cases where” with “if”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0105 is readopted with changes as published in 32:06 NCR 527-529 as follows:

2
3 **15A NCAC 02T .0105 GENERAL REQUIREMENTS**

4 (a) Jurisdiction. Applications for permits from the Division shall be made in accordance with this Rule. Applications
5 for permits under the jurisdiction of a local program shall be made in accordance with the requirements of the ~~Division~~
6 ~~approved~~ Division-approved program.

7 (b) Applications. Application for a permit ~~must~~ shall be made on ~~Division~~ Division-approved forms completely filled
8 out, where applicable, and fully executed in the manner set forth in Rule .0106 of this Section. A processing fee as
9 described in G.S. 143-215.3D ~~must~~ shall be submitted with each application in the form of a check or money order
10 made payable to the Department. Applications shall be returned if incomplete. ~~Sewer~~ Permits for sewer line extensions
11 shall be applied for separately from treatment, utilization, and disposal systems. The ~~Applicant~~ applicant shall provide
12 adequate documentation to the Division to ensure that the proposed system will meet all design and performance
13 criteria as required under this Subchapter and other applicable rules, be operated as a non-discharge system, and protect
14 surface water and groundwater standards. Variances to this Subchapter or adopted design criteria ~~must~~ shall be
15 specifically requested in the application and, if approved pursuant to Paragraph (n) of this Rule, incorporated into the
16 permit. The Division may accept certification from a licensed or certified professional (e.g. Professional Engineers,
17 Licensed Soil Scientist, Licensed Geologist, Technical Specialist) that the design meets or exceeds minimum design
18 criteria applicable to the project. ~~Division acceptance of certifications by the applicant or by licensed or certified~~
19 ~~professionals preparing reports for the application shall not constitute approval of a variance to this Subchapter or~~
20 ~~applicable minimum design and performance criteria unless specifically requested in the application and approved in~~
21 ~~the permit. Division acceptance of certifications that were specifically requested by the Division to be provided with~~
22 ~~the application from the Applicant or from licensed or certified professionals preparing reports for the application and~~
23 ~~that were approved in the permit shall constitute approval of a variance to this Subchapter or to applicable minimum~~
24 ~~design and performance criteria.~~

25 (c) Application packages for new and expanding facilities shall include the following items:

- 26 (1) The number of executed copies shall include the number necessary for each review office and one
27 additional copy. Additional copies shall be required if needed for federal and state grant and loan
28 projects.
- 29 (2) Reports, engineering plans, specifications, and calculations as required by the applicable rules of
30 this Subchapter. If prepared by licensed or certified professionals these reports shall be submitted
31 in accordance with the respective statutes and rules governing that profession.
- 32 (3) Operational agreements as required by Rule .0115 of this Section.
- 33 (4) For projects that require environmental documentation pursuant to the North Carolina
34 Environmental Policy Act, a final environmental document (Finding of No Significant Impact or
35 Record of Decision).

- (5) A general scaled location map, showing orientation of the facility with reference to at least two geographic references ~~(e.g. numbered roads, named streams/rivers).~~ (e.g. numbered roads, named streams or rivers).
- (6) ~~Documentation that other directly related (i.e. needed to properly construct and operate the facilities permitted under this Subchapter) environmental permit or certification applications are being prepared, have been applied for, or have been obtained (e.g. 401 certifications, erosion and sedimentation control plans, stormwater management plans).~~ Documentation that other environmental permit or certification applications that are needed to properly construct and operate the facilities permitted under this Subchapter are being prepared, have been applied for, or have been obtained (e.g. 401 certifications, erosion and sedimentation control plans, and stormwater management plans). The Division shall consider the application incomplete or issue the permit contingent on issuance of the dependent permits if issuance of other permits or certifications impact the system permitted under this Subchapter.
- (7) A description of the project including the origin, type and flow of waste to be treated. For industrial processing facilities, a waste analysis extensive enough to allow a complete evaluation of the system's capability to treat the waste and any potential impacts on the waters of the state shall be included.
- (8) Documentation of compliance with Article 21 Part 6 (Floodway Regulations) of Chapter 143 of the General Statutes.
- (9) Documentation as required by other applicable ~~rule(s)~~ rules in this Subchapter.
- (10) Documentation of the presence or absence of threatened or endangered aquatic species utilizing information provided by the Natural Heritage Program of the Department. This shall only apply to the area whose boundary is encompassed ~~by~~ by, and for the purpose ~~of of, the~~ of, the installation, operation, and maintenance of facilities permitted herein (wastewater collection, treatment, storage, utilization, or disposal). This documentation shall provide information on the need for permit conditions pursuant to Paragraph (i) of this Rule. ~~The Natural Heritage Program can be contacted at <http://www.ncnhp.org> or write to Natural Heritage Program, 1601 Mail Service Center, Raleigh, NC 27699 1601.~~
- (d) Application packages for renewals shall include updated site ~~plans, (if required as part of original submittal).~~ plans, if required as part of the original submittal.
- (e) Application and annual Fees.
- (1) Application Fee. For every application for a new or major modification of a permit under this Section, a nonrefundable application processing fee in the amount provided in G.S. 143-215.3D shall be submitted to the Division by the Applicant ~~applicant~~ at the time of application. For a facility with multiple treatment units under a single permit, the application fee shall be set by the total design treatment capacity. Modification fees shall be based on the projected annual fee for the facility.

- (2) Annual Fees. An annual fee for administering and compliance monitoring shall be charged in each year of the term of every renewable permit according to the schedule in G.S. 143-215.3D(a). Annual fees ~~must~~ shall be paid for any facility operating on an expired permit that has not been rescinded or revoked by the Division. Permittees shall be billed annually by the Division. A change in the facility which changes the annual fee shall result in the revised annual fee being billed effective with the next anniversary date.
- (3) Failure to pay an annual fee within 30 days after being billed shall be cause for the Division to revoke the permit.
- (f) Designs for facilities permitted under this Section shall use the practicable waste treatment and disposal alternative with the least adverse impact on the environment in accordance with G.S. 143-215.1(b)(2).
- (g) ~~In order to protect Publicly Owned Treatment Works, the~~ The Division shall incorporate pretreatment requirements under 15A NCAC ~~2H 02H~~ 02H .0900 into the permit.
- (h) Setbacks and required separation distances shall be provided as required by ~~individual~~ rules in this Subchapter. Setbacks to ~~streams (perennial and intermittent),~~ perennial and intermittent streams, perennial waterbodies, and wetlands shall be determined using the methodology set forth in 15A NCAC 02B .0233(4)(a). Setbacks to wells ~~are~~ for shall apply to those wells outside the compliance boundary. ~~Where~~ If wells and subsurface groundwater lowering drainage systems would otherwise be inside the compliance boundary as established in 15A NCAC 02L .0107, the Applicant ~~applicant~~ may request the compliance boundary be established closer to the waste disposal area and this shall be granted provided the groundwater standards can be met at the newly established compliance boundary.
- (i) Permits ~~may~~ shall provide specific conditions to address the protection of threatened or endangered aquatic species as provided in plans developed pursuant in 15A NCAC 02B .0110 if the construction and operation of the facility directly impacts such species.
- (j) The Except as otherwise required by Rule .1306 in this Subchapter, the ~~Permittee~~ permittee shall ~~keep permits active~~ comply with all permit conditions and requirements until the waste treatment systems authorized by the permit are properly closed or subsequently permitted under another permit issued by the appropriate permitting authority for that activity.
- (k) Monitoring of waste and surface waters shall be in accordance with 15A NCAC 02B .0505 except as otherwise provided by ~~specific~~ applicable rules in this Subchapter.
- (l) Reporting shall be in accordance with 15A NCAC 02B .0506 except as otherwise provided by ~~specific~~ applicable rules in this Subchapter.
- (m) Monitoring of groundwater shall be in accordance with Sections 15A NCAC 02L .0100 and 15A NCAC 02C .0100 except as otherwise provided by ~~specific~~ applicable rules in this Subchapter.
- (n) The Director shall approve alternative Design Criteria and Application Submittal requirements in cases where the Applicant ~~applicant~~ can demonstrate that the alternative ~~design criteria~~ will ~~provide the following:~~ provide:
- (1) equal or better treatment of the waste;
 - (2) equal or better protection of the waters of the state; and
 - (3) no increased potential for nuisance conditions from noise, odor or vermin.

1 (o) The Permittee shall retain the ~~Division-approved~~ Division-approved plans and specifications for the life of the
2 facility.

3
4 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

5 *Eff. September 1, 2006-2006;*

6 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0106

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “fee” with “fees”

Line 17 – delete “more general”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0106 is readopted as published in 32:06 NCR 529 as follows:

2
3 **15A NCAC 02T .0106 SUBMISSION OF PERMIT APPLICATIONS**

4 (a) Permit applications, supporting information, and processing fee for permits issued by the Division shall be filed
5 with the Division. Applications for permits from a ~~Division-approved~~ Division-approved local permitting program
6 shall be submitted ~~directly~~ to the local program director. Division permit processing fees ~~are not~~ shall not be required
7 for permits issued by delegated local permitting programs.

8 (b) Permit applications shall be signed as follows:

- 9 (1) in the case of corporations, by a principal executive officer of at least the level of ~~vice-president,~~
10 vice-president or his authorized representative;
11 (2) in the case of a partnership or a limited partnership, by a general partner;
12 (3) in the case of a sole proprietorship, by the proprietor;
13 (4) in the case of a municipal, state, or other public ~~entity~~ entity, by either an executive officer, elected
14 official in the highest level of elected office, or other authorized employee.

15 (c) Delegation of authority to sign permit applications to other authorized employees or any employee in a specific
16 position (~~i.e. signing officials~~) shall be provided in ~~letter format~~ writing to the Division and signed by an authorized
17 person pursuant to Paragraph (b) of this Rule. The delegation may be for a specific permit application or more general
18 for certain or all types of water quality permits. The letter shall identify the extent of delegation.

19
20 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.1;*

21 *Eff. September 1, ~~2006~~ 2006;*

22 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0107

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – add a comma after “specifications”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0107 is readopted as published in 32:06 NCR 529 as follows:

2
3 **15A NCAC 02T .0107 STAFF REVIEW AND PERMIT PREPARATION**

4 (a) The staff of the Division shall conduct a review of plans, specifications and other project data accompanying the
5 application and shall determine if the application and required information are complete. The staff shall acknowledge
6 receipt of a complete application except for fast-track sewer applications. The local government unit or units having
7 jurisdiction over specific residential projects shall be notified of permit applications in accordance with G.S.
8 143-215.1(d1).

9 (b) If the application ~~is not complete with~~ does not include all required information and ~~the~~ application fee, the
10 application shall be returned to the Applicant. ~~applicant~~. The staff shall advise the ~~applicant by mail:~~ Applicant:

11 (1) how the application or accompanying supporting information may be modified to make it acceptable
12 ~~or complete; for review; and~~

13 (2) that the 90 day processing period required in G.S. 143-215.1 and Rule .0108 of this Section begins
14 upon receipt of a corrected ~~or complete~~ application with required supporting information.

15 (c) ~~Pursuant to G.S. 143-215.67(a), the staff of the Division shall determine for sewer system construction or sewer~~
16 ~~system extensions, whether the treatment works or the sewer system to which the proposed system will discharge is~~
17 ~~adequate to receive waste which will be discharged from the proposed system. In reviewing a permit application for~~
18 ~~sewer system construction or sewer system extensions, the staff of the Division shall determine whether the treatment~~
19 ~~works or the sewer system to which the proposed system will discharge is adequate to receive waste which will be~~
20 ~~discharged from the proposed system, pursuant to G.S. 143-215.67(a).~~

21 (d) In reviewing a permit application for ~~For~~ new and expanding treatment works and disposal systems, the staff shall
22 make a site-specific evaluation to determine the potential impacts of the proposed project on surface and ground water
23 quality. The Applicant shall ~~applicant must~~ make the site accessible to the Division.

24 (e) If an application is accepted and later found to be incomplete, the Applicant ~~applicant~~ shall be advised how the
25 application or accompanying supporting information may be modified to make it ~~acceptable or~~ complete. The staff
26 shall advise the ~~applicant by mail:~~ Applicant:

27 (1) that the 90 day processing period required in G.S. 143-215.1(d) and Rule .0108 of this Section
28 begins on the date the additional information is received; and

29 (2) that if all required information is not submitted within 30 days, the project will be returned as
30 incomplete. Any resubmittal of a returned application ~~must~~ shall be accompanied with a new
31 application fee.

32
33 *History Note: Authority G.S. 143-215.1(b); 143-215.1(d); 143-215.3(a)(1); 143-215.3(a)(4);*
34 *Eff. September 1, 2006-2006;*
35 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0108

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 20 – replace “when” with “if”

Line 23 – do you mean “may” or “shall”? If “may,” what standards, factors, or circumstances determine whether the Division will require monitoring and reporting?

Line 23 – delete “any”

Line 24 – replace “lagoon/storage” with “lagoon or storage”

Line 25 – add a comma after “quantity”

Line 26 – add a comma after “waters”

Line 28 – delete “any”

Line 29 – replace “which” with “that”

Line 31 – why is the phrase “which shall not exceed five years” in this Rule? Shouldn’t this limitation be stated in Section .1300 and .1400?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0108 is readopted with changes as published in 32:06 NCR 529-530 as follows:

2
3 **15A NCAC 02T .0108 FINAL ACTION ON PERMIT APPLICATIONS TO THE DIVISION**

4 (a) The Director shall take final action on all applications not later than 90 days following receipt of a complete
5 application ~~and with~~ together with all required information. All ~~permits or permits~~, renewals of ~~permits permits~~, and
6 decisions denying permits or renewals shall be in writing.

7 (b) The Director ~~may~~ shall:

8 (1) issue a ~~permit~~ permit:

9 (A) containing such conditions as are necessary to effectuate the purposes of Article 21,
10 Chapter 143 of the General Statutes; and

11 (2)(B) ~~issue a permit~~ containing time schedules for achieving compliance with applicable effluent
12 standards and limitations, surface water or groundwater standards and other legally
13 applicable requirements;

14 (2)(3) deny a permit application ~~where~~ if necessary to effectuate:

15 (A) the purposes of Article 21, Chapter 143;

16 (B) the purposes of G.S. 143-215.67(a); or

17 (C) ~~rules on coastal waste treatment, disposal, found in Section 15A NCAC 02H .0400;~~

18 (C)(D) rules on groundwater quality standards found in Subchapter 02L of this ~~Chapter~~. Chapter;
19 or

20 (3)(4) hold public meetings when necessary to obtain additional information needed to complete the review
21 of the application. The application shall be considered as incomplete until the close of the meeting
22 record.

23 (c) The Division may require any monitoring and reporting requirements, including groundwater, surface water or
24 wetlands, waste, wastewater, ~~sludge~~, residuals, soil, treatment process, lagoon/storage pond, and plant tissue,
25 necessary to determine the source, quantity and quality of the waste and its effect upon the surface water, ground
26 waters or wetlands. All reports ~~must~~ shall be submitted on ~~Division-supplied~~ Division-supplied forms or forms
27 approved by the Division as providing the same information as required by the Division's forms.

28 (d) If a permit is denied, the letter of denial shall state the ~~reason(s)~~ reason for denial and any reasonable measures
29 which the Applicant ~~applicant~~ may take to make the application approvable.

30 (e) All permits requiring an annual fee shall be issued for a time period not to exceed five eight years, years, except
31 for those permits subject to Sections .1300 and .1400 of this Subchapter, which shall not exceed five years.

32
33 *History Note:* Authority G.S. 143-215.1(a); 143-215.1(b); 143-215.1(d); 143-215.3(a)(1);

34 *Eff. September 1, 2006-2006;*

35 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .0109 is readopted as published in 32:06 NCR 530 as follows:

2
3 **15A NCAC 02T .0109 PERMIT RENEWALS**

4 Requests for permit renewals shall be submitted to the Director at least 180 days prior to expiration unless the permit
5 has been revoked by the Director in accordance with Rule .0110 of this Section or a request has been made to rescind
6 the permit. Renewal requests shall be made in accordance with Rule .0105 and Rule .0106 of this Section.

7
8 *History Note: Authority G.S. 143-215.3(a)(1);*
9 *Eff. September 1, ~~2006~~ 2006;*
10 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0110

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “is” with “shall be”

Line 4 – show the deleted comma correctly: “~~revocation~~, revocation”

Line 5 – add “for” before “the following”

Line 10 – replace “on which a system” with “where a system”

Line 10 – replace “in which any” with “and where any”

Lines 17-18 – that “Administrative Code” do you mean? What “Statute” do you mean?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0110 is readopted as published in 32:06 NCR 530 as follows:

2
3 **15A NCAC 02T .0110 MODIFICATION AND REVOCATION OF PERMITS**

4 ~~Any~~ A permit issued by the Division pursuant to this Subchapter is subject to revocation ; or modification upon 60
5 days notice by the Director in whole or part ~~for:~~ the following reasons:

- 6 (1) violation of any terms or conditions of the ~~permit;~~ permit or this Subchapter;
7 (2) obtaining a permit by misrepresentation or failure to disclose ~~fully~~ all relevant facts;
8 (3) refusal of the Permittee ~~permittee~~ to allow authorized employees of the Department upon
9 presentation of credentials:
10 (a) to enter upon Permittee's ~~permittee's~~ premises on which a system is located in which any
11 records are required to be kept under terms and conditions of the permit;
12 (b) to have access to any documents and records required to be kept under terms and conditions
13 of the permit;
14 (c) to inspect any monitoring equipment or method required in the permit; or
15 (d) to sample any ~~pollutants.~~ pollutants;
16 (4) failure to pay the annual fee for administering and compliance ~~monitoring.~~ monitoring; or
17 (5) a determination by the Division that the conditions of the permit are in conflict with Administrative
18 Code or Statute.

19
20 *History Note:* Authority G.S. 143-215.1(b)(2.); 143-215.3(a)(1);
21 Eff. September 1, 2006-2006;
22 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0111

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 15 – add a comma after “(c)”

Line 25 – add a comma after “address”

Lines 33 and 37 – replace “under” with “pursuant to”

Page 2, line 4 – add “pursuant to G.S. 143-215.1” after “renew it”

Page 2, line 8 – add a comma after “Subchapter”

Page 2, line 16 – add “shall” after “permit”

Page 2, lines 17 and 25 – capitalize “State” if you mean North Carolina

Page 2, line 21 – delete “Commission”

Page 2, lines 28-29 – delete Paragraph (i)

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0111 is readopted with changes as published in 32:06 NCR 530-531 as follows:

2
3 **15A NCAC 02T .0111 CONDITIONS FOR ISSUING GENERAL PERMITS**

4 ~~(a) In accordance with the provisions of G.S. 143-215.1(b), (c) and (d), general permits may be developed by the~~
5 ~~Division and issued by the Director for categories of activities covered by this Subchapter. General permits may be~~
6 ~~written for categories of activities that involve the same or substantially similar operations, have similar treated waste~~
7 ~~characteristics, require the same limitations or operating conditions, and require the same or similar monitoring. After~~
8 ~~issuance of a general permit by the Director, persons operating facilities described by the general permit may request~~
9 ~~coverage under it, and the Director or his designee may grant appropriate certification. All individual operations which~~
10 ~~receive a "Certificate of Coverage" under a general permit are permitted under the specific general permit for which~~
11 ~~the coverage was issued. A Certificate of Coverage shall mean that approval is given to facilities that meet the~~
12 ~~requirements of coverage under the general permit. Persons operating facilities covered under general permits~~
13 ~~developed in accordance with this Rule shall be subject to the same limits, conditions, management practices,~~
14 ~~enforcement authorities, and rights and privileges as specified in the general permit. After issuance of a general permit~~
15 ~~by the Director pursuant to G.S. 143-215.1(b), (c) or (d), persons operating facilities described by the general permit~~
16 ~~may request coverage under it. An operation that receives a "Certificate of Coverage" under a general permit shall be~~
17 ~~permitted under the general permit for which the coverage was issued. A Certificate of Coverage shall mean that~~
18 ~~approval is given to facilities that meet the requirements of coverage under the general permit. Persons operating~~
19 ~~facilities covered under general permits developed in accordance with this Rule shall be subject to the same limits,~~
20 ~~conditions, management practices, enforcement authorities, and rights and privileges specified in the general permit.~~
21 ~~(b) Upon development of a draft general permit, the Director shall publicly notice under G.S. 143-215.4 (b)(1) and~~
22 ~~(2), at least 30 days prior to final action, an intent to issue the general permit. Upon development of a draft general~~
23 ~~permit, the Director shall publicly notice an intent to issue the general permit, pursuant to G.S. 143-215.4 (b)(1) and~~
24 ~~(2), at least 30 days prior to final action. A one-time publication of the notice in a newspaper having general circulation~~
25 ~~in the geographic areas affected by the proposed permit shall be required. The notice shall provide the name, address~~
26 ~~and phone number of the Division, a brief description of the intended action, and a brief description of the procedures~~
27 ~~for the formulation of final determinations, including a 30-day comment period and other means by which interested~~
28 ~~persons may comment upon the determinations.~~
29 ~~(c) No provisions in any general permit issued under this Rule shall be interpreted as allowing to allow the Permittee~~
30 ~~permittee to violate state surface water standards, groundwater standards outside a Compliance Boundary established~~
31 ~~in accordance with 15A NCAC 02L .0107, or other applicable environmental Rules. Construction of new water supply~~
32 ~~wells for human consumption shall be prohibited within Compliance Boundaries for facilities covered under general~~
33 ~~permits issued under this Section. General permits issued pursuant to this Rule shall be considered individual permits~~
34 ~~for purposes of Compliance Boundaries established under 15A NCAC 02L .0107.~~
35 ~~(d) To obtain an individual a Certificate of Coverage, a Notice of Intent to be covered by the general permit must~~
36 ~~shall be given by the Applicant applicant to the Division using forms provided by the Division. Division-approved~~
37 ~~forms. Coverage under the general permit shall be granted unless the Director makes a determination under Paragraph~~

(h) of this Rule that an individual permit is required. If all requirements of Paragraph (h) are not met, an individual permit application and full application review procedure shall be required.

(e) ~~General permits~~ A general permit shall be effective for a term not to exceed ~~five years~~ eight years, at the end of which the Division may renew ~~them~~ it. The Division shall satisfy public notice requirements specified in Paragraph (b) of this Rule prior to renewal of a general permit. ~~permits~~. If the Division does not renew a general permit, all operations covered under that general permit shall be notified to submit applications for individual permits.

(f) Anyone engaged in activities covered by the general permit ~~rules~~ rules, but not permitted in accordance with this Subchapter shall be in violation of G.S. 143-215.1.

(g) Any individual covered or considering coverage under a general permit may choose to pursue an individual permit for any operation covered by this Rule.

(h) The Director may require any person, otherwise eligible for coverage under a general permit, to apply for an individual permit by notifying that person that an application is required. Notification shall consist of a written description of the ~~reason(s)~~ reason for the decision, appropriate permit application forms and application instructions, a statement establishing the required date for submission of the application, and a statement informing the person that coverage by the general permit shall automatically terminate upon issuance of the individual permit. Reasons for requiring application for an individual permit include:

- (1) the operation is a significant contributor of pollutants to the waters of the state;
- (2) conditions at the permitted site change, altering the constituents or characteristics of the wastewater such that the operation no longer qualifies for coverage under a general permit;
- (3) noncompliance with the general permit;
- (4) noncompliance with the Commission rules in this Chapter;
- (5) a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the operation;
- (6) a determination by the Division that there has been or is the potential to have a direct discharge of ~~wastewater, sludge~~ wastewater or residuals to waters of the state; or
- (7) the system has been allowed to deteriorate or leak such that it poses an immediate threat to the environment.

(i) General permits or individual Certificate of Coverages may be modified, terminated, or revoked and reissued in accordance with the authority and requirements of rules of this Subchapter.

History Note: Authority G.S. 143-215.1; 143-215.3(a)(1); 143-215.10C;
Eff. September 1, ~~2006~~ 2006;
Readopted Eff. September 1, 2018.

1 15A NCAC 02T .0112 is readopted as published in 32:06 NCR 531 as follows:

2
3 **15A NCAC 02T .0112 DELEGATION OF AUTHORITY**

4 For permits issued by the Division, the Director is authorized to delegate any or all of the functions contained in the
5 rules of this Subchapter except the following:

- 6 (1) denial of a permit application;
7 (2) revocation of a permit not requested by the ~~permittee~~; Permittee; and
8 (3) modification of a permit not requested by the ~~permittee~~; Permittee.

9
10 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4);*
11 *Eff. September 1, ~~2006~~; 2006;*
12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0113

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 10-page 2 line 22 – the first word of each Subparagraph should not be capitalized

Line 18 – add a comma after “extensions”

Line 26 – replace “and” with a comma

Line 27 – add a comma after “coordinator”

Line 28 – add a comma after “cuttings”

Line 37 – add “and are” before “operated”

Page 2, line 8 – add a comma after “or”

Page 2, line 9 – add a comma after “municipality”

Page 2, lines 17-21 – revises as follows if this is what is meant:

- (18) Discharges to the land surface of less than 5,000 gallons per week of backwash water from greensand filters at potable water wells, not including conventional filters, reverse osmosis, or ion exchange filters, provided ponding or runoff does not occur and the backwash does not exceed the Maximum Contaminant Level (MCL) for radionuclides or arsenic; and

Page 2, line 26 – delete the comma and add commas after “and” and “addition”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0113 is readopted with changes as published in 32:06 531-533 as follows:

2
3 **15A NCAC 02T .0113 PERMITTING BY REGULATION**

4 (a) The following disposal systems as well as those in Permitting By Regulation rules in this Subchapter (i.e., Rules
5 .0203, .0303, .0403, ~~.1003~~, .1103, .1203, .1303, .1403, and .1503) ~~are~~ shall be deemed to be permitted pursuant to G.S.
6 ~~143-215.1(b)~~ 143-215.1(b), and it shall not be necessary for the Division to issue individual permits or coverage under
7 a general permit for construction or operation of the following disposal systems provided the system does not result
8 in any violations of surface water or groundwater standards, there is no direct discharge to surface waters, and all
9 criteria required for the specific system ~~is~~ are met:

- 10 (1) Swimming pool and spa filter backwash and drainage, filter backwash from aesthetic fountains, and
11 filter backwash from commercial or residential water features such as garden ponds or fish ~~ponds~~
12 ponds, that is discharged to the land surface;
- 13 (2) Backwash from raw water intake screening devices that is discharged to the land surface;
- 14 (3) Condensate from residential or commercial air conditioning units that is discharged to the land
15 surface;
- 16 (4) Discharges to the land surface from individual non-commercial car washing operations;
- 17 (5) Discharges to the land surface from flushing and hydrostatic testing water associated with utility
18 distribution systems, new sewer extensions or new reclaimed water distribution lines;
- 19 (6) Street wash water that is discharged to the land surface;
- 20 (7) Discharges to the land surface from firefighting ~~fire fighting~~ activities;
- 21 (8) Discharges to the land surface associated with emergency removal and treatment activities for
22 spilled oil authorized by the federal or state on-scene coordinator when such removals are
23 undertaken to minimize overall environmental damage due to an oil spill;
- 24 (9) Discharges to the land surface associated with biological or chemical decontamination activities
25 performed as a result of an emergency declared by the Governor or the Director of the Division of
26 Emergency Management and that are conducted by or under the direct supervision of the federal or
27 state on-scene coordinator and that meet the following criteria:
 - 28 (A) the volume produced by the decontamination activity is too large to be contained onsite;
 - 29 (B) the Division is informed prior to commencement of the decontamination activity; and
 - 30 (C) the wastewater is not radiologically contaminated or classified as hazardous waste;
- 31 (10) Drilling muds, cuttings and well water from the development of wells or from other construction
32 ~~activities~~ activities, including directional boring, except such wastes generated in the construction
33 and development of oil and gas wells regulated by Article 27 of G.S. 113;
- 34 (11) Purge water from groundwater monitoring wells;
- 35 (12) Composting facilities for ~~dead animals~~, animals animal mortality if the construction and operation
36 of the facilities is approved by the North Carolina Department of Agriculture and Consumer
37 Services; the facilities are constructed on an impervious, weight-bearing foundation, operated under

a roof; and the facilities are approved by the State Veterinarian pursuant to G.S. ~~106-403;~~106-403.

In the event of an imminent threat of a contagious animal disease, any emergency measure or procedure related to composting of animal mortality pursuant to G.S. 106-399.4(a):

(13) Overflow from elevated potable water storage facilities;

(14) Mobile carwashes if:

(A) all detergents used are biodegradable;

(B) no steam cleaning, engine or parts cleaning is being conducted;

(C) notification is made prior to operation by the owner to the municipality or if not in a municipality then the county where the cleaning service is being provided; and

(D) ~~all~~ non-recyclable washwater is collected and discharged into a sanitary sewer or wastewater treatment ~~facility~~ facility, upon approval of the facility's ~~owner~~ owner, such that no ponding or runoff of the washwater occurs;

(15) Mine tailings ~~where~~ if no chemicals are used in the mining process;

(16) Mine dewatering ~~where~~ if no chemicals are used in the mining process; ~~and~~

(17) Wastewater created from the washing of produce, with no further processing on-site, on farms where the wastewater is irrigated onto fields so as not to create runoff or cause a ~~discharge~~ discharge; and

(18) Discharges to the land surface of less than 5,000 gallons per week of backwash water from greensand filters, not including conventional filters, reverse osmosis, and ion exchange filters, at potable water wells, provided ponding or runoff does not occur and the backwash does not ~~contain radioactive material~~ exceed the Maximum Contaminant Level (MCL) for radionuclides or arsenic; and

(19) Discharges to the land surface of less than 350 gallons per week of backwash water from reverse osmosis, ion exchange filters, greensand filters at private drinking water ~~wells~~ wells, ~~[wells serving single family residences], provided ponding or runoff does not occur.~~

(b) Nothing in this Rule shall be deemed to allow the violation of any ~~assigned~~ surface water, groundwater, or air quality standards, and in addition any such violation shall be considered a violation of a condition of a permit. Further, nothing in this Rule shall be deemed to apply to or permit disposal systems for which a state National Pollutant Discharge Elimination System permit is otherwise required.

(c) Any violation of this Rule or any discharge to surface waters from the disposal systems listed in Paragraph (a) of this Rule or the activities listed in other Permitted By Regulation rules in this Subchapter shall be reported in accordance with 15A NCAC 02B .0506.

(d) Disposal systems deemed permitted under this Subchapter shall remain deemed permitted, notwithstanding any violations of surface water or groundwater standards or violations of this Rule or other Permitted By Regulation rules in this Subchapter, until such time as the Director determines that they shall not be deemed permitted in accordance with the criteria established in this Rule.

(e) The Director may determine that a disposal system ~~should~~ shall not be deemed to be permitted in accordance with this Rule or other Permitted By Regulation rules in this Subchapter and require the disposal system to obtain an

1 individual permit or a certificate of coverage under a general permit. This determination shall be made based on
2 existing or projected environmental impacts, compliance with the provisions of this Rule or other Permitted By
3 Regulation rules in this Subchapter, and the compliance history of the facility owner.

4
5 *History Note:* Authority G.S. 130A-300; 143-215.1(a)(1); 143-215.1(b)(4)(e); 143-215.3(a);
6 Eff. September 1, 2006;
7 Amended Eff. March 19, 2015; June 18, ~~2011~~2011;
8 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0114

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – delete the sentence that begins “These are design ...”

Line 7 – do you mean “may” or “shall”? If “may,” what standards, factors, or circumstances will determine whether higher flow rates will be required?

Page 4, line 8 – add “Design daily flow rates for” before “residential”

Page 4, line 9 – replace “use” with “be”

Page 4, line 21 through page 5, line 11 – the first word of each Subparagraph should not be capitalized

Page 4, line 22 through page 5, line 10 – the last word of each Subparagraph should be followed by a semicolon, not a period.

Page 4, line 30 – add a comma after “Section”

Page 5, line 10 add “and” after the semicolon

Page 5, line 19 – replace “(i.e. resort area)” with “, such as whether the facility is in a resort area.”

Page 5, line 20 – replace “in” with “required by”

Page 5, line 23 – replace “any” with “a”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0114 is readopted with changes as published in 32:06 NCR 533-535 as follows:

2
3 **15A NCAC 02T .0114 WASTEWATER DESIGN FLOW RATES**

4 (a) This Rule shall be used to determine wastewater flow rates for all systems ~~covered~~ governed by this Subchapter
5 unless alternate criteria are provided by a ~~program-specific~~ program-specific rule ~~and~~ or for flow used for the purposes
6 of 15A NCAC 02H .0105. These are ~~minimum~~ design daily flow rates for normal use and occupancy situations. Higher
7 flow rates may be required where usage and occupancy are atypical, ~~including,~~ including those in Paragraph (e) of
8 this Rule. Wastewater flow calculations ~~must~~ shall take hours of operation and anticipated maximum
9 ~~occupancies/usage~~ occupancies and usage into account when calculating peak flows for design.

10 (b) In determining the volume of sewage from dwelling units, the flow rate shall be 120 gallons per day per bedroom.
11 The minimum volume of sewage from each dwelling unit shall be 240 gallons per day and each additional bedroom
12 above two bedrooms shall increase the volume by 120 gallons per day. Each bedroom or any other room or addition
13 that can ~~reasonably be expected to~~ function as a bedroom shall be considered a bedroom for design purposes. When
14 the occupancy of a dwelling unit exceeds two persons per bedroom, the volume of sewage shall be determined by the
15 maximum occupancy at a rate of 60 gallons per person per day.

16 (c) The following table shall be used to determine the minimum allowable design daily flow of wastewater facilities.
17 Design flow rates for establishments not identified below shall be determined using available flow data, water-using
18 fixtures, occupancy or operation patterns, and other measured data.

Type of Establishments	Daily Flow For Design
Barber and beauty shops	
Barber Shops	50 gal/chair
Beauty Shops	125 gal/booth or bowl
Businesses, offices and factories	
General business and office facilities	25 gal/employee/shift
Factories, excluding industrial waste	25 gal/employee/shift
Factories or businesses with showers or food preparation	35 gal/employee/shift
Warehouse	100 gal/loading bay
Warehouse – self storage (not including caretaker residence)	1 gal/unit
Churches	
Churches without kitchens, day care or camps	3 gal/seat
Churches with kitchen	5 gal/seat
Churches providing day care or camps	25 gal/person (child & employee)
Fire, rescue and emergency response facilities	
Fire or rescue stations without on site staff	25 gal/person
Fire or rescue stations with on-site staff	50 gal/person/shift
Food and drink facilities	

1	Banquet, dining hall	30 gal/seat
2	Bars, cocktail lounges	20 gal/seat
3	Caterers	50 gal/100 sq ft floor space
4	Restaurant, full Service	40 gal/seat
5	Restaurant, single service articles	20 gal/seat
6	Restaurant, drive-in	50 gal/car space
7	Restaurant, carry out only	50 gal/100 sq ft floor space
8	Institutions, dining halls	5 gal/meal
9	Deli	40 gal/100 sq ft floor space
10	Bakery	10 gal/100 sq ft floor space
11	Meat department, butcher shop or fish market	75 gal/100 sq ft floor space
12	Specialty food stand or kiosk	50 gal/100 sq ft floor space
13	Hotels and Motels	
14	Hotels, motels and bed & breakfast facilities,	
15	without in-room cooking facilities	120 gal/room
16	Hotels and motels, with in-room cooking facilities	175 gal/room
17	Resort hotels	200 gal/room
18	Cottages, cabins	200 gal/unit
19	Self service laundry facilities	500 gal/machine
20	Medical, dental, veterinary facilities	
21	Medical or dental offices	250 gal/practitioner/shift
22	Veterinary offices (not including boarding)	250 gal/practitioner/shift
23	Veterinary hospitals, kennels, animal boarding facilities	20 gal/pen, cage, kennel or stall
24	Hospitals, medical	300 gal/bed
25	Hospitals, mental	150 gal/bed
26	Convalescent, nursing, rest homes without laundry facilities	60 gal/bed
27	Convalescent, nursing, rest homes with laundry facilities	120 gal/bed
28	Residential care facilities	60 gal/person
29	Parks, recreation, camp grounds, R-V parks and other outdoor activity facilities	
30	Campgrounds with comfort station, without	
31	water or sewer hookups	75 gal/campsite
32	Campgrounds with water and sewer hookups	100 gal/campsite
33	Campground dump station facility	50 gal/space
34	Construction, hunting or work camps with flush toilets	60 gal/person
35	Construction, hunting or work camps with chemical or	
36	portable toilets	40 gal/person
37	Parks with restroom facilities	250 gal/plumbing fixture

1	Summer camps without food preparation or laundry facilities	30 gal/person
2	Summer camps with food preparation and laundry facilities	60 gal/person
3	Swimming pools, bathhouses and spas	10 gal/person
4	Public access restrooms	325 gal/plumbing fixture
5	Schools, preschools and day care	
6	Day care and preschool facilities	25 gal/person (child & employee)
7	Schools with cafeteria, gym and showers	15 gal/student
8	Schools with cafeteria	12 gal/student
9	Schools without cafeteria, gym or showers	10 gal/student
10	Boarding schools	60 gal/person (student & employee)
11	Service stations, car wash facilities	
12	Service stations, gas stations	250 gal/plumbing fixture
13	Car wash facilities (if recycling water see Rule .0235)	1200 gal/bay
14	Sports centers	
15	Bowling center	50 gal/lane
16	Fitness, exercise, karate or dance center	50 gal/100 sq ft
17	Tennis, racquet ball	50 gal/court
18	Gymnasium	50 gal/100 sq ft
19	Golf course with only minimal food service	250 gal/plumbing fixture
20	Country clubs	60 gal/member or patron
21	Mini golf, putt-putt	250 gal/plumbing fixture
22	Go-kart, motocross	250 gal/plumbing fixture
23	Batting cages, driving ranges	250 gal/plumbing fixture
24	Marinas without bathhouse	10 gal/slip
25	Marinas with bathhouse	30 gal/slip
26	Video game arcades, pool halls	250 gal/plumbing fixture
27	Stadiums, auditoriums, theaters, community centers	5 gal/seat
28	Stores, shopping centers, malls and flea markets	
29	Auto, boat, recreational vehicle dealerships/showrooms	
30	with restrooms	125 gal/plumbing fixture
31	Convenience stores, with food preparation	60 gal/100 sq ft
32	Convenience stores, without food preparation	250 gal/plumbing fixture
33	Flea markets	30 gal/stall
34	Shopping centers and malls with food service	130 gal/1000 sq ft
35	Stores and shopping centers without food service	100 gal/1000 sq ft
36	Transportation terminals – air, bus, train, ferry, port and dock	5 gal/passenger

(d) Design daily flow rates for proposed non-residential developments where the types of use and occupancy are not known shall be designed for a minimum of 880 gallons per ~~acre~~ acre, or the Applicant ~~applicant~~ shall specify an anticipated flow based upon anticipated or potential uses.

~~(e) Conditions applicable to the use of the above design daily flow rates:~~

~~(1) For restaurants, convenience stores, service stations and public access restroom facilities, higher design daily flow rates shall be required based on higher expected usage where use is increased because of its proximity to highways, malls, beaches, or other similar high use areas.~~

~~(e)(2)~~ Residential property on barrier islands and similar communities located south or east of the Atlantic Intracoastal Waterway and used as vacation rental as defined in G.S. 42A-4 shall use 120 gallons per day per habitable room. Habitable room shall mean a room or enclosed floor space used or intended to be used for living or sleeping, excluding kitchens and dining areas, bathrooms, shower rooms, water closet compartments, laundries, pantries, foyers, connecting corridors, closets, and storage spaces.

(f) An adjusted daily sewage flow design rate shall be granted for permitted but not yet tributary connections and future connections tributary to the system upon showing that the capacity of a sewage system is adequate to meet actual daily wastewater flows from a facility included in Paragraph (b) or (c) of this Rule without causing flow violations at the receiving wastewater treatment plant or ~~capacity-related~~ capacity-related sanitary sewer overflows within the collection system as follows:

(1) Documented, representative data from that facility or a comparable facility shall be submitted by an authorized signing official in accordance with Rule .0106 of this Section to the Division ~~as follows~~ for all flow reduction ~~request~~ requests, as follows:

(A) Dates of flow meter calibrations during the time frame evaluated and indication if any adjustments were necessary.

(B) A breakdown of the type of connections (e.g. two bedroom units, three bedroom units) and number of customers for each month of submitted data as applicable. Identification of any non-residential connections including subdivision ~~clubhouses/pools~~, clubhouses and pools, restaurants, schools, churches and businesses. For each non-residential connection, information as identified in Paragraph (c) of this Rule (e.g. 200 seat church, 40 seat restaurant, 35 person pool bathhouse).

(C) ~~Owner of the collection system.~~ A letter of agreement from the owner or an official, meeting the criteria of Rule .0106 of this [Subchapter,] Section of the receiving collection system or treatment works accepting the wastewater and agreeing with the adjusted design rate.

(D) Age of the collection system.

(E) Analysis of inflow and infiltration within the collection system or receiving treatment plant, as applicable.

(F) ~~Where~~ If a dedicated wastewater treatment plant serves the specific area and is representative of the residential wastewater usage, at least the 12 most recent consecutive

1 monthly average wastewater flow readings and the daily total wastewater flow readings for
2 the highest average wastewater flow month per ~~customers~~ customers, as reported to the
3 Division.

4 (G) ~~Where~~ If daily data from a wastewater treatment plant cannot be ~~utilized~~ used or is not
5 representative of the project area: ~~at least~~ 12 months worth of monthly average wastewater
6 flows from the receiving treatment plant shall be evaluated to determine the peak sewage
7 month. Daily wastewater flows shall then be taken from a flow meter installed at the most
8 downstream point of the collection area for the peak month selected that is representative
9 of the project area. Justification for the selected placement of the flow meter shall also be
10 provided.

11 (H) An estimated ~~minimum~~ design daily sewage flow rate shall be ~~taken~~ determined by
12 calculating the numerical average of the top three daily readings for the highest average
13 flow month. The calculations shall also account for seasonal variations, excessive inflow
14 and infiltration, age and suspected meter ~~reading/recording~~ reading and recording errors.

15 (2) The Division shall evaluate all data submitted but shall also consider other factors in granting, with
16 or without adjustment, or denying a flow reduction request including: applicable weather conditions
17 during the data period (i.e. rainy or drought), other historical monitoring data for the particular
18 facility or other similar facilities available to the Division, the general accuracy of monitoring
19 reports and flow meter readings, and facility usage (i.e., resort area).

20 (3) Flow increases shall be required if the calculations in Subparagraph (f)(1) of this Rule yield design
21 flows higher than that specified in Paragraphs (b) or (c) of this Rule.

22 (4) The Permittee ~~applicant/owner~~ shall retain the letter of any approved adjusted daily design flow rate
23 for the life of the facility and shall transfer such letter to any future Permittee. ~~new system owner~~.

24
25 *History Note:* Authority G.S. 143-215.1; 143-215.3(a)(1);
26 Eff. September 1, 2006-2006;
27 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0115

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 7 and 10 – the first word of each Subparagraph should not be capitalized

Lines 14 and 18 – add a comma after “Declarations”

Lines 14-16 – consider revising as follows:

A copy of the Articles of Incorporation, Declarations, and By-laws, with the engineer's certification, shall be submitted prior to operation of the permitted facilities to the Division, as required by 15A NCAC 02T .0116.

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0115 is readopted as published in 32:06 NCR 535-536 as follows:

2
3 **15A NCAC 02T .0115 OPERATIONAL AGREEMENTS**

4 (a) Prior to issuance or reissuance of a permit pursuant to this Subchapter for a wastewater facility or sewer extension
5 as specified in G.S. 143-215.1(d1), a private ~~applicant shall provide evidence with the permit application:~~ Applicant
6 shall:

- 7 (1) ~~To show~~ Demonstrate that the Applicant ~~applicant~~ has been designated as a public utility by the
8 North Carolina Utilities Commission and is authorized to provide service to the specific project area.
9 This may be a Certificate of Public Convenience and Necessity or letter from the Public Staff; or
10 (2) Enter into and submit an executed Operational Agreement pursuant to G.S. 143-215.1(d1) with the
11 Division.

12 (b) ~~Where~~ If the Applicant ~~applicant is not a Homeowner's or Property Owner's Association,~~ developer of lots to be
13 sold, an executed Operational Agreement ~~must~~ shall be submitted with the permit application. A copy of the Articles
14 of Incorporation, Declarations and By-laws shall be submitted to the ~~Division~~ Division, as required by 15A NCAC
15 02T .0116, with the engineer's certification ~~as required by 15A NCAC 02T .0116~~ and prior to operation of the
16 permitted facilities.

17 (c) ~~For permit applications where~~ If the Applicant ~~applicant~~ is a legally formed Homeowners' or Property Owner's
18 Association, an executed Operational Agreement and a copy of the Articles of Incorporation, Declarations and By-
19 laws shall be submitted to the Division with the permit application.

20 (d) ~~An Operational Agreement is required prior to donation to a public utility or municipality unless the applicant is~~
21 ~~the respective municipality or public utility. The Operational Agreement shall become void upon transferring the~~
22 ~~permit to the public utility or municipality via a change of ownership request to the Division and permit issuance into~~
23 ~~the new owner name.~~

24
25 *History Note: Authority G.S. 143-215.1(d1);*
26 *Eff. September 1, 2006;2006;*
27 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0116

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – replace “any” with “all”

Line 9 – replace “official” with “Division-approved” if that is what is meant

Line 10 – replace “where” with “if”

Line 11 – do you mean “may” or “shall”? If “may,” what standards, factors, or circumstances determine whether additional certification is required?

Line 11 – does “needed” mean “required”? If not, what does it mean?

Lines 14-16 – consider revising as follows if this is what is meant:

(b) To transfer ownership of a sewer extension, a change of ownership request shall be submitted on Division-approved forms after certifying completion of the project.

Line 17 – add commas after “easements,” “installation,” and “operation” and delete the “and” after “installation”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0116 is readopted as published in 32:06 NCR 536 as follows:

2
3 **15A NCAC 02T .0116 CERTIFICATION OF COMPLETION**

4 (a) Prior to the operation of any sewer system, treatment works, utilization system, or disposal system for which an
5 individual permit has been issued in accordance with this Subchapter and the application prepared by licensed
6 professional, a certification ~~must~~ shall be received by the Division from a professional certifying that the sewer system,
7 treatment works, utilization system, or disposal system has been installed in accordance with the rules, any minimum
8 design criteria except as noted, and approved plans and specifications. The professional certification ~~must~~ shall be on
9 official forms completely filled out, where applicable, and submitted to the Division. For facilities with phased
10 construction or where there is a need to operate certain equipment under actual operating conditions prior to
11 certification, additional certification may be needed as follow-ups to the initial, pre-operation certification. The
12 Division may not acknowledge receipt of engineering certifications. The Permittee and the professional shall track the
13 submittal of certifications.

14 (b) For sewer extensions ~~involving developer donated projects where the developer is the original Permittee, where a~~
15 ~~transfer of ownership is desired,~~ a change of ownership request shall be submitted ~~to the Division on Division on~~
16 Division-approved forms upon certifying completion of the project.

17 (c) All deeds, easements and encroachment agreements necessary for installation and operation and maintenance of
18 the system shall be obtained prior to operation of the system.

19 (d) The Permittee shall maintain a copy of the individual permit and a set of final record drawings for the life of the
20 facility.

21
22 *History Note: Authority G.S. 143-215.1;*

23 *Eff. September 1, ~~2006-2006~~;*

24 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0117

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 8 – consider deleting “In order to insure the proper operation and maintenance of facilities permitted under this Section,”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0117 is readopted as published in 32:06 NCR 536 as follows:

2
3 **15A NCAC 02T .0117 TREATMENT FACILITY OPERATION AND MAINTENANCE**

4 (a) For facilities permitted under this Subchapter, the ~~permittee must~~ Permittee shall designate an Operator in
5 Responsible Charge and a back-up operator as required by the Water Pollution Control System Operators Certification
6 Commission ~~as established in pursuant to 15A NCAC 08F .0200 and 15A NCAC 08G .0200. Copies of this Rule are~~
7 ~~available from the Division, Archdale Building, 512 N. Salisbury Street, Raleigh, North Carolina 27604 at no charge.~~

8 (b) In order to insure the proper operation and maintenance of facilities permitted under this Section, the Operator in
9 Responsible ~~Charge,~~ Charge or a back-up operator when appropriate ~~must~~ shall operate and visit the facility as
10 required by the Water Pollution Control System Operators Certification Commission ~~as established in pursuant to 15A~~
11 ~~NCAC 08F .0200 and 15A NCAC 08G .0200. Copies of this Rule are available from the Division, Archdale Building,~~
12 ~~512 N. Salisbury Street, Raleigh, North Carolina 27604 at no charge.~~

13
14 *History Note: Authority G.S. 143-215.3;*

15 *Eff. September 1, ~~2006-2006~~;*

16 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0118

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 5, 7, and 17 – these lines refer to “wastewater treatment sustems” and to “wastewater treatment, utilization, or disposal systems.” Are these the same things? Please clarify by consistently using the applicable term.

Line 6 – add a comma after “districts”

Line 29 – delete “that”

Line 30 – what does “needed” mean – “required”?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0118 is readopted as published in 32:06 NCR 536-537 as follows:

2
3 **15A NCAC 02T .0118 DEMONSTRATION OF FUTURE WASTEWATER TREATMENT CAPACITIES**

4 ~~In order to insure that treatment, utilization, or disposal systems do not exceed their hydraulic treatment capacities, no~~
5 No permits for sewer line extensions shall be issued to wastewater treatment systems owned or operated by
6 municipalities, counties, sanitary districts or public utilities unless they meet the following requirements:

- 7 (1) Prior to exceeding 80 percent of the ~~wastewater treatment system's~~ permitted hydraulic capacity
8 (based on the average flow ~~of~~ during the last calendar year), the ~~permittee must~~ Permittee shall
9 submit an ~~approvable~~ engineering evaluation of their future wastewater treatment, utilization, and
10 disposal needs. This evaluation ~~must~~ shall outline ~~specific~~ plans for meeting future wastewater
11 treatment, utilization, or disposal needs by either expansion of the existing system, elimination or
12 reduction of extraneous flows, or water conservation and ~~must~~ shall include the ~~source(s)~~ source of
13 funding for the improvements. If expansion is not proposed or is proposed for a later date, a ~~detailed~~
14 justification ~~must~~ shall be made ~~to the satisfaction of the Director~~ that wastewater treatment needs
15 will be met based on past growth records and future growth projections and, as appropriate, shall
16 include conservation plans or other ~~specific~~ measures to achieve waste flow reductions.
- 17 (2) Prior to exceeding 90 percent of the ~~wastewater treatment, utilization, or disposal systems~~ permitted
18 hydraulic ~~capacity,~~ capacity (based on the average flow during the last calendar year), the ~~permittee~~
19 ~~must~~ Permittee shall obtain all permits needed for the expansion of the wastewater treatment,
20 utilization, or disposal system and, if construction is needed, submit ~~approvable~~ final plans and
21 specifications for ~~expansion~~ expansion, including a construction schedule. If expansion is not
22 proposed or is proposed for a later date, a ~~detailed~~ justification ~~must~~ shall be made ~~to the satisfaction~~
23 ~~of the Director~~ that wastewater treatment needs will be met based on past growth records and future
24 growth projections and, as appropriate, shall include conservation plans or other specific measures
25 to achieve waste flow reductions.
- 26 (3) The Director shall allow permits to be issued to facilities that are exceeding the 80 percent or 90
27 percent ~~loading rates~~ disposal capacity if the additional flow is not projected to result in the facility
28 exceeding its permitted hydraulic capacity, the facility is in compliance with all other permit
29 limitations and requirements, and ~~it is demonstrated to the satisfaction of the Director~~ that adequate
30 progress is being made in developing the needed engineering evaluations or plans and specifications.
31 In determining the adequacy of the progress, the Director shall consider the projected flows, the
32 complexity and scope of the work to be ~~completed~~ completed, and any projected environmental
33 impacts.

34
35 *History Note:* Authority G.S. 143-215.3;
36 Eff. September 1, 2006-2006;
37 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0120

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – replace “under” with “pursuant to”

Lines 6-7 – consider revising as follows:

In addition to the criteria set forth in Paragraph (b) of this Rule, the Director may also consider other compliance information in determining compliance history.

However, use of the word “may” raises the question whether you mean “shall” and, if not, what standards, factors, or circumstances determine whether other compliance information will be considered.

Line 8 0 delete the comma after “granted”

Line 17 – replace “the permit” with “its permit” if that is what is meant.

Line 22 – add a comma after “agreement”

Line 27 – replace “approved” with “subject to approval”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0120 is readopted with changes as published in 32:06 NCR 537 as follows:

2
3 **15A NCAC 02T .0120 HISTORICAL CONSIDERATION IN PERMIT APPROVAL**

4 (a) The Division shall consider an Applicant's ~~applicant's~~ compliance history in accordance with G.S. 143-
5 215.1(b)(4)b.2. and with the requirements contained ~~within in~~ this Rule for environmental permits and certifications
6 issued under Article 21. Paragraph (b) of this Rule is a partial set of criteria for routine consideration under G.S. 143-
7 215.1(b)(4)b.2. The Director may also consider other compliance information in determining compliance history.

8 (b) When any of the following apply, permits for new and expanding facilities shall not be granted, unless the Division
9 determines that the permit is specifically and solely needed for the construction of facilities to resolve non-compliance
10 with any environmental statute or rule:

11 (1) The Applicant ~~applicant~~ or any parent, subsidiary, or other affiliate of the Applicant ~~applicant or~~
12 ~~parent~~ has been convicted of environmental crimes under G.S. 143-215.6B or under Federal law
13 that would otherwise be prosecuted under G.S. 143-215.6B ~~where all appeals~~ and all appeals of this
14 conviction have been abandoned or exhausted.

15 (2) The Applicant ~~applicant~~ or any parent, subsidiary, or other affiliate of the Applicant ~~affiliation~~ has
16 previously abandoned a wastewater treatment facility without properly closing the facility in
17 accordance with the permit or this Subchapter.

18 (3) The Applicant ~~applicant~~ or any parent, subsidiary, or other affiliate of the Applicant ~~affiliation~~ has
19 not paid a civil penalty ~~where all appeals~~ and all appeals of this penalty have been abandoned or
20 exhausted.

21 (4) The Applicant ~~applicant~~ or any parent, subsidiary, or other affiliate of the Applicant ~~affiliation~~ is
22 currently not compliant with any compliance schedule in a permit, settlement agreement or order.

23 (5) The Applicant ~~applicant~~ or any parent, subsidiary, or other affiliate of the Applicant ~~affiliation~~ has
24 not paid an annual fee in accordance with Rule ~~.0105(e)(2).~~ .0105(e)(2) of this Section.

25 (c) Permits for renewing facilities shall not be granted if the Applicant or any affiliation has not paid an annual fee in
26 accordance with Rule ~~.0105(e)(2).~~ .0105(e)(2) of this Section.

27 ~~(d)(e)~~ Any variance to this Rule shall be approved by the Director and shall be based on the current compliance status
28 of the Permittee's ~~permittee's~~ facilities and the magnitude of previous violations. Variance approval shall not be
29 delegated to subordinate staff.

30
31 *History Note:* Authority G.S. 143-215.1(b); 143-215.3(a);

32 *Eff. September 1, 2006; 2006;*

33 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0201

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – replace “applies” with “shall apply”

Lines 7 and 8 – replace “does” with “shall”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0201 is readopted as published in 32:06 NCR 537 as follows:

2
3 **SECTION .0200 – WASTEWATER PUMP AND HAUL SYSTEMS**
4

5 **15A NCAC 02T .0201 SCOPE**

6 This Section applies to all pump and haul activities of wastewater under the authority of the Division. This Section
7 does not apply to the transport of animal waste from animal waste management systems permitted under Section .1300
8 of this Subchapter and Section .1400 of this Subchapter. In addition, this Section does not apply to the transport of
9 wastewater residuals or biosolids permitted under Section .1100 of this Subchapter or Section .1200 of this Subchapter.

10
11 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

12 *Eff. September 1, ~~2006~~2006;*

13 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0203

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 7, 9, 14, 15, 17, 18, 23, 24, 26, 27, and 29 – the first word of each Subparagraph should not be capitalized

Line 19 – add a comma after “type”

Line 19 – add “the” before “location”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0203 is readopted with changes as published in 32:06 NCR 537 as follows:

2
3 **15A NCAC 02T .0203 PERMITTING BY REGULATION**

4 (a) The following systems ~~are~~ shall be deemed permitted pursuant to Rule .0113 of this Subchapter ~~provided if~~ if the
5 system meets the criteria in Rule .0113 of this Subchapter and all criteria required for ~~the specific that~~ the specific that system in this

6 Rule:

7 (1) Wastewater from single-beverage kiosks and similar operations not regulated under the authority of
8 the Division of ~~Environmental~~ Public Health if the following criteria are met:

9 (A) The facility notifies the appropriate Division regional office in writing advising of the type
10 of operation, type and quantity of wastewater generated, and the receiving wastewater
11 treatment facility. A letter from the facility that is accepting the wastewater (type and
12 quantity) ~~specifically~~ agreeing to accept wastewater from the applicant shall be ~~included.~~
13 included;

14 (B) The wastewater does not contain any human waste. ~~Waste; and waste; and~~

15 (C) The waste is collected and discharged into a sewer or treatment system designed and
16 permitted to accept the type of wastewater being pumped and hauled.

17 (2) Industrial wastewater if the following criteria are met:

18 (A) The facility notifies the appropriate Division regional office in writing advising of the type
19 of operation, type and quantity of wastewater generated, ~~location,~~ location of wastewater
20 generation, and the receiving wastewater treatment facility. A letter from the facility
21 accepting the wastewater (type and quantity) ~~specifically~~ agreeing to accept wastewater
22 from the applicant shall be ~~included.~~ included;

23 (B) The wastewater does not contain any human waste. waste;

24 (C) The waste is collected and discharged into a sewer or treatment system designed and
25 permitted to accept the type of wastewater being pumped and ~~hauled.~~ hauled;

26 (D) The pump and haul activity is not to alleviate a failing wastewater ~~system.~~ system; and

27 (E) The Division regional office concurs in writing that the activity meets the criteria in this
28 Rule.

29 (3) ~~Pump~~ Pumping and hauling of waste from sewer cleaning activities.

30 (b) The Director may determine that a system ~~should~~ shall not be deemed permitted in accordance with this Rule and
31 Rule .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

32
33 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);

34 *Eff. September 1, 2006-2006;*

35 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0204

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 5-6 – replace “(e.g. odors, vectors)” with “such as odors or vectors,”

Line 7 – delete “to”

Line 7 – replace “must” with “shall”

Line 9 – do you mean “may” or “hall”? If “may”, what standards, factors or circumstances determine whether enforcement action will be taken?

Line 13 – add a comma after “wastewater”

Line 14 – replace “wastewater (type and quantity)” with “both the type and quantity of wastewater”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0204 is readopted as published in 32:06 NCR 538 as follows:

2
3 **15A NCAC 02T .0204 PERMITTING**

4 (a) ~~Pump and haul permits are not acceptable long term domestic wastewater treatment alternatives.~~ Permits for
5 domestic wastewater shall only be issued in cases of environmental emergencies, nuisance conditions (e.g. odors,
6 vectors), health problems, or for unavoidable delays in construction of systems previously permitted under this
7 Section. Applications for pump and haul permits to for unavoidable construction delays must include documentation
8 demonstrating the delay could not be avoided. Failure to complete construction prior to the expiration of a pump and
9 haul permit due to unavoidable construction delays may subject the Permittee to enforcement action by the Division
10 if the delay could have been avoided by payment of additional costs. The permits shall be issued for a period of no
11 more than six months unless the Director determines that conditions are such that the final waste management options
12 cannot be implemented within six months.

13 (b) Applications shall include a letter from the facility accepting the wastewater ~~specifically~~ agreeing to accept
14 wastewater (type and quantity) from the applicant for the proposed activity.

15 (c) Pump and haul facilities shall include at a minimum 24 hours storage equipped with high-water alarms.

16 (d) Permitted pump and haul facilities or activities under this rule shall be inspected at least daily by the permittee or
17 its representative.

18
19 *History Note: Authority G.S. 143-215.1; 143-215.3(a.);*
20 *Eff. September 1, ~~2006~~2006;*
21 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0301

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 6-7 – delete the first sentence

Line 8 – add “shall” before “apply”

Line 8 – add a comma after “extensions”

Line 9 – delete the parentheses

Line 9 – add a comma after “systems”

Line 10 – add a comma after “system”

Line 10 – add “to” before “requirements”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0301 is readopted as published in 32:06 NCR 538 as follows:

2
3 **SECTION .0300 - SEWER EXTENSIONS**
4

5 **15A NCAC 02T .0301 SCOPE**

6 The rules in this Section set forth the requirements and procedures for application and issuance of permits for sewers
7 as required by G.S. 143-215.1(a) and permitting delegation of local sewer programs allowable by G.S. 143-215.1(f).

8 The rules in this Section apply to all sewer extensions including gravity sewers, pump stations, force mains, vacuum
9 sewers, pressure sewers (including Septic Tank Effluent Pump (STEP) systems) or alternative sewer systems that
10 discharge to another sewer system and requirements for local delegated sewer extension permitting programs.

11
12 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

13 *Eff. September 1, 2006-2006;*

14 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0302

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “are used” with “shall apply”

Line 5 – delete the parentheses and add “or” before “collection” if this does not change the meaning

Line 11 – add a comma after “waste”

Line 15 – add a comma after “system”

Lines 20-21 – revise as follows if this does not change the meaning:

... share a common pressure pipe with a diameter of 1.5 inches through 6 inches.

Line 28 – delete “considered”

Line 34 – does “appurtenant appliances” refer only to “alternative systems” or to all of the systems listed after the word “means”? If all of the systems, add a comma after “systems”

Line 37 – replace “utilizing” with “using”

Page 2, line 3 – replace “(up-gradients)” with “or up-gradients” if this does not change the meaning

Page 2, line 6 – replace “with” with “and”

Page 2, line 11 – replace “(non vacuum)” with “non-vacuum”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0302 is readopted with changes as published in 32:06 NCR 538-539 as follows:

2
3 **15A NCAC 02T .0302 DEFINITIONS**

4 (a) The following definitions are used in this Section:

- 5 (1) "Alternative sewer system" means any sewer system (collection system) other than a gravity system
6 or standard pump station and force main. These include pressure sewer systems, septic ~~tank/effluent~~
7 tank with effluent pump (STEP) sewer systems, vacuum sewer system, and small diameter variable
8 grade gravity sewers.
- 9 (2) "Building" means any structure occupied or intended for supporting or sheltering any occupancy.
- 10 (3) "Building drain" means that part of the lowest piping of a drainage system that receives the discharge
11 from soil, waste and other drainage pipes that extends 10 feet beyond the walls of the building and
12 conveys the drainage to the building sewer.
- 13 (4) "Building sewer" means that part of the drainage system that extends from the end of the building
14 drain and conveys the discharge from a single building to a public gravity sewer, private gravity
15 sewer, individual sewage disposal system or other point of disposal.
- 16 (5) "Fast-track" means a permitting process whereby a professional engineer certifies that a sewer
17 design and associated construction documents conform to all applicable sewer related rules and
18 design ~~criteria, thereby forgoing an upfront technical review by the Division.~~ criteria.
- 19 (6) "Pressure sewer system" means an interdependent system of grinder pump stations, typically for
20 residences, serving individual wastewater connections for single buildings that share a common and
21 typically a small diameter pressure pipe (1.5 inches through 6 inches). Duplex or greater pump
22 stations connected to a common pressure pipe that can operate both independently and
23 simultaneously with other pump stations while maintaining operation of the system within the
24 operating constraints ~~are not considered shall be~~ excluded ~~from the definition of a pressure~~
25 ~~sewer system.~~
- 26 (7) "Private sewer" means any part of a sewer system ~~which~~ that collects wastewater from one building
27 and crosses another property or travels along a street right of way or from more than one building
28 and is not considered a public sewer.
- 29 (8) "Public sewer" means a sewer located in a dedicated public street, roadway, or dedicated public
30 right-of-way or easement ~~which~~ that is owned or operated by any municipality, county, water or
31 sewer district, or any other political subdivision of the state authorized to construct or operate a
32 sewer system.
- 33 (9) "Sewer system" means pipelines or conduits, ~~pumping stations,~~ stations including lift stations and
34 grinder stations, alternative ~~systems,~~ systems and ~~appliances appurtenant thereto,~~ appurtenant
35 appliances used for conducting wastewater to a point of ultimate treatment and disposal.
- 36 (10) "Small diameter, variable grade gravity sewer system" means a system of wastewater collection
37 utilizing an interceptor tank to remove solids and grease from the waste ~~stream, thereby allowing~~

1 ~~smaller diameter pipes and shallower grades to be used.~~ stream. Flow is transferred to the central
2 gravity system in the public right-of-way by gravity or effluent pumps. With venting and design,
3 inflective grades (up-gradients) may also be accommodated.

4 (11) "Septic ~~tank/effluent tank with effluent pump~~ (STEP) system" means ~~the same type of system as a~~
5 ~~"pressure sewer system" except that a pressure sewer system in which~~ the individual grinder pump
6 is replaced with a septic tank with an effluent pump either in the second chamber of the septic tank
7 or in a separate pump tank that follows the septic tank.

8 (12) "Vacuum sewer system" means a mechanized system of wastewater collection ~~utilizing~~ using
9 differential air pressure to move the wastewater. Centralized stations provide the vacuum with valve
10 pits providing the collection point from the source and also the inlet air required to move the
11 wastewater. In conjunction with the vacuum pumps, a standard (non vacuum) pump station and
12 force main is used to transport the wastewater from the vacuum tanks to a gravity sewer or ultimate
13 point of treatment and disposal.

14
15 *History Note:* *Authority G.S. 143-215.1; 143-215.3(a);*
16 *Eff. September 1, ~~2006-2006~~;*
17 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0303

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 7, 14, 25, and page 2 line 5 – the first word of each Subparagraph should not be capitalized

Line 10 – replace “building” with “buildings”

Line 13 – how will this approval be obtained? Does an existing rule govern such approvals that could be cited here?

Lines 13, 24, and page 2 lines 2 and 4 – replace the period with a semicolon

Line 17 – add a comma after “created”

Line 30 – add a comma after “created”

Page 2, line 4 – add “and” after the semicolon

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0303 is readopted with changes as published in 32:06 NCR 539-540 as follows:

2
3 **15A NCAC 02T .0303 PERMITTING BY REGULATION**

4 (a) The following systems ~~are~~ shall be deemed permitted pursuant to Rule .0113 of this Subchapter ~~provided if~~ provided if the
5 system meets the criteria in Rule .0113 of this Subchapter and all criteria required for ~~the specific that~~ the specific that system in this
6 Rule:

7 (1) A building sewer documented by the local building inspector to be in compliance with the North
8 Carolina State Plumbing Code, ~~which Code and that~~ Code and that serves a single building with the sole purpose
9 of conveying wastewater from that building into a gravity sewer that extends onto or is adjacent to
10 the building's property. A building sewer that contribute more than five percent of the existing
11 wastewater treatment facility's design capacity or 50,000 gallons per day of flow as calculated using
12 the wastewater design flow rates in Rule .0114 of this Subchapter shall not commence operations
13 until after it receives approval [form] from the regional office.

14 (2) A gravity sewer serving a single building with less than 600 gallons per day of flow as calculated
15 using rates in 15A NCAC 02T .0114 that crosses another property or parallels a ~~right-of-way~~ right-
16 of-way, provided that:

17 (A) an easement for crossing another property is obtained, a map is created and both are
18 recorded at the Register of Deeds office in the county of residence for both property owners
19 and runs with the ~~land, land~~ land or, in the case of a building sewer traveling along a right-of-
20 way, documented permission from the dedicated right-of-way owner to use such right-of-
21 way;

22 (B) the building inspector certifies the sewer to the point of connection to the existing sewer is
23 in accordance with state or local plumbing code; and

24 (C) no other connections are made to the sewer without prior approval from the Division.

25 (3) ~~New pump stations or sewage ejectors and force mains if all of the following criteria are met:~~ A
26 pump station and force main serving a single building with less than 600 gallons per day of flow as
27 calculated using the wastewater design flow rates in Rule .0114 of this Subchapter provided that:

28 (A) ~~the pump station serves a single building,~~

29 (B) ~~the force main does not traverse other property or parallel a street right of way;~~

30 (A) an easement for crossing another property is obtained, a map is created and both are
31 recorded at the Register of Deeds office in the county of residence for both property owners
32 and runs with the land or, in the case of a force main traveling along a right-of-way,
33 documented permission from the dedicated right-of-way owner to use such right-of-way;

34 (C)(B) ~~the force main ties if a force main is used, it ties into a non-pressurized~~
35 pipe/manhole/wetwell pipe, manhole or wetwell; (i.e. is not part of an alternative sewer
36 system);

1 ~~(D)~~(C) the system is approved by the local building inspector as being in complete compliance
2 with the North Carolina Plumbing Code to the point of connection to the existing sewer,
3 and

4 ~~(E)~~(D) no other connections are made to the sewer without prior approval from the Division.

5 (4) The following sewer ~~operations~~ operations, provided that the work conforms to all rules, setbacks
6 and design standards; record drawings of the completed project are kept for the life of the project;
7 and new sources of wastewater flow, immediate or future, are not planned to be connected to the
8 sewer other than previously permitted but not yet tributary:

9 (A) rehabilitation or replacement of sewers ~~in-kind (i.e., size)~~ of the same size and with the
10 same horizontal and vertical alignment;

11 (B) rehabilitation or replacement of public 6-inch sewers with 8-inch ~~sewers~~, sewers, provided
12 that the rehabilitation or replacement is to correct deficiencies and bring the sewer up to
13 current ~~minimum~~ standards;

14 (C) line relocations of the same pipe size and within the same right-of-way or easement;

15 (D) parallel line installations of the same size and within the right-of-way or easement where
16 the existing line will be abandoned;

17 (E) point repairs; and

18 (F) ~~in-place in-place~~ pump station ~~repairs/upgrades and maintaining~~ repairs or upgrades that
19 maintain permitted capacity to within five percent of the original permitted capacity for
20 pump replacement.

21 (b) The Director may determine that a system ~~should~~ shall not be deemed permitted in accordance with this Rule and
22 Rule .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

23
24 *History Note:* *Authority G.S. 143-215.1; 143-215.3(a);*

25 *Eff. September 1, 2006-2006;*

26 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0304

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace the period with “and may be found at”

Lines 5 and 6 – delete the brackets

Line 6 – add a period at the end of the sentence

Line 8 – add a comma after “STEP systems”

Line 10 add a comma after “laterals”

Line 28 – replace “where” with “fir which”

Line 29 – replace “if the system does” with “that do”

Line 30 – replace the period with “, which may be found at”

Lines 31 and 32 – delete the brackets

Line 32 – add a period at the end of the sentence

Line 35 – add a comma after “works”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0304 is readopted as published in 32:06 NCR 540-541 as follows:

2
3 **15A NCAC 02T .0304 APPLICATION SUBMITTAL**

4 (a) ~~Application~~ Applications for permits pursuant to this Section shall be made on forms provided by the Division.

5 [[https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/sewer-extension-permitting)
6 [systems/sewer-extension-permitting](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/sewer-extension-permitting)]

7 (b) Applications shall not be submitted unless the Permittee has assured downstream sewer capacity.

8 (c) For pressure sewers, vacuum sewers, STEP systems and other alternative sewer systems discharging into a sewer
9 system, the Permittee, by certifying the permit application and receiving an issued permit, ~~agrees to be responsible for~~
10 ~~shall maintain in operable condition~~ all individual pumps, tanks, service laterals and main lines as ~~permitted. The line~~
11 ~~from a building to the septic or pump tank is excluded from this responsibility. permitted, excluding the line from a~~
12 ~~building to the septic or pump tank. This does not prohibit the Permittee from entering into a service agreement with~~
13 ~~another entity. However, the Permittee shall be responsible for correcting any environmental or public health problems~~
14 ~~with the system.~~

15 (d) For sewer extensions ~~involving gravity sewers, pump stations and force mains or any combination thereof that do~~
16 ~~not require an Environmental Assessment pursuant to 15A NCAC 01C .0408 (except for low pressure sewers, vacuum~~
17 ~~sewers and STEP systems discharging to a sewer system), are not funded through the Division's Construction, Grants~~
18 ~~and Loans Section, that have been designed in accordance with all applicable rules and design criteria, and where if~~
19 ~~plans, calculations and specifications~~ calculations, specifications, and other supporting documents have been sealed
20 by a professional engineer, application may be made according to the fast-track permitting process.

21 (e) ~~Projects involving an Environmental Assessment per 15A NCAC 01C .0408 or are funded through the Division's~~
22 ~~Construction, Grants and Loans Section must be submitted for a full technical review on application forms provided~~
23 ~~by the Division.~~ An application for sewers involving an Environmental Assessment shall not be considered complete
24 until either a Finding of No Significant Impact or an Environmental Impact Statement and Record of Decision ~~is~~ has
25 been issued.

26 (f) ~~Where the plans were not prepared by a professional engineer, applications shall be submitted for full technical~~
27 ~~review on application forms specified by the Division.~~

28 (g)(f) ~~Low pressure sewer systems, vacuum sewer systems and other alternative sewer systems~~ Sewer systems where
29 the design criteria has not been developed or if the system does not meet all applicable rules and design criteria shall
30 be submitted for a full technical review using the official application form for those systems.
31 [[https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/sewer-extension-permitting)
32 [systems/sewer-extension-permitting](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/sewer-extension-permitting)]

33 (h)(g) ~~A letter of agreement from the owner or an official, meeting the criteria in Rule .0106 of this Subchapter, of~~
34 ~~the receiving collection system or treatment works accepting the wastewater is required, if~~ If the application is not
35 submitted by the owner of the receiving collection system or treatment works, works the application shall include a
36 letter of agreement from the owner or an official of the receiving collection system or treatment works that accepts
37 the wastewater and that meets the criteria if Rule .0106 of this Subchapter. This letter shall be specific to the project

1 ~~whether or not capacity has been purchased through an intergovernmental agreement or contract. This letter shall also~~
2 ~~signify that the owner of the receiving collection system or treatment works has adequate capacity to transport and~~
3 ~~treat the proposed new wastewater. This shall not negate the need for downstream sewer capacity calculations. In~~
4 ~~addition, this letter shall:~~

5 (1) specifically refer to the project, regardless whether capacity has been purchased through an
6 intergovernmental agreement of contract;

7 (2) signify that the owner of the receiving collection system or treatment works has adequate capacity
8 to transport and treat the proposed new wastewater; and

9 (3) shall be dated within 12 months from the date of submitting the application.

10 This letter shall not obviate the need for the downstream sewer capacity calculations.

11
12 *History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.67;*

13 *Eff. September 1, 2006-2006;*

14 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0305

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 4-5 – revise as follows:

- (a) Sewers and sewer extensions shall not be constructed in the following areas:

Lines 8 and 11 – add a comma after “feasible”

Line 10 – replace “(Governor and Council of State)” with “represented by the Governor and Council of State”

Lines 17-19 – please check whether the Board’s determination is current.

Lines 20, 23, and 27 – the first word of each Subparagraph should not be capitalized

Line 20 – delete the comma after “features”

Lines 22 and 26 – replace the period with a semicolon

Line 23 – add a comma before “including”

Line 26 – add “and” after the semicolon

Line 28 – add a comma after “construction”

Line 30 – add a comma after “easements”

Lines 34-34 – do you mean this:

- (e) Two feet protection from a 100-year flood shall be provided unless there is a water-tight seal on all station hatches and manholes with control panels, and unless vents extend two feet above the 100-year flood elevation.

or this:

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

(e) Two feet protection from a 100-year flood shall be provided unless there is a water-tight seal on all station hatches, manholes with control panels. and vents extending two feet above the 100-year flood elevation.

Page 2, line 8 – delete the comma after “source”

Page 2, line 12 – delete the parentheses

Page 2, line 12 – add a comma after “waters”

Page 2, line 14 – correct the spacing of “50 feet”

Page 2, line 16 – correct the spacing of “10 feet”

Page 2, line 27 – replace “systems to” with “systems from”

Page 2, lines 28, 30, and 34 and page 3, lines 1 and 4 – the first word of each Subparagraph should not be capitalized

Page 2, line 30 – add a comma after “methods”

Page 3, line 4 – add a comma after “methods”

Page 3, line 10 – delete “i.e.”

Page 3, line 24 – do not capitalize “pump”

Page 3, line 35 – add a comma after “condition”

Page 4, line 2 – add a comma after “number”

Page 4, line 5 – revise as follows: “Wet wells shall be equipped with screened vents.”

Page 4, line 17 – add a comma after “STEP”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0305 is readopted with changes as published in 32:06 NCR 541-543 as follows;

2
3 **15A NCAC 02T .0305 DESIGN CRITERIA**

4 (a) Construction of sewers and sewer extensions are prohibited in the following ~~areas unless the specified~~
5 ~~determinations are made:~~ area:

6 (1) ~~in~~ a natural area designated on the State Registry of Natural Heritage Areas by a protection
7 agreement between the owner and the Secretary, unless ~~the Commission agrees that~~ no prudent,
8 feasible or technologically possible alternative exists; or,

9 (2) ~~in~~ a natural area dedicated as a North Carolina Nature Preserve by mutual agreement between the
10 owner and State of North Carolina (Governor and Council of State), unless ~~the Commission~~
11 ~~recommends and~~ the Governor and Council of State agree that no prudent, feasible or
12 technologically possible alternative exists;

13 (b) Engineering design documents. The following documents shall be prepared prior to submitting a permit
14 application to the Division. If submittal of such documents is not requested in the permitting process (i.e., fast-track),
15 they shall be available upon request by the Division. If required by G.S. 89C, a professional engineer shall prepare
16 these documents:

17 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December
18 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing
19 engineering under G.S. 89C.]

20 (1) A plan and profile of sewers, showing their proximity to other utilities and natural features, such as
21 water supply lines, water lines, wells, storm drains, surface waters, wetlands, roads and other
22 trafficked areas.

23 (2) Design calculations including pipe and pump sizing, velocity, pump cycle times and level control
24 settings, pump station buoyancy, wet well storage, surge protection, detention time in the wet well
25 and force main, ability to flush low points in force mains with a pump cycle, and downstream sewer
26 capacity analysis.

27 (3) ~~Specifications relative to the sewer system~~ Sewer system specifications describing all materials to
28 be used, methods of construction and means for assuring the quality and integrity of the finished
29 project.

30 (c) All deeds, easements and encroachment agreements necessary for ~~installation and operation~~ installation, operation,
31 and maintenance of the system shall be obtained prior to operation of the system.

32 (d) There shall be no by-pass or overflow lines designed in any new sewer system except for valved piping and
33 appurtenances intended for emergency pumping ~~operation(s).~~ operations.

34 (e) ~~A minimum of two~~ Two feet protection from a 100-year flood shall be provided unless there is a water-tight seal
35 on all station hatches and manholes with control panels and vents extending two feet above the 100-year flood
36 elevation.

(f) The following ~~minimum~~ separations shall be provided ~~for~~ from the sewer system to the listed feature except as allowed by Paragraph (g) of this Rule:

Storm sewers and other utilities not listed below (vertical)	24 18 inches
--	-------------------------

Water mains (vertical-water over sewer including in benched trenches)	18 inches
or (horizontal)	10 feet

Reclaimed water lines (vertical – reclaimed over sewer)	18 inches
or (horizontal)	2 feet

Any private or public water supply source, ~~including any~~ consisting of wells, WS-I ~~waters~~ waters, ~~Class I~~ Class I, or Class II, impounded or Class III reservoirs used as a source of drinking water

100 feet

Waters classified ~~WS (except WS I or WS V)~~, WS-II, WS-III, WS-IV, B, SA, ORW, HQW, or SB from normal high water (or tide ~~elevation~~) and elevation, wetlands that are directly abutting these waters and wetlands classified as UWL or SWL

50 feet

Any other stream, lake, impoundment, <u>wetlands classified as WL, waters classified as C, SC, or WS-V</u> , or ground water lowering and surface drainage ditches	10 feet
--	---------

Any building foundation	5 feet
-------------------------	--------

Any basement	10 feet
--------------	---------

Top slope of embankment or cuts of 2 feet or more vertical height	10 feet
---	---------

Drainage systems and interceptor drains	5 feet
---	--------

Any swimming pool	10 feet
-------------------	---------

Final earth grade (vertical)	36 inches
------------------------------	-----------

(g) ~~Alternatives where~~ The following separations shall be permitted if separations in Paragraph (f) of this Rule cannot be achieved. ~~Nothing achieved, provided that nothing~~ in this Paragraph shall supersede the allowable alternatives provided in the Commission for Public Health Public Water Supply Rules (15A NCAC 18C), Commission for Public Health Sanitation Rules (15A NCAC 18A) or the Groundwater Protection Rules (15A NCAC 02L and 15A NCAC 02C) that pertain to the separation of sewer systems to water mains or public or private wells:

(1) For storm sewers, engineering solutions such as ductile iron pipe or structural bridging to prevent crushing the underlying ~~pipe~~ pipe;

(2) For public or private wells, piping materials, testing methods and acceptability standards meeting water main standards shall be used where these ~~minimum~~ separations cannot be maintained. All appurtenances shall be outside the 100-foot ~~radius~~ radius of the well. The ~~minimum~~ separation shall however not be less than 25 feet from a private well or 50 ~~ft~~ feet from a public ~~well~~ well;

(3) For public water main horizontal or vertical separations, alternatives as described in 15A NCAC 18C .0906(b) and ~~(e)~~ (c);

- 1 (4) For less than 36-inches cover from final earth grade, ductile iron pipe shall be ~~specified~~ required in
2 any alternative. Ductile iron pipe or other pipe with proper bedding to develop design supporting
3 strength shall be provided where sewers are subject to traffic bearing ~~loads~~; loads; and
- 4 (5) For all other separations, materials, testing methods and acceptability standards meeting water main
5 standards (15A NCAC 18C) shall be ~~specified~~ required in any alternative.
- 6 (h) The following criteria shall be met for all pumping stations and force mains:
- 7 (1) Pump Station Reliability:
- 8 (A) ~~Pump stations, except when exempted by Subparagraph (j)(2) of this Rule, Pump stations~~
9 shall be designed with multiple pumps such that peak flow can be pumped with the largest
10 pump out of service. Simplex pump stations (i.e. pump stations with only one pump) shall
11 only be allowable to serve only a single building with an average daily design flow less
12 than or equal to 600 gallons per day as calculated using Rule .0114 of this Subchapter.
- 13 (B) A standby power source or pump ~~is~~ shall be required at all pump stations except for ~~those~~
14 simplex pump stations subject to Subparagraph (j)(2) of this Rule; stations. Controls shall
15 be provided to automatically activate the standby source and signal an alarm condition.
- 16 (C) As an alternative to Part (B) of this Subparagraph for pump stations with an average daily
17 design flow less than 15,000 gallons per day as calculated using Rule .0114 of this
18 Subchapter, a portable power source or pumping capability may be ~~utilized~~; used. ~~It shall~~
19 ~~be demonstrated to the Division that the~~ The portable source is ~~shall be~~ owned or contracted
20 by the permittee and ~~is~~ shall be compatible with the station. If the portable power source
21 or pump is dedicated to multiple pump stations, an evaluation of all the pump stations'
22 storage capacities and the rotation schedule of the portable power source or ~~pump,~~
23 ~~including travel timeframes, shall be provided in the case of a multiple station power~~
24 ~~outage. Pump in a multiple station power outage, including travel timeframes, shall be~~
25 provided.
- 26 (D) ~~As an alternative to Part (B) for Simplex pump or vacuum stations connecting a single~~
27 ~~building to an alternative a sewer system, wet well storage requirements~~ system shall be
28 ~~documented to provide 24-hours worth of wastewater storage or, or exceed shall provide~~
29 storage in excess of that needed during the greatest power outage over the last three years
30 or the documented response time to replace a failed pump, whichever is greater.
31 Documentation shall be required pursuant to the of wastewater storage shall be provided
32 with the permit application. In no case shall less than 6 hours worth of wastewater storage
33 be provided above the pump-on level.
- 34 (E) All pump stations designed for two pumps or more shall have a telemetry system to provide
35 remote notification of a problem condition ~~to include~~ including power failure and high
36 water alarm.
- 37 (F) All pump stations shall have a high water audio and visual alarm.

- (2) Pump stations shall have a permanent weatherproof sign stating the pump station identifier, 24-hour emergency number and instructions to call in case of emergency. Simplex pump or vacuum stations serving a single-family residence shall have a placard or sticker placed inside the control panel with a 24-hour emergency contact number.
- (3) Screened vents for all wet wells.
- (4) The public shall be restricted from access to the site and equipment.
- (5) Air relief valves shall be provided at all high points along force mains where the vertical distance exceeds ten feet.
- (i) The following criteria shall be met for gravity sewers:
- (1) ~~for public gravity sewers,~~ public gravity sewers shall be equipped with a minimum eight inch diameter pipe and ~~for private gravity sewers,~~ private gravity sewers shall be equipped with a minimum six inch diameter pipe;
- (2) the maximum separation between manholes shall be 425 feet unless ~~written~~ documentation is submitted with the application that the ~~owner/authority~~ owner has the capability to perform routine cleaning and maintenance ~~on~~ of the sewer at the specified manhole separation; and
- (3) drop manholes shall be provided where invert separations exceed 2.5 feet.
- (j) The following criteria shall be met for low pressure sewers, vacuum sewers, STEP and other alternative sewers discharging into another sewer system:
- (1) Hydraulic modeling of the system shall be submitted using the ~~statistical (projected)~~ statistically projected number of pumps running at one time. If computer modeling is provided by a pump manufacturer, it shall be indicated and shall be considered part of the design calculations pursuant to Subparagraph (b)(2) of this Rule.
- (2) Simplex pump stations shall only ~~be allowable for single family residences. to~~ serve a single building with an average daily design flow less than 600 gallons per day as calculated using Rule .0114 of this Subchapter. All other buildings connected to the system shall at a minimum have duplex pumps.
- (3) Septic tanks shall adhere to the standards established in 15A NCAC 18A .1900.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006.
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0306

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

This Rule appears to use several terms to refer to the same entity, including certified authority, certified program, local authority, local program, local sewer system program, etc. Please choose one term and use it, and only it, consistently.

Line 10 – delete the parentheses and add “such as” before “alternative”

Line 10 – replace “systems” with “system”

Line 13 – replace “must” with “shall”

Line 31 – add “and” after the semicolon

Lines 33-36 – indent to line up with the rest of this Subparagraph.

Line 33 – replace “what” with “which”

Lines 34-36 – revise as follows if this is what is meant:

The applicant shall also specify whether these permits will be issued to sewer systems that are publicly or privately owned.

Page 2, line 1 – what does this mean? Possibly:

Local ordinances and rules governing processing permit applications, setting permit requirements, enforcement, and penalties shall be compatible with rules and statutes governing permits issued by the Division.

Page 2, line 5 – delete “then”

Page 2, line 6 – replace “must” with “shall”

Page 2, line 8 – replace “which” with “that”

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Page 2, line 9 – replace “Any” with “All”

Page 2, line 20 – delete “(Delegation)”

Page 2, line 28 – replace “which” with “that”

Page 2, lines 29 and 32 – revise the beginning of these sentences as follows: “The local sewer system program shall not issue ...” using whatever term for local program you have decided upon.

Page 2, lines 36-37 – what standards, factors, or circumstances determine whether more frequent reporting is required? Is there a Rule that governs this and could be cited here?

Page 3, line 8 – replace “any” with “all”

Page 3, line 15 – add “shall be subject to approval” after “but”

Page 3, line 21 – add “with” before “G.S.”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0306 is readopted with changes as published in 32:06 NCR 543-544 as follows:

2
3 **15A NCAC 02T .0306 LOCAL PROGRAMS FOR SEWER SYSTEMS**

4 (a) Jurisdiction. Municipalities, counties, local boards or commissions, water and sewer authorities, or groups of
5 municipalities and counties may apply to the Commission for approval certification of local programs for permitting
6 construction, modification, and operation of public and private sewer systems in their utility service areas (~~i.e.,~~
7 ~~delegation~~) pursuant to G.S. 143-215.1(f). Permits issued by approved certified local programs serve in place of
8 permits issued by the Division except for projects involving an Environmental Impact Statement, Assessment, projects
9 that do not meet all applicable sewer related rules and minimum design criteria, or if the permitting authority has not
10 been certified (e.g. alternative sewer systems), which shall continue to be permitted by the Division. The Division
11 may ~~choose~~ choose to cede permitting authority to the approved certified local program after review of Environmental
12 Assessment projects and issuance of a Finding of No Significant Impact, or if other permits are required.

13 (b) ~~Applications. Application~~ An application for approval certification of a local program must provide adequate
14 information to assure compliance with the requirements of G.S. 143-215.1 (f) and the following requirements:

- 15 (1) Applications for local sewer system programs shall be submitted to the Director.
- 16 (2) The program application shall include: ~~include three copies of the intended permit application forms,~~
17 ~~permit shell(s), minimum design criteria (specifications), sewer ordinances, flow chart of~~
18 ~~permitting, staffing, inspection and certification procedures, intended permit application fees,~~
19 ~~downstream capacity assurance methods and other relevant documents to be used in administering~~
20 ~~the local program. The applicant shall specify in a cover letter what permits the local authority~~
21 ~~desires to issue. The options are any of the following: gravity sewers, pump stations, force mains,~~
22 ~~and/or pressure sewers. The applicant shall also specify whether such permits will be issued to~~
23 ~~public (to be self-owned) or private systems (not donated to delegated authority).~~
- 24 (A) the intended permit application forms;
- 25 (B) permit shells;
- 26 (C) design criteria and specifications;
- 27 (D) sewer ordinance;
- 28 (E) flow chart of permitting;
- 29 (F) staffing;
- 30 (G) inspection and certification procedures;
- 31 (H) intended permit application fees;
- 32 (I) downstream capacity assurance methods.

33 The applicant shall specify in a cover letter what permits the local authority desires to issue. The options are
34 any of the following: gravity sewers, pump stations, force mains, or pressure sewers. The applicant shall also
35 specify whether such permits will be issued to public (to be self-owned) or private (not donated to the certified
36 authority).

- (3) ~~Certification that the local~~ Local authorities for processing permit applications, setting permit requirements, enforcement, and penalties ~~are~~ shall be compatible with those for permits issued by the Division.
- (4) If the treatment and disposal system receiving the ~~waste~~ wastewater from the sewer line extension permitted under the local program is under the jurisdiction of another local unit of government, then the program application must contain a written statement from ~~that~~ the other local unit of government that the proposed program complies with all its requirements and that the applicant has entered into a satisfactory contract which assures continued compliance.
- (5) Any future amendments to the requirements of this Section shall be incorporated into the local sewer system program within 60 days of the effective date of the amendments.
- (6) A Professional Engineer shall be on the staff of the local sewer system program or be retained as a consultant to review unusual situations or designs and to answer questions that arise in the review of proposed projects.
- (7) Each project permitted by the local sewer system program shall be inspected for compliance with the requirements of the local program at least once during construction.
- (c) Approval of Local Programs. The staff of the Division shall acknowledge receipt of an application for a local sewer system program in writing, review the application, notify the applicant of additional information that may be required, and make a recommendation to the Commission ~~on the acceptability~~ regarding certification of the proposed local program.
- (d) Conditions of Local Program Approval (Delegation). Once approved by the Commission, the ~~delegated authority~~ local program shall adhere to the following:
- (1) Adequacy of Receiving Facilities. Local sewer system programs shall not issue a permit for a sewer project ~~which that~~ would increase the flow or change the characteristics of waste to a treatment works or sewer system unless the local program has received a written determination from the Division that, pursuant to G.S. 143-215.67 (a), the treatment works or sewer system ~~is adequate to receive~~ can adequately treat the waste. The Division staff may, when appropriate, provide one written determination that covers all local permits for domestic sewage sewer projects with total increased flow to a particular treatment works less than a specified amount and which are issued within a specified period of time. In no case shall the local sewer system program issue a permit for additional wastewater if the receiving wastewater treatment is in noncompliance with its Division issued permit unless the additional flow is allowed as part of a special order pursuant to G.S. 143-215.2. In no case shall the delegated authority issue a permit for additional wastewater without documenting capacity assurance along the tributary wastewater path to the wastewater treatment plant.
- (2) All permitting actions shall be summarized and submitted to the Division and the appropriate Division Regional Office ~~on a quarterly basis~~ annually on Division ~~forms~~ forms unless more frequent reporting is required by the Division. The report shall also provide a listing and summary

of all enforcement actions taken or pending during the reporting period. ~~quarter~~. The quarters begin ~~on January 1, April 1, July 1 and October 1~~. The report shall be submitted by February 1 of each year. ~~within 30 days after the end of each quarter~~. Reporting forms are available at: <https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/local-programs>

(3) A copy of all program ~~documents~~ documents, such as specifications, permit applications, permit shells, shell certification forms, and ordinance pertaining to ~~permitting~~ permitting, shall be submitted to the Division ~~on an annual basis~~ annually along with a summary of any other program changes. Program changes ~~to note~~ shall include ~~staffing~~ staffing changes, processing fees, and ordinance revisions. After initial submittal of such documents and if no further changes occur in subsequent years, a letter stating such may be submitted in lieu of the ~~requested~~ required documentation. ~~The Division may request changes to local program documents if the Commission adopts more stringent standards.~~

(4) Modification of a Local Program. Modifications to local programs, including the expansion of permitting ~~authority~~ authority, shall not be required to be approved by the Commission, but by the Director.

(e) Appeal of Local Decisions. Appeal of individual permit denials or issuance with conditions the permit applicant finds unacceptable shall be made according to the approved local ordinance. The Commission shall not consider individual permit denials or issuance with conditions to which a Permittee objects. This Paragraph does not alter the enforcement authority of the Commission as specified in G.S. 143-215.1(f).

(f) The Division may audit the ~~delegated~~ certified program for compliance with this Rule and G.S. 143-215.1(f) at any time with a scheduled appointment with the ~~delegated~~ certified authority.

(g) The Division shall maintain a list of all local units of government with approved local sewer system programs and make copies of the list available to the public upon request and payment of ~~any~~ reasonable costs for reproduction. The list may be obtained from the Division.

History Note: Authority G.S. 143-215.1; 143-215.3(a);

Eff. September 1, 2006-2006;

Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0401

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add “shall” before “apply”

Line 8 – add a comma after “mains”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0401 is readopted as published in 32:06 NCR 544 as follows:

2
3 **SECTION .0400 – SYSTEM-WIDE COLLECTION SYSTEM PERMITTING**
4

5 **15A NCAC 02T .0401 SCOPE**

6 The rules of this Section apply to system-wide collection systems pursuant to G.S. 143-215.9B, ~~where the Director~~
7 ~~may issue~~ governing the issuance of system-wide permits for collection systems relating to operation and maintenance
8 of sewers, pump stations, force mains and all appurtenances.
9

10 *History Note: Authority G.S. 143-215.1(a); 143-215.3(a); 143-215.9B;*

11 *Eff. September 1, ~~2006~~ 2006;*

12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0402

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “are used” with “shall apply”

Line 8 – replace “mean” with “include”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0402 is readopted as published in 32:06 NCR 544-545 as follows:

2
3 **15A NCAC 02T .0402 DEFINITIONS**

4 The following definitions are used in this Section:

- 5 (1) "Collection system" means a public or private sewer ~~system~~ system, consisting of sewer lines, force
6 ~~mains, pump stations or any combination thereof~~ that conveys wastewater to a designated
7 wastewater treatment facility or separately-owned sewer system. For purposes of permitting, the
8 collection system ~~is considered to be~~ shall mean any existing or newly installed sewer system
9 extension up to the wastewater treatment facility property or point of connection with a separately-
10 owned sewer system.
- 11 (2) "High-priority sewer" means any aerial sewer, sewer contacting surface waters, siphon, sewer
12 positioned parallel to streambanks that is subject to erosion that undermines or deteriorates the
13 sewer, or sewer designated as a high priority in a ~~Division-issued~~ Division-issued permit ~~where~~ if
14 the sewer does not meet minimum design requirements.

15
16 *History Note:* *Authority G.S. 143-215.1(a); 143-215.3(a); 143-215.9B;*
17 *Eff. September 1, 2006-2006;*
18 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0403

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – add a comma after “permitted”

Line 13 – add a comma after “inventory”

Line 16 – add a comma after “day” and delete the parentheses

Line 17 – replace “cover” with “justify”

Line 20 – delete “at least”

Line 25 – replace “are” with “shall be”

Line 32 – replace the comma with “and”

Page 2, lines 5-6 – consider revising as follows if the meaning will be unchanged:

- (10) Documentation of compliance with Subparagraphs (a)(1) through (a)(9) of this Rule shall be maintained for three years with the exception of the map, which shall be maintained for the life of the system.

Who is required to maintain these documents, and where must they be kept?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0403 is readopted with changes as published in 32:06 NCR 545 as follows:

2
3 **15A NCAC 02T .0403 PERMITTING BY REGULATION**

4 (a) Collection systems having an actual, permitted or ~~Division-approved~~ Division-approved average daily flow less
5 than 200,000 gallons per day ~~are~~ shall be deemed permitted pursuant to Rule .0113 of this Subchapter ~~provided if the~~
6 system meets the criteria in Rule .0113 of this Subchapter and all ~~specific~~ criteria required in this Rule:

- 7 (1) The ~~sewer collection~~ system ~~is~~ shall be effectively maintained and operated at all times to prevent
8 discharge to land or surface ~~waters,~~ waters and to prevent any contravention of groundwater
9 standards or surface water standards.
- 10 (2) A map of the ~~sewer collection~~ system ~~has been~~ shall have been developed and ~~is~~ shall be actively
11 maintained.
- 12 (3) An operation and maintenance ~~plan~~ plan, including pump station inspection frequency, preventative
13 maintenance schedule, spare parts inventory and overflow response ~~has been~~ shall have been
14 developed and implemented.
- 15 (4) Pump stations that are not connected to a telemetry system (~~i.e., remote alarm system~~) ~~are inspected~~
16 shall be inspected by the permittee or its representative every day (i.e., 365 days per ~~year~~ year).
17 unless the permittee demonstrates that daily inspections are not necessary because the pump station
18 has sufficient storage capacity, above the elevation at which the pump activates, to cover a longer
19 inspection interval. In no case shall the inspection interval exceed seven days. Pump stations that
20 are connected to a telemetry system ~~are~~ shall be inspected at least once per week.
- 21 (5) High-priority sewers ~~are~~ shall be inspected by the permittee or its representative ~~at least~~ once every
22 ~~six months~~ six-months, and inspections ~~are~~ shall be documented.
- 23 (6) A general observation by the permittee or its representative of the entire ~~sewer collection~~ system is
24 shall be conducted ~~at least~~ once per year.
- 25 (7) Overflows and bypasses are reported to the appropriate Division regional office in accordance with
26 15A NCAC 02B .0506(a), and public notice ~~is~~ shall be provided as required by G.S. 143-215.1C.
- 27 (8) A Grease Control Program ~~is~~ shall be in place as follows:
 - 28 (A) For publicly owned collection systems, the Grease Control Program shall include ~~at least~~
29 bi-annual distribution of educational materials for both commercial and residential users
30 and the legal means to require grease interceptors for new construction and retrofit, if
31 necessary, of grease interceptors at existing establishments. The plan shall also include
32 legal means for inspections of the grease interceptors, enforcement for violators and the
33 legal means to control grease entering the system from other public and private satellite
34 ~~sewer collection~~ systems.
 - 35 (B) For privately owned collection systems, the Grease Control Program shall include ~~at least~~
36 bi-annual distribution of grease education materials to users of the collection system by the
37 permittee or its representative.

(C) Grease education materials shall be distributed more often than required in Parts (A) and (B) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.

(9) Right-of-ways and easements ~~are~~ shall be maintained in the full easement width for personnel and equipment accessibility.

(10) Documentation shall be kept for Subparagraphs (a)(1) through (a)(9) of this Rule for ~~a minimum of~~ three years with the exception of the map, which shall be maintained for the life of the system.

(b) Private collection systems on a single property serving an industrial facility ~~where~~ from which the domestic wastewater contribution is less than 200,000 gallons per day shall be deemed permitted.

(c) The Director may determine that a collection system ~~should~~ shall not be deemed to be permitted in accordance with this Rule and Rule .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

*History Note: Authority G.S. 143-215.1(a); 143-215.3(a); 143-215.9B;
Eff. September 1, ~~2006~~2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0404

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – add a comma after “systems” and “plants”

Line 4 – delete the parentheses and replace “i.e.” with “such as”

Line 5 – add “of the” before “collection”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0404 is readopted as published in 32:06 NCR 545 as follows:

2
3 **15A NCAC 02T .0404 MULTIPLE COLLECTION SYSTEMS UNDER COMMON OWNERSHIP**

4 If a public entity owns multiple but separate collection systems (i.e., tributary to separate plants) and any one is subject
5 to an individual permit, all collection systems shall be covered ~~under~~ by one permit. This shall not be applicable to
6 public utilities authorized to operate by the North Carolina Utilities Commission ~~who~~ that own several individual
7 systems within the state.

8
9 *History Note: Authority G.S. 143-215.1(a); 143-215.3(a); 143-215.9B;*

10 *Eff. September 1, ~~2006~~ 2006;*

11 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0405

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 8 – what standards, factors, or circumstances determine whether the Director extends a deadline? Is there a Rule that could be cited here?

Line 8 – replace “must” with “shall”

Line 9 – add “are” after “forms”

Line 12 – replace “such permit” with “with”

Line 13 – what does “to effectuate the purpose of Article 21, Chapter 143 of the General Statutes” mean? This is extremely vague. Are there no rules or sets of rule that could be cited?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0405 is readopted as published in 32:06 NCR 545-546 as follows:

2
3 **15A NCAC 02T .0405 IMPLEMENTATION**

4 (a) Permit applications for the initial issuance of a collection system permit shall be completed and submitted to the
5 Division within 60 days of the collection system owner's certified mail receipt of the Division's request for application
6 submittal. Permit renewal requests shall be submitted to the Director at least 180 days prior to expiration, unless the
7 permit has been revoked in accordance with ~~15A NCAC 02T .0110~~. 15A NCAC 02T .0110, a request has been made
8 to rescind the permit, or the Director extends this deadline. All applications must be submitted in duplicate, completed
9 on official forms, and fully executed. Application forms available at: [https://deq.nc.gov/about/divisions/water-](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/system-wide-collection-system-permitting)
10 resources/water-resources-permits/wastewater-branch/collection-systems/system-wide-collection-system-permitting.
11 (b) Collection systems subject to an individual permit shall comply with the standards in Rule .0403 of this ~~Section~~
12 ~~until such time as their individual permit is issued.~~ Section and such permit conditions contained in an individual
13 permit to effectuate the purpose of Article 21, Chapter 143 of the General Statues.

14
15 *History Note: Authority G.S. 143-215.1(a); 143-215.3(a); 143-215.9B;*
16 *Eff. September 1, ~~2006~~2006;*
17 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .0501 is readopted as published in 32:06 NCR 546 as follows:

2
3 **SECTION .0500 – WASTEWATER IRRIGATION SYSTEMS**
4

5 **15A NCAC 02T .0501 SCOPE**

6 The rules in this Section shall apply to all surface irrigation of wastewater systems not otherwise specifically governed
7 by other rules of this Subchapter. Surface irrigation of wastewater shall include ~~includes~~ spray irrigation, drip
8 irrigation, and any other application of wastewater to the ground surface.
9

10 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

11 *Eff. September 1, ~~2006~~ 2006;*

12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0504

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 9, 21, 25, and 29 – do not capitalize the first word on these lines.

Line 21 – add a comma after “constituents”

Lines 32-36; page 2, lines 1, 2-5, and 7-10 – do not capitalize the any word on these lines.

Page 2, line 24 – add a comma after “head”

Page 2, line 31 – add a comma after “orientation”

Page 3, lines 6-9 – list, as follows, if this does not alter the meaning of the Subparagraph:

- (2) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (A) wells, including usage and construction details if available;
 - (B) ephemeral, intermittent, and perennial streams;
 - (C) springs;
 - (D) lakes;
 - (E) ponds; and
 - (F) other surface drainage features;

Page 3, line 19 – delete “can”

Page 3, line 22 – replace “is” with “shall be”

Page 4, line 21 – replace “ownership (i.e., contract, deed or article of incorporation);” with “ownership, such as a contract, deed, or article of incorporation;”

Page 4, lines 33-37 and page 5, lines 1-14 – do not capitalize the any word on these lines except in the parentheses.

Page 5, line 16 – add a comma after “minerals”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

Page 5, line 26 – delete “following” and add “from the following” after “factor”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0504 is readopted with changes as published in 32:06 NCR 546-548 as follows.

2
3 **15A NCAC 02T .0504 APPLICATION SUBMITTAL**

4 (a) The requirements in this Rule shall apply to all new and expanding ~~facilities.~~ facilities, as applicable.

5 (b) Soils ~~Report.~~ report. A soil evaluation of the disposal site shall be provided to the Division by the Applicant
6 ~~applicant~~ in a report that includes the following. If required by G.S. 89F, a soil scientist shall prepare this evaluation:
7 ~~[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005,~~
8 ~~that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science under G.S. 89F.]~~

9 (1) ~~A field~~ Field description of ~~the~~ the soil profile, based on examinations of excavation pits or auger
10 borings, within seven feet of land surface or to ~~bedrock~~ bedrock, describing the following
11 parameters by individual diagnostic horizons:

12 (A) the thickness of the horizon;

13 (B) the texture;

14 (C) the color and other diagnostic features;

15 (D) the structure;

16 (E) the internal drainage;

17 (F) the depth, thickness, and type of restrictive ~~horizon;~~ horizon(s); and

18 (G) the presence or absence and depth of evidence of any seasonal high water ~~table.~~ table
19 (SHWT).

20 Applicants shall dig pits when necessary for evaluation of the soils at the ~~site.~~ site;

21 (2) Recommendations concerning loading rates of liquids, solids, other wastewater constituents and
22 amendments. Annual hydraulic loading rates shall be based on in-situ measurement of saturated
23 hydraulic conductivity in the most restrictive horizon for each soil mapping unit. Maximum
24 irrigation precipitation rates shall be provided for each soil mapping ~~unit.~~ unit;

25 (3) A field-delineated soil map delineating soil mapping units within each land application site and
26 showing all physical features, location of pits and auger borings, legends, scale, and a north arrow.
27 The legends shall also include dominant soil series name and family or higher taxonomic class for
28 each soil mapping ~~unit.~~ unit; and

29 (4) ~~A representative soils analysis (i.e., Standard Soil Fertility Analysis)~~ Standard Soil Fertility Analysis
30 conducted on each land application site. The Standard Soil Fertility Analysis shall include the
31 following parameters:

32 (A) Acidity; ~~acidity;~~

33 (B) Base Saturation (by calculation); ~~base saturation (by calculation);~~

34 (C) Calcium; ~~calcium;~~

35 (D) Cation Exchange Capacity; ~~cation exchange capacity;~~

36 (E) Copper; ~~copper;~~

- (F) Exchangeable Sodium Percentage (by calculation); ~~exchangeable sodium percentage (by calculation);~~
- (G) Magnesium; ~~magnesium;~~
- (H) Manganese; ~~manganese;~~
- (I) Percent Humic Matter; ~~percent humic matter;~~
- (J) pH; ~~pH;~~
- (K) Phosphorus; ~~phosphorus;~~
- (L) Potassium; ~~potassium;~~
- (M) Sodium; ~~sodium;~~ and
- (N) Zinc. ~~zinc.~~

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]

(c) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents. The following documents shall be provided to the Division by the Applicant; ~~applicant;~~

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

- (1) engineering plans for the entire system, including treatment, storage, application, and disposal facilities and equipment except those previously permitted unless those previously permitted are directly tied into the new units or are critical necessary ~~critical~~ to the understanding of the complete process;
- (2) specifications describing materials to be used, methods of construction, and means for ensuring quality and integrity of the finished product ~~product~~, including leakage testing; and
- (3) engineering ~~calculations~~ calculations, including hydraulic and pollutant loading for each treatment unit, treatment unit sizing criteria, hydraulic profile of the treatment system, total dynamic head and system curve analysis for each pump, buoyancy calculations, and irrigation design.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering pursuant to G.S. 89C.]

(d) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information on boundaries and physical features not under the purview of other licensed professions. Site plans or maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location, orientation and relationship of facility components including:

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying under G.S. 89C.]

- (1) ~~a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief and showing all facility related structures and fences within the treatment, storage,~~

1 ~~and disposal areas, and soil mapping units shown on all disposal sites; a scaled map of the site, with~~
2 ~~topographic contour intervals not exceeding 10 feet or 25 percent of total site relief, showing:~~

3 (A) ~~all facility-related structures and fences within the treatment, storage, and disposal areas;~~
4 ~~and~~

5 (B) ~~soil mapping units on all disposal sites;~~

6 (2) the location of all wells (including usage and construction details if available), streams (ephemeral,
7 intermittent, and perennial), springs, lakes, ponds, and other surface drainage features within 500
8 feet of all waste treatment, storage, and disposal ~~sites~~ ~~sites(s)~~ and delineation of the review and
9 compliance boundaries;

10 (3) setbacks as required by Rule .0506 of this Section; and

11 (4) site property boundaries within 500 feet of all waste treatment, storage, and disposal ~~sites~~ ~~sites(s)~~.

12 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December
13 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps
14 pursuant to this Paragraph constitutes practicing surveying pursuant to G.S. 89C.]

15 (e) Hydrogeologic report. A hydrogeologic description prepared by a Licensed Geologist, Licensed Soil Scientist, or
16 Professional Engineer if required by Chapters 89E, 89F, or 89C, ~~respectively, respectively, of the subsurface to a depth~~
17 ~~of 20 feet or bedrock, whichever is less,~~ shall be provided to the Division by the ~~Applicant~~ ~~applicant~~ for systems
18 treating industrial waste and any system with a design flow over 25,000 gallons per day. Industrial facilities with a
19 design flow less than 25,000 gallons per day of wastewater that can demonstrate that the effluent will be of quality
20 similar to domestic wastewater, including effluent requirements established in 15A NCAC 02T .0505(b)(1), shall,
21 upon request, be exempted from this requirement. The hydrogeologic evaluation shall be of the subsurface to a depth
22 of 20 feet or bedrock, whichever is less deep. A greater depth of An investigation to a depth greater than 20 feet is
23 required if the respective depth is used in predictive calculations. This evaluation shall be based on borings for which
24 the numbers, locations, and depths are sufficient sufficient numbers, locations, and depths of borings to define the
25 components of the hydrogeologic evaluation. In addition to borings, other techniques may be used to investigate the
26 subsurface conditions at the ~~site. These techniques may include site, including~~ geophysical well logs, surface
27 geophysical surveys, and tracer studies. This evaluation shall be presented in a report that includes the following
28 components:

29 [~~Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for~~
30 ~~Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers~~
31 ~~and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description~~
32 ~~documents pursuant to this Paragraph constitutes practicing geology under G.S. 89E, soil science under G.S. 89F, or~~
33 ~~engineering under G.S. 89C.~~]

34 (1) a description of the regional and local geology and hydrogeology;

35 (2) a description, based on field observations of the site, of the site topographic setting, streams, springs
36 and other groundwater discharge features, drainage features, existing and abandoned wells, rock

- outcrops, and other features that may affect the movement of the contaminant plume and treated wastewater;
- (3) changes in the lithology underlying the site;
 - (4) the depth to bedrock and the occurrence of any rock outcrops;
 - (5) the hydraulic conductivity and transmissivity of the affected ~~aquifer(s);~~ aquifer as determined by in-situ field testing, such as slug tests or pumping tests, in the intended area of irrigation;
 - (6) the depth to the seasonal high water table;
 - (7) a discussion of the relationship between the affected aquifers of the site to local and regional geologic and hydrogeologic features;
 - (8) a discussion of the groundwater flow regime of the site prior to the operation of the proposed facility and the post operation of the proposed ~~facility,~~ facility, focusing on the relationship of the system to groundwater receptors, groundwater discharge features, and groundwater flow media; and
 - (9) if the ~~SHWT~~ seasonal high water table is within six feet of the surface, a mounding analysis to predict the level of the ~~SHWT~~ seasonal high water table after wastewater application.

[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description documents pursuant to this Paragraph constitutes practicing geology pursuant to G.S. 89E, soil science pursuant to G.S. 89F, or engineering pursuant to G.S. 89C.]

(f) Property Ownership Documentation shall be provided to the Division by the Applicant, ~~applicant~~ consisting of:

- (1) legal documentation of ownership (i.e., contract, deed or article of incorporation);
- (2) ~~written notarized intent to purchase agreement~~ an agreement of an intent to purchase the property that is written, notarized, and signed by both parties, accompanied by a plat or survey map; or
- (3) ~~written notarized lease agreement~~ an agreement to lease the property that is written, notarized, and signed by both parties, specifically indicating the intended use of the property, as well as accompanied by a plat or survey map. Lease agreements shall adhere to the requirements of 15A NCAC 02L .0107.

(g) Public utilities shall submit to the Division a Certificate of Public ~~Conveyance~~ Convenience and Necessity or a letter from the NC Utilities Commission stating that it has received a franchise application. ~~application has been received.~~

(h) A ~~complete~~ chemical analysis of the typical wastewater to be ~~discharged~~ irrigated shall be provided to the Division by the Applicant ~~applicant~~ for industrial waste, including which shall include:

- (1) Total Organic Carbon; ~~Total Organic Carbon,~~
- (2) 5-day Biochemical Oxygen Demand (BOD₅); ~~5-day Biochemical Oxygen Demand (BOD₅);~~
- (3) Chemical Oxygen Demand (COD); ~~Chemical Oxygen Demand (COD);~~
- (4) Nitrate Nitrogen (NO₃-N); ~~Nitrate Nitrogen (NO₃-N);~~
- (5) Ammonia Nitrogen (NH₃-N); ~~Ammonia Nitrogen (NH₃-N);~~

- (6) Total Kjeldahl Nitrogen (TKN); Total Kjeldahl Nitrogen (TKN);
(7) pH; pH;
(8) Chloride; Chloride;
(9) Total Phosphorus; Total Phosphorus;
(10) Phenol; Phenol;
(11) Total Volatile Organic Compounds; Total Volatile Organic Compounds;
(12) Fecal Coliform; Fecal Coliform;
(13) Calcium; Calcium;
(14) Sodium; Sodium;
(15) Magnesium; Magnesium;
(16) Sodium Adsorption Ratio (SAR); Sodium Adsorption Ratio (SAR);
(17) Total Trihalomethanes; Total Trihalomethanes; and
Toxicity Test Parameters and
(18) Total Dissolved Solids.

(i) A project evaluation and a receiver site agronomic management plan (if applicable) and recommendations concerning cover crops and their ability to accept the proposed application rates of liquid, solids, minerals and other constituents of the wastewater shall be provided to the Division by the Applicant. ~~applicant.~~

(j) A residuals management plan as required by Rule ~~.0508~~ .0508(a) of this Section shall be provided to the Division by the Applicant. ~~applicant. A written commitment is not required at the time of application; however, it must be provided to the Division prior to operation of the permitted system.~~

~~(k) A water balance shall be provided to the Division by the applicant that determines required effluent storage based upon the most limiting factor of the hydraulic loading based on either the most restrictive horizon or groundwater mounding analysis; or nutrient management based on either agronomic rates for the specified cover crop or crop management.~~

(k) The Applicant shall provide to the Division a water balance that determines the required effluent storage based on the following most limiting factor:

- (1) hydraulic loading based on the most restrictive horizon;
(2) hydraulic loading based on the groundwater mounding analysis;
(3) nutrient management based on agronomic rates for the specified cover crop; or
(4) nutrient management based on crop management.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0505

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 5-29 – revise Paragraph (b) as follows:

- (b) New and expanding systems:
 - (1) that are municipal, domestic, or commercial facilities, except systems subject to Subparagraph (b)(2) or this Rule, shall meet a monthly average of each of the following:
 - (A) five-day biochemical oxygen demand (BOD₅) ≤ 30 mg/L;
 - (B) total suspended solids (TSS) ≤ 30 mg/L;
 - (C) ammonia (NH₃-N) ≤ 15 mg/L; and
 - (D) fecal coliforms ≤ 200 colonies/100 mL;
 - (2) with lagoon treatment systems whose application is received by the Division after December 31, 2011, except those permitted as new under Subparagraph (b)(1) of this Rule, shall meet a monthly average of each of the following:
 - (A) five-day biochemical oxygen demand (BOD₅) ≤ 30 mg/L;
 - (B) total suspended solids (TSS) ≤ 90 mg/L; and
 - (C) fecal coliforms ≤ 200 colonies/100 mL; or
 - (3) that are not described in Subparagraphs (b)(1) and (b)(2) of this Rule shall meet treatment standards that assure that surface water or groundwater standards will not be exceeded.

Line 34 – delete the comma

Page 2, line 4 – add a comma after “ponds”

Page 2, line 5 – add commas after “storage” and “disposal”

Page 2, line 9 – add a comma after “trenches”

Page 2, line 14 – delete “methods”

Page 2, line 16 – add a comma after “trenches”

Page 2, line 36 – add “established” after “rates”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

Page 3, line 4 – add a comma after “storage”

Page 3, line 15 – delete the comma

Page 3, line 16 – add “to be” after “determined”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0505 is readopted with changes as published in 32:06 NCR 548-550 as follows:

2
3 **15A NCAC 02T .0505 DESIGN CRITERIA**

4 (a) The requirements in this Rule shall apply to all new and expanding facilities, ~~facilities, as applicable.~~

5 (b) Minimum degree of treatment for new and expanding systems: ~~systems are as follows:~~

6 (1) ~~For new that are~~ municipal, domestic and commercial facilities, except systems subject to
7 Subparagraph (b)(2) of this Rule, the minimum degree of treatment shall meet a monthly average
8 of each of the following:

9 (A) five-day Biochemical Oxygen Demand (BOD₅) ≤ 30 mg/L;

10 (B) Total Suspended Solids (TSS) ≤ 30 mg/L;

11 (C) Ammonia (NH₃-N) (~~NH₃~~) ≤ 15 mg/L; and

12 (D) Fecal Coliforms ≤ 200 colonies/100 ~~mL~~ mL.

13 (2) ~~For expanding municipal, domestic, and commercial facilities except systems subject to~~
14 ~~Subparagraphs (b)(3) or (b)(4) of this Rule, facilities shall meet the limitation provided in~~
15 ~~Subparagraph (b)(1) of this Rule.~~

16 (3) ~~For expanding municipal facilities, except those permitted as new under Subparagraph (b)(1) of this~~
17 ~~Rule, with lagoon treatment systems, the minimum degree of treatment shall meet a monthly average~~
18 ~~of five-day Biochemical Oxygen Demand (BOD₅) ≤ 60 mg/L; Total Suspended Solids (TSS) ≤ 90~~
19 ~~mg/L; Fecal Coliforms ≤ 200 colonies/100 mL. No expanding facilities shall be permitted under this~~
20 ~~provision for any project whose application is received by the Division after December 31, 2011.~~

21 (2)(4) ~~For expanding municipal facilities whose application is received by the Division after December~~
22 ~~31, 2011, except those permitted as new under Subparagraph (b)(1) of this Rule, with lagoon~~
23 ~~treatment systems~~ systems, except those permitted as new under Subparagraph (b)(1) of this Rule,
24 the minimum degree of treatment shall meet a monthly average of each of the following:

25 (A) five-day Biochemical Oxygen Demand (BOD₅) ≤ 30 mg/L;

26 (B) Total Suspended Solids (TSS) ≤ 90 mg/L; and

27 (C) Fecal Coliforms ≤ 200 colonies/100 ~~mL~~ mL; or

28 (3)(5) that are not described in Subparagraphs (b)(1) and (b)(2) of this Rule shall meet treatment standards
29 that assure that surface water or groundwater standards will not be exceeded. Treatment for other
30 operations shall be based on producing the quality effluent used in documenting protection of
31 surface water or groundwater standards.

32 (c) All wastes shall be applied at agronomic rates unless predictive calculations are provided that ~~document~~
33 demonstrate State groundwater standards will be protected.

34 (d) All ~~treatment/storage lagoons/ponds~~ open-atmosphere treatment lagoons and ponds, and open-atmosphere storage
35 units shall have at least two feet of freeboard.

(e) Waste, including treated waste, shall not be placed directly into, or in contact with, GA classified groundwater unless such placement will not result in a contravention of GA groundwater standards, as demonstrated by predictive calculations or modeling.

(f) Treatment works and disposal systems ~~utilizing~~ using earthen basins, lagoons, ponds or trenches, excluding holding ponds containing non-industrial treated effluent prior to ~~spray~~ irrigation, for treatment, storage or disposal shall have either a liner of natural material at least one foot in thickness and having a hydraulic conductivity of no greater than 1×10^{-6} centimeters per second when compacted, or a synthetic liner of sufficient thickness to exhibit structural integrity and an effective hydraulic conductivity no greater than that of the natural material liner.

(g) The bottoms of earthen impoundments, trenches or other similar excavations shall be at least four feet above the bedrock surface, except that the bottom of excavations ~~which that~~ are less than four feet above bedrock shall have a liner with a hydraulic conductivity no greater than 1×10^{-7} centimeters per second. Liner thickness shall be that thickness necessary to achieve a leakage rate consistent with the sensitivity of classified groundwaters. Liner requirements may be reduced if ~~it can be demonstrated by the~~ Applicant demonstrates applicant through predictive calculations or modeling methods that construction and use of these treatment and disposal units will not result in contravention of surface water or groundwater standards.

(h) Impoundments, trenches or other excavations made for the purpose of storing or treating waste shall not be excavated into bedrock unless the placement of waste into such excavations will not result in a contravention of surface water or groundwater standards, as demonstrated by predictive calculations or modeling.

(i) Each facility, except for those using septic tanks or lagoon treatment, shall provide flow equalization with either a capacity based upon a representative diurnal hydrograph or a capacity of 25 percent of the daily system design flow. ~~Flow equalization of at least 25 percent of the facilities permitted hydraulic capacity must be provided for all seasonal or resort facilities and all other facilities with fluctuations in influent flow which may adversely affect the performance of the system.~~

(j) By-pass and overflow lines shall be prohibited.

(k) Multiple pumps shall be provided ~~if~~ wherever pumps are used.

(l) Power reliability shall be provided, ~~provided~~ consisting of:

(1) automatically activated standby power ~~supply~~ supply, located onsite, and onsite capable of powering all essential treatment units under design conditions; or

(2) approval by the Director that the facility:

(A) serves a private water distribution system ~~which that~~ has automatic shut-off at power failure and no elevated water storage ~~tanks; tanks,~~

(B) has sufficient storage capacity that no potential for overflow ~~exists; exists,~~ and

(C) can tolerate septic wastewater ~~due to~~ during prolonged detention.

(m) A water-tight seal on all ~~treatment/storage~~ treatment and storage units or ~~minimum of two feet of~~ protection from the 100-year flood elevation shall be provided.

(n) Irrigation system design shall not exceed the recommended precipitation rates in the soils report prepared pursuant to Rule .0504 of this Section.

- (o) ~~A minimum of~~ 30 days of residual storage shall be provided.
- (p) Disposal areas shall be designed to maintain a one-foot vertical separation between the seasonal high water table and the ground surface.
- (q) The public shall be prohibited access to the treatment, storage and irrigation facilities. ~~wetted irrigation area and treatment facilities.~~
- (r) Influent pump stations shall meet the sewer ~~minimum~~ design criteria ~~as provided~~ set forth in Section .0300 of this Subchapter.
- (s) Septic tanks shall adhere to the standards established in 15A NCAC 18A .1900.
- (t) ~~The irrigation system~~ Facilities ~~[with an average daily flow greater than 10,000 GPD]~~ shall be provided with a flow meter to ~~allow accurate determination of~~ measure the volume of treated wastewater applied to each field.
- (u) Coastal waste treatment facilities, defined in 15A NCAC 02H .0403, shall be equipped with noise and odor control devices that shall be enclosed.
- (v) For coastal waste treatment facilities, defined in 15A NCAC 02H .0403, all essential treatment and disposal units shall be provided in duplicate.
- (w) Facilities serving residential communities shall provide five days of effluent ~~[storage.]~~ storage, unless additional storage is determined necessary pursuant to the water balance requirements in Rule .0504(k) of this Section.
- (x) Automatically activated irrigation systems shall be connected to a rain or moisture sensor to prevent irrigation during precipitation events or wet conditions that would cause runoff.

History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0506

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Throughout this Rule, replace "any" with "a" or "each"

Lines 12-13 – if the parenthetical lists examples, revise as follows: "Surface waters such as intermittent and perennial streams, perennial waterbodies, and wetlands" If the parenthetical is an exclusive list, revise as follows: "Intermittent and perennial streams, perennial waterbodies, and wetlands"

Line 14 – delete the parentheses

Line 15 – if the parenthetical lists examples, revise as follows: "Surface water diversions such as ephemeral streams, waterways, and ditches" If the parenthetical is an exclusive list, revise as follows: "Ephemeral streams, waterways, and ditches"

Line 35 – replace "located" with "set forth"

Line 35 – add a comma after "lines"

Page 2, line 1 – add a comma after "involved"

Page 2, line 3 – replace "when" with "if"

Page 3, line 4 – replace "creating said" with "separated by the"

Page 2, line 6 – delete the comma

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0506 is readopted with changes as published in 32:06 NCR 550 as follows:

3 **15A NCAC 02T .0506 SETBACKS**

4 (a) The setbacks for irrigation sites shall be as follows:

	Spray	Drip
	(feet)	(feet)
Any habitable residence or place of public assembly under separate ownership		
or not to be maintained as part of the project site	400	100
Any habitable residence or place of public assembly owned by the Permittee permittee		
to be maintained as part of the project site	200	15
Any private or public water supply source	100	100
Surface waters (streams – intermittent and perennial, perennial waterbodies,		
and wetlands)	100	100
Groundwater lowering ditches (where the bottom of the ditch intersects the SHWT)	100	100
Surface water diversions (ephemeral streams, waterways, ditches)	25	25
Any well with exception of monitoring wells	100	100
Any property line	150	50
Top of slope of embankments or cuts of two feet or more in vertical height	15	15
Any water line from a disposal system	10	10
Subsurface groundwater lowering drainage systems	100	100
Any swimming pool	100	100
Public right of way	50	50
Nitrification field	20	20
Any building foundation or basement	15	15

25 (b) The setbacks for treatment and storage units shall be as follows:

26 (feet)

Any habitable residence or place of public assembly under separate ownership	
or not to be maintained as part of the project site	100
Any private or public water supply source	100
Surface waters (streams – intermittent and perennial, perennial waterbodies,	
and wetlands)	50
Any well with exception of monitoring wells	100
Any property line	50

34 (c) Achieving the reclaimed water effluent standards ~~contained~~ established in 15A NCAC 02U .0301 shall permit the
35 system to use the setbacks located in 15A NCAC 02U .0701(d) for property lines and the compliance boundary shall
36 be at the irrigation area boundary.

1 (d) Setback waivers shall be written, notarized, signed by all parties involved and recorded with the county Register
2 of Deeds. Waivers involving the compliance boundary shall be in accordance with 15A NCAC 02L .0107.

3 (e) Setbacks to property lines established in Paragraphs (a) and (b) of this Rule shall not be applicable when the
4 Permittee, or the entity from which the Permittee is leasing, owns both parcels creating said property line.

5 (f) Habitable residences or places of [public] assembly under separate ownership constructed after the non-discharge
6 facilities were originally permitted or subsequently modified, are exempt from the setback requirements in Paragraphs
7 (a) and (b) of this Rule.

8
9 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

10 *Eff. September 1, 2006;*

11 *Amended Eff. June 18, ~~2011~~ 2011;*

12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0507

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – add “the” before “anticipated”

Lines 16, 17, 19, and 23 – delete the commas

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0507 is readopted with changes as published in 32:06 NCR 550-551 as follows:

2
3 **15A NCAC 02T .0507 OPERATION AND MAINTENANCE ~~PLAN~~**

4 (a) An operation and maintenance plan shall be maintained for all systems. The plan shall:

- 5 (1) describe the operation of the system in sufficient detail to show what operations are necessary for
6 the system to function and by whom the ~~functions~~ operations are to be conducted;
7 (2) describe anticipated maintenance of the system;
8 (3) include provisions for safety measures, ~~measures~~ including restriction of access to the site and
9 equipment, as appropriate; and
10 (4) include spill control provisions, ~~provisions~~ including:
11 (A)~~(a)~~ response to upsets and bypasses, ~~bypasses~~ including control, containment, and
12 remediation; and
13 (B)~~(b)~~ contact information for plant personnel, emergency responders, and regulatory agencies.

14 (b) Irrigation areas shall have a year-round vegetative cover.

15 (c) Irrigation shall not result in ponding or runoff of treated effluent.

16 (d) Irrigation and metering equipment shall be tested and calibrated annually, or as established by permit.

17 (e) ~~Automobiles~~ **Vehicles** and heavy machinery shall not be allowed on the irrigation area, except during installation
18 or maintenance activities.

19 (f) Water level gauges shall be provided for all open-atmosphere treatment lagoons and ponds, and open-atmosphere
20 storage units.

21 (g) Vegetative cover shall be maintained on all earthen embankments.

22 (h) The Permittee shall keep a log of maintenance activities that occur at the facility.

23 (i) The Permittee shall perform inspections and maintenance to ensure proper operation of the facility.

24
25 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

26 *Eff. September 1, 2006-2006;*

27 *Readoption Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0508

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add a comma after “stored”

Lines 10 and 11 – replace “utilization” with “use”

Line 16 – add a comma after “stored”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0508 is readopted as published in 32:06 NCR 551 as follows:

2
3 **15A NCAC 02T .0508 RESIDUALS MANAGEMENT PLAN**

4 (a) A Residuals Management Plan shall be maintained for all systems that generate residuals. The plan ~~must~~ shall
5 include the following:

- 6 (1) a detailed explanation as to how the residuals will be collected, handled, processed, stored and
7 disposed;
- 8 (2) an evaluation of the residuals storage requirements for the treatment ~~facility, facility~~ based upon the
9 maximum anticipated residuals production rate and the ability to remove residuals;
- 10 (3) a permit for residuals disposal or utilization ~~utilization~~, or a written commitment to the Permittee of
11 a Department-approved ~~Department-approved~~ residuals disposal/utilization ~~disposal or utilization~~
12 program accepting the residuals ~~which that~~ demonstrates that the approved program has adequate
13 capacity to accept the residuals ~~residuals~~, or that an application for approval has been submitted;
14 and
- 15 (4) if oil, grease, grit, or screenings removal and collection is a designed unit process, a detailed
16 explanation as to how ~~the oil/grease~~ these materials will be collected, handled, processed, stored and
17 disposed.

18 (b) The Permittee shall maintain a record of all residuals removed from the facility.

19
20 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

21 *Eff. September 1, 2006-2006;*

22 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0601

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – replace “utilizing” with “using”

Line 9 – replace “considered” with “deemed”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0601 is readopted as published in 32:06 NCR 551 as follows:

2
3 **SECTION .0600 – SINGLE-FAMILY RESIDENCE WASTEWATER IRRIGATION SYSTEMS**
4

5 **15A NCAC 02T .0601 SCOPE**

6 The rules in this Section shall apply to all surface irrigation of wastewater systems ~~specifically~~ designed for one
7 building single-family residences. One building single-family residences generating and utilizing reclaimed water
8 shall meet requirements established in 15A NCAC 02U. Surface irrigation systems serving single-family residences
9 ~~are~~ shall be considered to be ground absorption systems in accordance with 15A NCAC 02L .0107.

10
11 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

12 *Eff. September 1, ~~2006~~ 2006;*

13 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0604

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 9, 20, 24, and 28 – do not capitalize the first word on these lines.

Line 20 – add a comma after “constituents”

Lines 31-36; and page 2, lines 1-3, and 5-8 – do not capitalize the any word on these lines.

Page 2, line 22 – add a comma after “head”

Page 2, line 29 – add a comma after “orientation”

Page 3, lines 4-7 – list, as follows, if this does not alter the meaning of the Subparagraph:

- (2) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (A) wells, including usage and construction details if available;
 - (B) ephemeral, intermittent, and perennial streams;
 - (C) springs;
 - (D) lakes;
 - (E) ponds; and
 - (F) other surface drainage features;

Page 3, line 14 – replace “ownership (i.e., contract, deed or article of incorporation);” with “ownership, such as a contract, deed, or article of incorporation;”

Page 3, line 21 – add a comma after “troubleshooting”

Page 3, line 24 – do not capitalize “county health department”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0604 is readopted with changes as published in 32:06 NCR 551-553 as follows:

2
3 **15A NCAC 02T .0604 APPLICATION SUBMITTAL**

4 (a) The requirements in this Rule shall apply to all new and expanding ~~facilities, as applicable.~~ facilities.

5 (b) Soils ~~Report.~~ **Report.** A soil evaluation of the disposal site shall be provided to the Division by the Applicant
6 ~~applicant~~ in a report that includes the following. If required by G.S. 89F, a soil scientist shall prepare this evaluation:
7 ~~[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005,~~
8 ~~that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science under G.S. 89F.]~~

9 (1) ~~A field~~ Field description of the soil profile, based on examinations of excavation pits and auger
10 borings, within seven feet of land surface or to ~~bedrock~~ bedrock, describing the following
11 parameters by individual diagnostic horizons:

12 (A) the thickness of the horizon;

13 (B) the texture;

14 (C) the color and other diagnostic features;

15 (D) the structure;

16 (E) the internal drainage;

17 (F) the depth, thickness, and type of restrictive ~~horizon(s);~~ horizon; and

18 (G) the presence or absence and depth of evidence of any seasonal high water table.

19 Applicants may be required to dig pits when necessary for proper evaluation of the soils at the site.

20 (2) Recommendations concerning loading rates of liquids, solids, other wastewater constituents and
21 amendments. Annual hydraulic loading rates shall be based on in-situ measurement of saturated
22 hydraulic conductivity in the most restrictive horizon for each soil mapping unit. Maximum
23 irrigation precipitation rates shall be provided for each soil mapping unit.

24 (3) A field-delineated soil map delineating soil mapping units within each land application site and
25 showing all physical features, location of pits and auger borings, legends, scale, and a north arrow.
26 The legends shall also include dominant soil series name and family or higher taxonomic class for
27 each soil mapping unit; and

28 (4) A ~~representative soils analysis (i.e., Standard Soil Fertility Analysis)~~ Standard Soil Fertility Analysis
29 conducted on each land application site. The Standard Soil Fertility Analysis shall include the
30 following parameters:

31 (A) Acidity; ~~acidity;~~

32 (B) Base Saturation (by calculation); ~~base saturation (by calculation);~~

33 (C) Calcium; ~~calcium;~~

34 (D) Cation Exchange Capacity; ~~cation exchange capacity;~~

35 (E) Copper; ~~copper;~~

36 (F) Exchangeable Sodium Percentage (by calculation); ~~exchangeable sodium percentage (by~~
37 ~~calculation);~~

- (G) Magnesium; ~~magnesium~~,
(H) Manganese; ~~manganese~~,
(I) Percent Humic Matter; ~~percent humic matter~~,
(J) pH; ~~pH~~,
(K) Phosphorus; ~~phosphorus~~,
(L) Potassium; ~~potassium~~,
(M) Sodium; ~~sodium~~, and
(N) Zinc; ~~zinc~~.

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]

(c) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents. The following documents shall be provided to the Division by the Applicant; ~~applicant~~:

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

- (1) engineering plans for the entire system, including treatment, storage, application, and disposal facilities and equipment except those previously permitted unless those previously permitted are directly tied into the new units or are critical necessary to the understanding of the complete process;
- (2) specifications describing materials to be used, methods of construction, and means for ensuring quality and integrity of the finished product, including leakage testing; and
- (3) engineering calculations, including hydraulic and pollutant loading for each treatment unit, treatment unit sizing criteria, hydraulic profile of the treatment system, total dynamic head and system curve analysis for each pump, buoyancy calculations, and irrigation design.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering pursuant to G.S. 89C.]

(d) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information on boundaries and physical features not under the purview of other licensed professions. Site plans or maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location, orientation and relationship of facility components including:

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying under G.S. 89C.]

- (1) ~~a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief and showing all facility related structures and fences within the treatment, storage and disposal areas, and soil mapping units shown on all disposal sites;~~ a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief, showing:

(A) all facility-related structures and fences within the treatment, storage, and disposal areas;
and
(B) soil mapping units on all disposal sites;

(2) the location of all wells (including usage and construction details if available), streams (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage features within 500 feet of all waste treatment, storage, and disposal ~~site(s)~~ site and delineation of the review and compliance boundaries;

(3) setbacks as required by Rule .0606 of this ~~Subchapter~~ Section; and

(4) site property boundaries within 500 feet of all waste treatment, storage, and disposal ~~site(s)~~ sites.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying pursuant to G.S. 89C.]

(e) Property Ownership Documentation shall be provided to the Division consisting of:

(1) legal documentation of ownership (i.e., contract, deed or article of incorporation);

(2) ~~written notarized intent to purchase agreement~~ an agreement of an intent to purchase the property that is written, notarized, and signed by both parties, accompanied by a plat or survey map; or

(3) ~~written notarized lease agreement~~ an agreement to lease the property that is written, notarized, and signed by both parties, specifically indicating the intended use of the property, as well as accompanied by a plat or survey map. Lease agreements shall adhere to the requirements of 15A NCAC 02L .0107.

(f) An Operation and Maintenance Plan addressing routine inspections, maintenance schedules, troubleshooting and a layman's explanation about the wastewater treatment and irrigation disposal systems shall be submitted to the Division by the Applicant. ~~applicant~~.

(g) A letter from the local County Health Department denying the site for all subsurface systems shall be submitted to the Division by the Applicant. ~~applicant~~.

(h) ~~A notarized~~ A properly executed Operation and Maintenance Agreement shall be submitted to the Division by the Applicant. ~~applicant~~.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0605

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 7-10 – do not capitalize any word other than those in parentheses

Line 21 – add “2-strand wire” before “fencing”

Line 21 – delete “(minimum 2-strand wire)”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0605 is readopted as published in 32:06 NCR 553 as follows:

2
3 **15A NCAC 02T .0605 DESIGN CRITERIA**

4 (a) The requirements in this Rule shall apply to new and expanding facilities.

5 (b) Minimum degree of treatment for new and expanding systems ~~prior to storage~~ shall meet a monthly average of
6 each of the following:

7 (1) five-day Biochemical Oxygen Demand (BOD₅) ≤ 30 mg/L;

8 (2) Total Suspended Solids (TSS) ≤ 30 mg/L;

9 (3) Ammonia (NH₃) ≤ 15 mg/L; and

10 (4) Fecal Coliforms ≤ 200 colonies/100 mL, ~~ml~~.

11 (c) Waste, including treated waste, shall not be placed directly into, or in contact with, GA classified groundwater
12 unless such placement will not result in a contravention of GA groundwater standards, as demonstrated by predictive
13 calculations or modeling.

14 (d) Excavation into bedrock shall be lined with a 10 millimeter synthetic liner.

15 (e) Earthen treatment and storage facilities shall be prohibited.

16 (f) By-pass and overflow lines shall be prohibited.

17 (g) A water-tight seal on all ~~treatment/storage~~ treatment and storage units or ~~minimum of two feet of~~ protection from
18 the 100-year flood elevation shall be provided.

19 (h) Preparation of an operational management ~~plan~~, plan and, if appropriate, a crop management plan shall be
20 provided.

21 (i) Fencing shall be provided to prevent access to the irrigation site (minimum 2-strand wire) and treatment units shall
22 be ~~secured with locks on all tankage and control panels~~, lockable.

23 (j) Irrigation system design shall not exceed the recommended precipitation rates in the soils report prepared pursuant
24 to Rule .0604 of this Section.

25 (k) Septic tanks shall adhere to 15A NCAC 18A .1900.

26 (l) Tablet chlorination or ultraviolet disinfection shall be provided.

27 (m) ~~A minimum of five~~ Five days of storage based on average daily flow between the pump off float and inlet invert
28 pipe shall be provided.

29 (n) ~~Pump/dosing~~ Pump and dosing tanks shall have audible and visual alarms external to any structure.

30 (o) A rain or moisture sensor shall be provided to prevent irrigation during precipitation events or wet conditions that
31 would cause runoff.

32 (p) ~~A minimum of~~ 18 inches of vertical separation between the apparent seasonal high water table and the ground
33 surface shall be provided.

34 (q) ~~A minimum of one~~ One foot of vertical separation between any perched seasonal high water table and the ground
35 surface shall be provided.

36 (r) Loading rates shall not exceed 50 inches per year.

- 1 *History Note:* *Authority G.S. 143-215.1; 143-215.3(a);*
- 2 *Eff. September 1, ~~2006~~2006;*
- 3 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0606

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Throughout Paragraph (a), replace "any" with "a" or "each"

Lines 12-13 – if the parenthetical lists examples, revise as follows: "Surface waters such as intermittent and perennial streams, perennial waterbodies, and wetlands" If the parenthetical is an exclusive list, revise as follows: "Intermittent and perennial streams, perennial waterbodies, and wetlands"

Line 14 – delete the parentheses

Line 15 – if the parenthetical lists examples, revise as follows: "Surface water diversions such as ephemeral streams, waterways, and ditches" If the parenthetical is an exclusive list, revise as follows: "Ephemeral streams, waterways, and ditches"

Line 27 – add a comma after "parties"

Line 29 – replace "when" with "if"

Line 30 – replace "creating said" with "separated by the"

Line 32 – delete the comma

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0606 is readopted with changes as published in 32:06 NCR 553-554 as follows:

2
3 **15A NCAC 02T .0606 SETBACKS**

4 (a) The setbacks for ~~Irrigation~~irrigation sites shall be as follows:

	Spray	Drip
	(feet)	(feet)
Any habitable residence or place of public assembly under separate ownership		
or not to be maintained as part of the project site	400	100
Any habitable residence or place of public assembly owned by the Permittee permittee		
to be maintained as part of the project site	200	15
Any private or public water supply source	100	100
Surface waters (streams – intermittent and perennial, perennial waterbodies, and wetlands)	100	100
Groundwater lowering ditches (where the bottom of the ditch intersects the SHWT)	100	100
Surface water diversions (ephemeral streams, waterways, ditches)	25	25
Any well with exception of monitoring wells	100	100
Any property line	150	50
Top of slope of embankments or cuts of two feet or more in vertical height	15	15
Any water line from a disposal system	10	10
Subsurface groundwater lowering drainage systems	100	100
Any swimming pool	100	100
Public right of way	50	50
Nitrification field	20	20
Any building foundation or basement	15	15

25 (b) Treatment and storage facilities associated with systems permitted under this Section shall adhere to the setback
26 requirements in Section .0500 of this Subchapter except as provided in this Rule.

27 (c) Setback waivers shall be written, notarized, signed by both parties and recorded with the County Register of
28 Deeds. Waivers involving the compliance boundary shall be in accordance with 15A NCAC 02L .0107.

29 (d) Setbacks to property lines established in Paragraphs (a) and (b) of this Rule shall not be applicable when the
30 Permittee, or the entity from which the Permittee is leasing, owns both parcels creating said property line.

31 (e) Habitable residences or places of [public] assembly under separate ownership constructed after the non-discharge
32 facilities were originally permitted or subsequently modified, are exempt from the setback requirements in Paragraphs
33 (a) and (b) of this Rule.

34
35 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

36 *Eff. September 1, 2006-2006;*

37 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .0607 is readopted as published in 32:06 NCR 554 as follows:

2
3 **15A NCAC 02T .0607 CONNECTION TO REGIONAL SYSTEM**

4 If a public or community sewage system is or becomes available, the subject wastewater treatment facilities shall be
5 closed and all wastewater shall be discharged into the public or community sewage system.

6
7 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

8 *Eff. September 1, ~~2006~~ 2006;*

9 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0608

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – delete the comma

Line 6 – show the added comma correctly: “~~permit~~ permit.”

Line 7 – delete the comma

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0608 is adopted with changes as published in 32:06 NCR 554 as follows:

2
3 **15A NCAC 02T .0608 OPERATION AND MAINTENANCE**

4 (a) Irrigation areas shall have a year-round vegetative cover.

5 (b) Irrigation shall not result in ponding or runoff of treated effluent.

6 (c) Metering equipment shall be tested and calibrated annually, or as established by permit.

7 (d) ~~Automobiles~~ Vehicles and heavy machinery shall not be allowed on the irrigation area, except during installation
8 or maintenance activities.

9 (e) The Permittee shall keep a log of maintenance activities that occur at the facility.

10 (f) The Permittee shall perform inspections and maintenance to ensure proper operation of the facility.

11
12 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

13 *Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0701

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add “shall” before “include”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0701 is readopted as published in 32:06 NCR 554 as follows:

2
3 **SECTION .0700 – ~~HIGH-RATE~~ HIGH-RATE INFILTRATION SYSTEMS**

4
5 **15A NCAC 02T .0701 SCOPE**

6 This Section ~~shall apply~~ applies to all high-rate infiltration facilities. High-rate infiltration facilities include all
7 facilities that dispose of wastewater effluent onto the land at an application rate that meets or exceeds the rates provided
8 in Rule .0702 of this Section.

9
10 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

11 *Eff. September 1, ~~2006~~ 2006;*

12 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .0702 is readopted with changes as published in 32:06 NCR 554 as follows:

2
3 **15A NCAC 02T .0702 DEFINITIONS**

4 A **As s** used in this Section, "High-rate infiltration" shall mean any application rate that exceeds 1.75 inches of
5 wastewater effluent per week or 0.156 gallons per day per square foot of land. mean:

6 (1) ~~In coastal areas as defined in Section 15A NCAC 02H .0400, an application rate that exceeds 1.75~~
7 ~~inches of wastewater effluent per week (0.156 gallons per day per square foot of land).~~

8 (2) ~~In non-coastal areas, an application rate that exceeds 1.50 gallons of wastewater effluent per day per~~
9 ~~square foot of land (16.8 inches per week).~~

10
11 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);

12 *Eff. September 1, 2006-2006;*

13 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0704

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 9, 21, 25, and 29 – do not capitalize the first word on these lines.

Line 21 – add a comma after “constituents”

Lines 32-36; page 2, lines 1, 2-5, and 7-10 – do not capitalize the any word on these lines.

Page 2, line 24 – add a comma after “head”

Page 2, line 32 – add a comma after “orientation”

Page 3, lines 8-11 – list, as follows, if this does not alter the meaning of the Subparagraph:

- (2) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (A) wells, including usage and construction details if available;
 - (B) ephemeral, intermittent, and perennial streams;
 - (C) springs;
 - (D) lakes;
 - (E) ponds; and
 - (F) other surface drainage features;

Page 3, line 21 – delete “can”

Page 3, line 24 – replace “is” with “shall be”

Page 4, line 23 – replace “ownership (i.e., contract, deed or article of incorporation);” with “ownership, such as a contract, deed, or article of incorporation;”

Page 4, lines 34-37 and page 5, lines 1-15 – do not capitalize the any word on these lines except in the parentheses.

Page 5, line 17 – add a comma after “minerals”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

Page 5, line 26 – delete “following” and add “from the following” after “factor”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0704 is readopted with changes as published in 32:06 NCR 554-557 as follows:

2
3 **15A NCAC 02T .0704 APPLICATION SUBMITTAL**

4 (a) The requirements in this Rule shall apply to all new and expanding ~~facilities, as applicable.~~ facilities.

5 (b) Soils ~~Report.~~ report. A soil evaluation of the disposal site shall be provided to the Division by the Applicant
6 ~~applicant~~ in a report that includes the following. If required by G.S. 89F, a soil scientist shall prepare this evaluation:
7 ~~[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005,~~
8 ~~that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science under G.S. 89F.]~~

9 (1) A field ~~Field~~ description of the soil profile, based on examinations of excavation pits or auger
10 borings, within seven feet of land surface or to bedrock ~~bedrock~~, describing the following
11 parameters by individual diagnostic horizons:

12 (A) the thickness of the horizon;

13 (B) the texture;

14 (C) the color and other diagnostic features;

15 (D) the structure;

16 (E) the internal drainage;

17 (F) the depth, thickness, and type of restrictive ~~horizon(s);~~ horizon; and

18 (G) the presence or absence and depth of evidence of any seasonal high water ~~table (SHWT).~~
19 table.

20 Applicants shall dig pits when necessary for evaluation of the soils at the ~~site.~~ site;

21 (2) Recommendations concerning loading rates of liquids, solids, other wastewater constituents and
22 amendments. Annual hydraulic loading rates shall be based on in-situ measurement of saturated
23 hydraulic conductivity in the most restrictive horizon for each soil mapping unit. Maximum
24 ~~irrigation-precipitation~~ infiltration rates shall be provided for each soil mapping unit.

25 (3) A field-delineated soil map delineating soil mapping units within each land application site and
26 showing all physical features, location of pits and auger borings, legends, scale, and a north arrow.
27 The legends shall also include dominant soil series name and family or higher taxonomic class for
28 each soil mapping unit; and

29 (4) A ~~representative soils analysis (i.e., Standard Soil Fertility Analysis)~~ Standard Soil Fertility Analysis
30 conducted on each land application site. The Standard Soil Fertility Analysis shall include the
31 following parameters:

32 (A) Acidity; ~~acidity;~~

33 (B) Base Saturation (by calculation); ~~base saturation (by calculation);~~

34 (C) Calcium; ~~calcium;~~

35 (D) Cation Exchange Capacity; ~~cation exchange capacity;~~

36 (E) Copper; ~~copper;~~

- (F) Exchangeable Sodium Percentage (by calculation); ~~exchangeable sodium percentage (by calculation);~~
- (G) Magnesium; ~~magnesium;~~
- (H) Manganese; ~~manganese;~~
- (I) Percent Humic Matter; ~~percent humic matter;~~
- (J) pH; ~~pH;~~
- (K) Phosphorus; ~~phosphorus;~~
- (L) Potassium; ~~potassium;~~
- (M) Sodium; ~~sodium;~~ and
- (N) Zinc. ~~zinc.~~

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]

(c) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents. The following documents shall be provided to the Division by the Applicant; ~~applicant;~~

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

- (1) engineering plans for the entire system, including treatment, storage, application, and disposal facilities and equipment except those previously permitted unless those previously permitted are directly tied into the new units or are critical necessary to the understanding of the complete process;
- (2) specifications describing materials to be used, methods of construction, and means for ensuring quality and integrity of the finished product including leakage testing; and
- (3) engineering calculations, including hydraulic and pollutant loading for each treatment unit, treatment unit sizing criteria, hydraulic profile of the treatment system, total dynamic head and system curve analysis for each pump, buoyancy calculations, and irrigation/infiltration design.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering pursuant to G.S. 89C.]

(d) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information on boundaries and physical features not under the purview of other licensed professions. Site plans or maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location, orientation and relationship of facility components including:

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying under G.S. 89C.]

- (1) ~~a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief and showing all facility-related structures and fences within the treatment, storage and disposal areas, and soil mapping units shown on all disposal sites;~~ a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief, showing:
- (A) all facility-related structures and fences within the treatment, storage, and disposal areas;
- and
- (B) soil mapping units on all disposal sites;
- (2) the location of all wells (including usage and construction details if available), streams (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage features within 500 feet of all waste treatment, storage, and disposal ~~site(s)~~ sites and delineation of the review and compliance boundaries;
- (3) setbacks as required by Rule .0706 of this Section; and
- (4) site property boundaries within 500 feet of all waste treatment, storage, and disposal ~~site(s)~~ sites.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying pursuant to G.S. 89C.]

(e) Hydrogeologic report. A hydrogeologic description prepared by a Licensed Geologist, Licensed Soil Scientist, or Professional Engineer if required by Chapters 89E, 89F, or 89C, ~~respectively~~ respectively, ~~of the subsurface to a depth of 20 feet or bedrock, whichever is less,~~ shall be provided to the Division by the Applicant ~~applicant~~ for systems treating industrial waste and any system with a design flow over 25,000 gallons per day. Industrial facilities with a design flow less than 25,000 gallons per day, and can demonstrate that the effluent will be of quality similar to domestic wastewater including effluent requirements established in 15A NCAC 02T .0705(b) and 02T .0706(b) or (c) as applicable, may request and receive an exemption from this requirement. The hydrogeologic evaluation shall be of the subsurface to a depth of 20 feet or bedrock, whichever is less deep. A greater depth of An investigation to a depth greater than 20 feet is required if the respective depth is used in predictive calculations. This evaluation shall be based on ~~borings for which the numbers, locations, and depths are sufficient~~ sufficient numbers, locations, and depths of borings to define the components of the hydrogeologic evaluation. In addition to borings, other techniques may be used to investigate the subsurface conditions at the ~~site.~~ site, including. ~~These techniques may include~~ geophysical well logs, surface geophysical surveys, and tracer studies. This evaluation shall be presented in a report that includes the following components:

[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description documents pursuant to this Paragraph constitutes practicing geology under G.S. 89E, soil science under G.S. 89F, or engineering under G.S. 89C.]

- (1) a description of the regional and local geology and hydrogeology;

- (2) a description, based on field observations of the site, of the site topographic setting, streams, springs and other groundwater discharge features, drainage features, existing and abandoned wells, rock outcrops, and other features that may affect the movement of the contaminant plume and treated wastewater;
- (3) changes in the lithology underlying the site;
- (4) the depth to bedrock and the occurrence of any rock outcrops;
- (5) the hydraulic conductivity and transmissivity of the affected ~~aquifer(s);~~ aquifer as determined by in-situ field testing, such as slug tests or pumping tests, in the intended area of infiltration;
- (6) the depth to the seasonal high water table;
- (7) a discussion of the relationship between the affected aquifers of the site to local and regional geologic and hydrogeologic features;
- (8) a discussion of the groundwater flow regime of the site prior to the operation of the proposed facility and the post operation of the proposed ~~facility~~ facility, focusing on the relationship of the system to groundwater receptors, groundwater discharge features, and groundwater flow media; and
- (9) a mounding analysis to predict the level of the ~~SHWT~~ seasonal high water table after wastewater application.

[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description documents pursuant to this Paragraph constitutes practicing geology pursuant to G.S. 89E, soil science pursuant to G.S. 89F, or engineering pursuant to G.S. 89C.]

(f) Property Ownership Documentation shall be provided to the Division consisting of:

- (1) legal documentation of ownership (i.e., contract, deed or article of incorporation);
- (2) ~~written notarized intent to purchase agreement~~ an agreement of an intent to purchase the property that is written, notarized, and signed by both parties, accompanied by a plat or survey map; or
- (3) ~~written notarized lease agreement~~ an agreement to lease the property that is written, notarized, and signed by both parties, specifically indicating the intended use of the property, as well as accompanied by a plat or survey map. Lease agreements shall adhere to the requirements of 15A NCAC 02L .0107.

(g) Public utilities shall submit a Certificate of Public ~~Conveyance~~ Convenience and Necessity or a letter from the NC Utilities Commission stating that it has received a franchise application ~~has been received.~~ application.

(h) A ~~complete~~ chemical analysis of the typical wastewater to be ~~discharged~~ infiltrated shall be provided to the Division by the Applicant ~~applicant~~ for industrial waste, including which shall include:

- (1) ~~Total Organic Carbon;~~ Total Organic Carbon;
- (2) ~~5-day Biochemical Oxygen Demand (BOD₅);~~ 5-day Biochemical Oxygen Demand (BOD₅);
- (3) ~~Chemical Oxygen Demand (COD);~~ Chemical Oxygen Demand (COD);
- (4) ~~Nitrate Nitrogen (NO₃-N);~~ Nitrate Nitrogen (NO₃-N);

- (5) ~~Ammonia Nitrogen (NH₃-N);~~ Ammonia Nitrogen (NH₃-N);
(6) ~~Total Kjeldahl Nitrogen (TKN);~~ Total Kjeldahl Nitrogen (TKN);
(7) ~~pH;~~ pH;
(8) ~~Chloride;~~ Chloride;
(9) ~~Total Phosphorus;~~ Total Phosphorus;
(10) ~~Phenol;~~ Phenol;
(11) ~~Total Volatile Organic Compounds;~~ Total Volatile Organic Compounds;
(12) ~~Fecal Coliform;~~ Fecal Coliform;
(13) ~~Calcium;~~ Calcium;
(14) ~~Sodium;~~ Sodium;
(15) ~~Magnesium;~~ Magnesium;
(16) ~~Sodium Adsorption Ratio (SAR) ;~~ Sodium Adsorption Ratio (SAR);
(17) ~~Total Trihalomethanes;~~ Total Trihalomethanes; and
~~Toxicity Test Parameters and~~
(18) ~~Total Dissolved Solids.~~

(i) A project evaluation and a receiver site agronomic management plan (if applicable) containing recommendations concerning cover crops and their ability to accept the proposed application rates of liquid, solids, minerals and other constituents of the wastewater shall be provided to the Division.

(j) A residuals management plan as required by Rule .0708 .0708(a) of this Section is to be provided to the Division. ~~A written commitment is not required at the time of application; however, it must be provided prior to operation of the permitted system.~~

~~(k) A water balance shall be provided to the Division that determines required effluent storage based upon the most limiting factor of the hydraulic loading based on either the most restrictive horizon or groundwater mounding analysis; or nutrient management based on either agronomic rates for a specified cover crop or crop management requirements.~~

(k) The Applicant shall provide to the Division a water balance that determines the required effluent storage based on the following most limiting factor:

- (1) hydraulic loading based on the most restrictive horizon;
- (2) hydraulic loading based on the groundwater mounding analysis;
- (3) nutrient management based on agronomic rates for the specified cover crop; or
- (4) nutrient management based on crop management.

(l) Facilities utilizing subsurface groundwater lowering drainage systems shall demonstrate that groundwater and surface water standards will be protected.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0705

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 11-20 – revise Paragraph (b) as follows:

- (b) New and expanding systems:
 - (1) that are municipal, domestic, or commercial facilities, except systems subject to Subparagraph (b)(2) or this Rule, shall meet a monthly average of each of the following:
 - (A) five-day biochemical oxygen demand (BOD₅) ≤ 10 mg/L;
 - (B) total suspended solids (TSS) ≤ 15 mg/L;
 - (C) ammonia (NH₃-N) ≤ 4 mg/L;
 - (D) fecal coliforms ≤ 14 colonies/100 mL; and
 - (E) nitrate nitrogen (NO₂-N) ≤ 10 mg/L; or
 - (3) that are not described in Subparagraph (b)(1) shall meet treatment standards that assure that surface water or groundwater standards will not be exceeded.

Line 21 – delete the comma

Line 26 – add a comma after “ponds”

Line 27 – add a comma after “storage”

Line 28 – add a comma after “disposal”

Line 31 – add a comma after “trenches”

Line 36 – delete “methods”

Page 2, line 1 – add a comma after “trenches”

Page 2, line 21 – add “established” after “rates”

Page 3, line 4 – delete the comma

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

Page 3, line 5 – add a comma after “runoff”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0705 is readopted with changes as published in 32:06 NCR 557-558 as follows:

2
3 **15A NCAC 02T .0705 DESIGN CRITERIA**

4 (a) The requirements in this Rule ~~shall~~ apply to all new and expanding ~~facilities, facilities, as applicable.~~

5 ~~(b) Degree of treatment shall be based on a monthly average 5 day Biochemical Oxygen Demand (BOD₅) ≤ 10 mg/L;~~
6 ~~Total Suspended Solids (TSS) ≤ 15 mg/L; Ammonia Nitrogen (NH₃-N) ≤ 4 mg/L; Fecal Coliforms ≤ 14 per 100 mL;~~
7 ~~and Nitrate Nitrogen (NO₃-N) ≤ 10 mg/L for domestic and commercial operations. Treatment for other operations~~
8 ~~shall be based on producing the quality effluent used in documenting protection of surface water or groundwater~~
9 ~~standards. More stringent effluent limits may be applied in accordance with calculations submitted by the applicant to~~
10 ~~document protection of surface water or groundwater standards.~~

11 (b) Minimum degree of treatment for new and expanding systems:

12 (1) that are municipal, domestic and commercial facilities, except systems subject to Subparagraph
13 (b)(2) of this Rule, shall meet a monthly average of each of the following:

14 (A) five-day Biochemical Oxygen Demand (BOD₅) ≤ 10 mg/L;

15 (B) Total Suspended Solids (TSS) ≤ 15 mg/L;

16 (C) Ammonia (NH₃-N) ≤ 4 mg/L;

17 (D) Fecal Coliforms ≤ 14 colonies/100 mL; and

18 (E) Nitrate Nitrogen (NO₃-N) ≤ 10 mg/L; or

19 (2) that are not described in Subparagraph (b)(1) of this Rule shall meet treatment standards that assure
20 that surface water or groundwater standards will not be exceeded.

21 (c) All ~~treatment/storage lagoons/ponds~~ open-atmosphere treatment lagoons and ponds, and open-atmosphere storage
22 and basin infiltration units shall have at least two feet of freeboard.

23 (d) Waste, including treated waste, shall not be placed directly into, or in contact with, GA classified groundwater
24 unless such placement will not result in a contravention of GA groundwater standards, as demonstrated by predictive
25 calculations or modeling.

26 (e) Treatment works and disposal systems ~~utilizing~~ using earthen basins, lagoons, ponds or trenches, excluding
27 holding ponds containing non-industrial treated effluent prior to ~~spray irrigation~~ infiltration, for treatment, storage or
28 disposal shall have either a liner of natural material at least one foot in thickness and having a hydraulic conductivity
29 of no greater than 1×10^{-6} centimeters per second when compacted, or a synthetic liner of sufficient thickness to
30 exhibit structural integrity and an effective hydraulic conductivity no greater than that of the natural material liner.

31 (f) The bottoms of earthen impoundments, trenches or other similar excavations shall be at least four feet above the
32 bedrock surface, except that the bottom of excavations ~~which~~ that are less than four feet above bedrock shall have a
33 liner with a hydraulic conductivity no greater than 1×10^{-7} centimeters per second. Liner thickness shall be that
34 thickness necessary to achieve a leakage rate consistent with the sensitivity of classified groundwaters. Liner
35 requirements may be reduced if ~~it can be demonstrated by the~~ Applicant demonstrates applicant through predictive
36 calculations or modeling methods that construction and use of these treatment and disposal units will not result in
37 contravention of surface water or groundwater standards.

- (g) Impoundments, trenches or other excavations made for the purpose of storing or treating waste shall not be excavated into bedrock unless the placement of waste into such excavations will not result in a contravention of surface water or groundwater standards, as demonstrated by predictive calculations or modeling.
- (h) Each facility, except for those using septic tanks or lagoon treatment, shall provide flow equalization with either a capacity based upon a representative diurnal hydrograph or a capacity of 25 percent of the daily system design flow. Flow equalization of at least 25 percent of the facilities permitted hydraulic capacity must be provided for all seasonal or resort facilities and all other facilities with fluctuations in influent flow which may adversely affect the performance of the system.
- (i) By-pass and overflow lines shall be prohibited.
- (j) Multiple pumps shall be provided ~~if~~ wherever pumps are used.
- (k) Power reliability shall be ~~provided~~ provided, consisting of:
- (1) automatically activated standby ~~power supply~~ power supply, located onsite, onsite and capable of powering all essential treatment units under design conditions; or
 - (2) approval by the Director that the facility:
 - (A) serves a private water distribution system ~~which~~ that has automatic shut-off at power failure and no elevated water storage ~~tanks, tanks;~~
 - (B) has sufficient storage capacity that no potential for overflow ~~exists, exists;~~ and
 - (C) can tolerate septic wastewater ~~due to~~ during prolonged detention.
- (l) A water-tight seal on all ~~treatment/storage~~ treatment and storage units or ~~minimum~~ of two feet of protection from ~~the~~ 100-year flood elevation shall be provided.
- (m) ~~Irrigation~~ Infiltration system design shall not exceed the recommended precipitation rates in the soils report prepared pursuant to Rule .0704 of this Section.
- (n) ~~A minimum~~ of 30 days of residuals storage shall be provided.
- (o) Disposal areas shall be designed to maintain a one-foot vertical separation between the seasonal high water table and the ground surface.
- (p) The public shall be prohibited access to the treatment, storage and infiltration facilities. ~~wetted disposal area and treatment facilities.~~
- (q) Influent pump stations shall meet the sewer ~~minimum~~ design criteria ~~as provided~~ set forth in Section .0300 of this Subchapter.
- (r) Septic tanks shall adhere to 15A NCAC 18A .1900.
- (s) Infiltration areas shall be designed to allow routine maintenance of the area without interruption of disposal.
- (t) Subsurface groundwater lowering drainage systems permitted under this Subchapter shall be subject to the corrective action requirements in 15A NCAC 02L .0106.
- (u) Waste treatment facilities shall be equipped with noise and odor control devices that shall be enclosed.
- (v) All essential treatment and disposal units shall be provided in duplicate.
- (w) The application rate shall not exceed 10 gallons per day per square foot (GPD/ft²).

1 (x) Facilities [with an average daily flow greater than 10,000 GPD] shall be provided with a flow meter to measure
2 the volume of treated wastewater applied to each infiltration site.

3 (y) Subsurface groundwater lowering drainage systems shall be prohibited within the compliance boundary.

4 (z) Facilities serving residential communities shall provide five days of effluent storage, unless the Applicant
5 demonstrates that the infiltrated effluent will not pond, runoff or breakout regardless of weather or soil conditions.

6 (aa) Automatically activated infiltration systems, excluding basin, rotary, and spray bed infiltration systems, shall be
7 connected to a rain or moisture sensor to prevent infiltration during precipitation events or wet conditions that would
8 cause runoff.

9
10 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

11 *Eff. September 1, 2006-2006;*

12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0706

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Throughout this Rule, replace “any” with “a” or “each”

Lines 12-13 – if the parenthetical lists examples, revise as follows: “Surface waters such as intermittent and perennial streams, perennial waterbodies, and wetlands” If the parenthetical is an exclusive list, revise as follows: “Intermittent and perennial streams, perennial waterbodies, and wetlands”

Line 14 – delete the parentheses

Line 15 – if the parenthetical lists examples, revise as follows: “Surface water diversions such as ephemeral streams, waterways, and ditches” If the parenthetical is an exclusive list, revise as follows: “Ephemeral streams, waterways, and ditches”

Page 2, lines 11-12 – revise as follows:

... designed to meet effluent limits of 7 mg/L of total nitrogen and 3 mg/L of total phosphorus.

Page 2, lines 14-15 – revise as follows:

... designed to meet effluent limits of 4 mg/L of total nitrogen and 2 mg/L of total phosphorus.

Page 2, line 18 – add a comma after “Subchapter”

Page 2, line 19 – add a comma after “involved”

Page 2, line 21 – replace “when” with “if”

Page 2, line 22 – replace “creating said” with “separated by the”

Page 2, line 24 – delete the comma

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0706 is readopted with changes as published in 32:06 NCR 558-559 as follows:

3 **15A NCAC 02T .0706 SETBACKS**

4 (a) The setbacks for Infiltration Units infiltration sites shall be as follows:

	<u>Spray</u>	<u>Drip</u>	<u>Basin</u>
	<u>(feet)</u>	<u>(feet)</u>	<u>(feet)</u>
<u>Any habitable residence or place of public assembly under separate</u>			
<u>ownership or not to be maintained as part of the project site</u>	<u>400</u>	<u>100</u>	<u>100</u>
<u>Any habitable residence or place of public assembly owned by the Permittee</u>			
<u>to be maintained as part of the project site</u>	<u>200</u>	<u>15</u>	<u>50</u>
<u>Any private or public water supply source</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>Surface waters (streams – intermittent and perennial, perennial waterbodies,</u>			
<u>and wetlands)</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>Groundwater lowering ditches (where the bottom of the ditch intersects</u>			
<u>the SHWT)</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>Subsurface groundwater lowering drainage systems</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>Surface water diversions (ephemeral streams, waterways, ditches)</u>	<u>50</u>	<u>50</u>	<u>50</u>
<u>Any well with exception of monitoring wells</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>Any property line</u>	<u>150</u>	<u>50</u>	<u>50</u>
<u>Top of slope of embankments or cuts of two feet or more in vertical height</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>Any water line from a disposal system</u>	<u>10</u>	<u>10</u>	<u>10</u>
<u>Public right of way</u>	<u>50</u>	<u>50</u>	<u>50</u>
<u>Nitrification field</u>	<u>20</u>	<u>20</u>	<u>20</u>
<u>Any building foundation or basement</u>	<u>15</u>	<u>15</u>	<u>15</u>
<u>Impounded public water supplies</u>	<u>500</u>	<u>500</u>	<u>500</u>
<u>Public shallow groundwater supply (less than 50 feet deep)</u>	<u>500</u>	<u>500</u>	<u>500</u>
<u>(feet)</u>			
Any habitable residence or place of public assembly under separate ownership			
or not to be maintained as part of the project site			<u>400</u>
Any habitable residence or place of public assembly owned by the permittee			
to be maintained as part of the project site			<u>200</u>
Any private or public water supply source			<u>100</u>
Surface waters (streams – intermittent and perennial, perennial waterbodies, and wetlands)			<u>200</u>
Groundwater lowering ditches (where the bottom of the ditch intersects the SHWT)			<u>200</u>
Subsurface groundwater lowering drainage systems			<u>200</u>
Surface water diversions (ephemeral streams, waterways, ditches)			<u>50</u>
Any well with exception of monitoring wells			<u>100</u>

1	Any property line	200
2	Top of slope of embankments or cuts of two feet or more in vertical height	100
3	Any water line from a disposal system	10
4	Any swimming pool	100
5	Public right of way	50
6	Nitrification field	20
7	Any building foundation or basement	15
8	Impounded public water supplies	500
9	Public shallow groundwater supply (less than 50 feet deep)	500

(b) Setbacks in Paragraph (a) of this Rule to surface waters, groundwater lowering ditches, and subsurface groundwater lowering drainage systems shall be 100 feet if the treatment units are designed to meet a Total Nitrogen of 7 ~~mg/4~~ mg/L and Total Phosphorus of 3 ~~mg/4~~ mg/L effluent limit.

(c) Setbacks in Paragraph (a) of this Rule to surface waters, groundwater lowering ditches, and subsurface groundwater lowering drainage systems shall be 50 feet if the treatment units are designed to meet a Total Nitrogen of 4 ~~mg/4~~ mg/L and Total Phosphorus of 2 ~~mg/4~~ mg/L effluent limit. This setback provision ~~does~~ shall not apply to SA waters.

(d) Treatment and storage facilities associated with systems permitted under this Section shall adhere to the setback requirements in Section .0500 of this Subchapter except as provided in this Rule.

(e) Setback waivers shall be written, notarized, signed by all parties involved and recorded with the County Register of Deeds. Waivers involving the compliance boundary shall be in accordance with 15A NCAC 02L .0107.

(f) Setbacks to property lines established in Paragraphs (a) and (d) of this Rule shall not be applicable when the Permittee, or the entity from which the Permittee is leasing, owns both parcels creating said property line.

(g) Habitable residences or places of ~~public~~ assembly under separate ownership constructed after the non-discharge facilities were originally permitted or subsequently modified, are exempt from the setback requirements in Paragraphs (a) and (d) of this Rule.

History Note: Authority G.S. 143-215.1; 143-215.3(a);

Eff. September 1, 2006, 2006;

Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0707

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – add “the” before “anticipated”

Lines 17, 18, 20, and 23 – delete the commas

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0707 is readopted with changes as published in 32:06 NCR 559 as follows:

2
3 **15A NCAC 02T .0707 OPERATION AND MAINTENANCE ~~PLAN~~**

4 (a) An operation and maintenance plan shall be maintained for all systems. The plan shall:

- 5 (1) describe the operation of the system in sufficient detail to show what operations are necessary for
6 the system to function and by whom the functions are to be conducted;
7 (2) describe anticipated maintenance of the system;
8 (3) include provisions for safety ~~measures~~, measures including restriction of access to the site and
9 equipment, as appropriate; and
10 (4) include spill control ~~provisions~~, provisions including:
11 (A) response to upsets and ~~bypasses~~, bypasses including control, containment, and
12 remediation; and
13 (B) contact information for plant personnel, emergency responders, and regulatory agencies.

14 (b) Infiltration areas, excluding basin, rotary, and spray bed infiltration systems, shall have a year-round vegetative
15 cover.

16 (c) Infiltration, excluding basin infiltration systems, shall not result in ponding or runoff of treated effluent.

17 (d) Infiltration and metering equipment shall be tested and calibrated annually, or as established by permit.

18 (e) ~~Automobiles~~Vehicles and heavy machinery shall not be allowed on the infiltration area, except during
19 installation or maintenance activities.

20 (f) Water level gauges shall be provided for all open-atmosphere treatment lagoons and ponds, and all open-
21 atmosphere storage and basin infiltration units.

22 (g) Vegetative cover shall be maintained on all earthen embankments.

23 (h) Basin, rotary, and spray bed infiltration systems shall be cleaned to remove deposited materials every permit cycle,
24 or as established by permit.

25 (i) The Permittee shall keep a log of all maintenance activities that occur at the facility.

26 (j) The Permittee shall perform inspections and maintenance to ensure proper operation of the facility.

27
28 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

29 *Eff. September 1, ~~2006~~2006;*

30 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0708

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add a comma after “stored”

Lines 10 and 11 – replace “utilization” with “use”

Line 16 – add a comma after “stored”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0708 is readopted as published in 32:06 NCR 559-560 as follows:

2
3 **15A NCAC 02T .0708 RESIDUALS MANAGEMENT PLAN**

4 (a) A Residuals Management Plan shall be maintained for all systems that generate residuals. The plan ~~must~~ shall
5 include the following:

- 6 (1) a detailed explanation as to how the residuals will be collected, handled, processed, stored and
7 disposed;
- 8 (2) an evaluation of the residuals storage requirements for the treatment ~~facility~~ facility, based upon the
9 maximum anticipated residuals production rate and the ability to remove residuals;
- 10 (3) a permit for residuals ~~disposal or utilization, utilization or~~ a written commitment to the Permittee of
11 a ~~Department-approved~~ Department-approved residuals ~~disposal/utilization~~ disposal or utilization
12 program accepting the residuals ~~which~~ that demonstrates that the approved program has adequate
13 capacity to accept the ~~residuals,~~ residuals or that an application for approval has been submitted;
14 and
- 15 (4) if oil, grease, grit, or screenings removal and collection is a designed unit process, a detailed
16 explanation as to how ~~the oil/grease~~ these materials will be collected, handled, processed, stored and
17 disposed.

18 (b) The Permittee shall maintain a record of all residuals removed from the facility.

19
20 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

21 *Eff. September 1, 2006-2006;*

22 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .0801 is readopted as published in 32:06 NCR 560 as follows:

2
3 **SECTION .0800 – OTHER NON-DISCHARGE WASTEWATER SYSTEMS**

4
5 **15A NCAC 02T .0801 SCOPE**

6 This Section ~~applies~~ shall apply to systems not specifically regulated by other rules in this Subchapter ~~in which the~~
7 ~~waste~~ and governs waste that is disposed of by ground absorption systems or other non-discharge systems such as
8 infiltration lagoons and evaporative ~~systems~~ systems, as well as authorizations to construct for NPDES facilities.

9
10 *History Note: Authority G.S. 143-215.1; 143-215.3(a.);*

11 *Eff. September 1, ~~2006~~ 2006;*

12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0804

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “under” with “pursuant to”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0804 is readopted as published in 32:06 NCR 560 as follows:

2
3 **15A NCAC 02T .0804 APPLICATION SUBMITTAL**

4 Submittal requirements shall be the same as systems permitted under ~~15A NCAC 02T .0504~~ 15A NCAC 02T .0504,
5 except those that are not applicable to authorization to construct type ~~permits (e.g., soils report, hydrogeological~~
6 ~~investigations, or receiver site management plan)~~ permits.

7
8 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

9 *Eff. September 1, ~~2006~~ 2006;*

10 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0805

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “under” with “pursuant to”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0805 is readopted as published in 32:06 NCR 560 as follows:

2
3 **15A NCAC 02T .0805 DESIGN CRITERIA**

4 Design requirements shall be the same as systems permitted under ~~15A NCAC 02T .0505~~ 15A NCAC 02T .0505,
5 except those that are not applicable to authorization to construct type permits (~~e.g. degree of treatment and irrigation~~
6 ~~system design requirements~~) or specifically addressed by Section 15A NCAC 02H .0100.

7
8 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

9 *Eff. September 1, ~~2006-2006~~;*

10 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .0806 is readopted with changes as published in 32:06 NCR 560 as follows:

2
3 **15A NCAC 02T .0806 SETBACKS**

4 Setbacks shall be the same as those listed in 15A NCAC 02T .0506 except infiltration basins, which shall meet the
5 setbacks listed in 15A NCAC 02T ~~.0706 for infiltration units.~~ .0706.

6
7 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

8 *Eff. September 1, ~~2006~~2006;*

9 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0807

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “under” with “pursuant to”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0807 is adopted as published in 32:06 NCR 590 as follows:

2
3 **15A NCAC 02T .0807 OPERATION AND MAINTENANCE**

4 Operation and maintenance requirements shall be the same as systems permitted under 15A NCAC 02T .0707.

5
6 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

7 *Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .0808

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “under” with “pursuant to”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .0808 is adopted as published in 32:06 NCR 560 as follows:

2
3 **15A NCAC 02T .0808 RESIDUALS MANAGEMENT**

4 Residuals management requirements shall be the same as systems permitted under 15A NCAC 02T .0708.

5
6 History Note: Authority G.S. 143-215.1; 143-215.3(a);

7 Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1101

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – replace “is” with “shall be”

Line 8 – add a comma after “grit”

Line 21 – replace “(i.e.” with “, but”

Line 22 – delete the parenthesis

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1101 is readopted with changes as published in 32:06 NCR 560 as follows:

2
3 **SECTION .1100 – RESIDUALS MANAGEMENT**
4

5 **15A NCAC 02T .1101 SCOPE**

6 This Section ~~shall apply~~ applies to the treatment, storage, transportation, use, and disposal of residuals. Not regulated
7 under this Section is the treatment, storage, transportation, use, or disposal of:

- 8 (1) oil, grease, grit and screenings from wastewater treatment facilities;
- 9 (2) septage from wastewater treatment facilities;
- 10 (3) ash that is regulated in accordance with ~~Section .1200;~~ Section .1200 of this Subchapter;
- 11 (4) residuals that are regulated in accordance with Section .1300 and Section .1400 of this Subchapter;
- 12 (5) residuals that are prepared for land application, used, or disposed of in a solid waste management
13 facility permitted by the Division of Waste Management;
- 14 (6) residuals that are disposed of in an incinerator permitted by the Division of Air Quality;
- 15 (7) residuals that are transported out of state for treatment, storage, use, or disposal; ~~and~~
- 16 (8) residuals that meet the definition of a hazardous waste in accordance with 40 CFR 260.10 as adopted
17 by reference in 15A NCAC 13A .0102(b) or that have a concentration of polychlorinated biphenyls
18 equal to or greater than 50 milligrams per kilogram of total solids on a dry weight basis; and (i.e.,
19 dry weight basis).
- 20 (9) byproduct waste resulting from any process of industry, manufacturing, trade, business, or the
21 development of any natural resource (i.e., not from a wastewater treatment, water supply treatment,
22 or air pollution control facility permitted under the authority of the Commission).

23
24 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);
25 Eff. September 1, 2006-2006;
26 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1102

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 11 – add a comma after “ton”

Line 22 – replace the semicolon with a colon

Lines 23-29 – do not capitalize any word other than “Rule” or “Section”

Page 2, line 3 – consider revising as follows:

That is primarily used for the disposal of residuals, and agricultural ...

Page 2, line 8 – do you mean “mass” or “weight”?

Page 2, line 16 – do you need “minimum”? If not, delete it.

Page 2, lines 20-23 – consider revising as follows:

"Land application" shall mean spraying or spreading of residuals onto the land surface, injection, or incorporation to condition the soil or fertilize crops or vegetation grown in the soil.

Page 3, lines 4-5 – replace “overland and runs off of” with “over”

Page 3, line 6 – delete “relatively.” What does “large materials” mean?

Page 3, line 14 – add a comma after “trenches”

Page 3, line 14 – replace “is” with “are”

Page 3, line 20 – do you mean “mass” or “weight”?

Page 3, line 23 – what is a residual has been treated both aerobically and anaerobically?

Page 3, line 27 – what does “mass movement” mean?

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Page 3, line 29 – do you mean “transporting” or “transmitting”?

Page 3, line 31 – what does “excess air” mean?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1102 is readopted with changes as published in 32:06 NCR 560-562 as follows:

2
3 **15A NCAC 02T .1102 DEFINITIONS**

4 As used in this Section:

- 5 (1) "Aerobic digestion" shall mean the biochemical decomposition of organic matter in residuals into
6 carbon dioxide and water by microorganisms in the presence of air.
- 7 (2) "Agricultural land" shall mean land on which a food crop, feed crop, or fiber crop is grown.
- 8 (3) "Anaerobic digestion" shall mean the biochemical decomposition of organic matter in residuals into
9 methane gas and carbon dioxide by microorganisms in the absence of air.
- 10 (4) "Bag and other container" shall mean a bag, bucket, bin, box, carton, vehicle, trailer, tanker, or an
11 open or closed receptacle with a load capacity of 1.102 short tons or one metric ton or less.
- 12 (5) "Base flood" shall mean a flood that has a one percent ~~chance~~ change of occurring in any given year.
13 ~~year (i.e., a flood with a magnitude equaled once in 100 years).~~
- 14 (6) "Biological residuals" shall mean residuals that have been generated during the treatment of
15 domestic wastewater, the treatment of animal processing wastewater, or the biological treatment of
16 industrial wastewater.
- 17 (7) "Biological treatment" shall mean treatment in a system that ~~utilizes~~ uses biological processes,
18 ~~processes that shall include~~ including lagoons, activated sludge systems, extended aeration systems,
19 and fixed film systems.
- 20 (8) "Bulk residuals" shall mean residuals that are transported and not sold or given away in a bag or
21 other container for application to the land.
- 22 (9) "Class A residuals" shall mean residuals that are either bagged or bulk residuals meeting:
23 (a) the Pollutant Limits in Rule .1105(a) [of this Section and Rule] and .1105(c) of this Section;
24 (b) the Pathogen Reduction Requirements in Rule .1106(a) of this Section; and
25 (c) the Vector Attraction Reduction Requirements in Rule .1107 of this Section.
- 26 (10) "Class B residuals" shall mean residuals that are bulk residuals meeting:
27 (a) the Pollutant Limits in Rule .1105(a) [of this Section and Rule] and .1105(b) of this Section;
28 (b) the Pathogen Reduction Requirements in Rule .1106(b) of this Section; and
29 (c) the Vector Attraction Reduction Requirements in Rule .1107 of this Section.
- 30 ~~(11)(8)(9)~~ "Cover" shall mean soil or ~~other~~ Division-approved material used to cover residuals placed
31 in a surface disposal unit.
- 32 ~~(12)(9)(10)~~ "Cumulative pollutant loading rate" shall mean the maximum amount of a pollutant that
33 ~~can~~ is permitted to be applied to a unit area of land.
- 34 ~~(13)(10)(11)~~ "Dedicated program" shall mean a program involving the application of ~~bulk~~ residuals in
35 which any of the permitted land meets the definition of a dedicated land application site.
- 36 ~~(14)(11)(12)~~ "Dedicated land application site" shall mean land:
37 (a) to which ~~bulk~~ residuals are applied at greater than agronomic ~~rates~~ rates;

(b) to which ~~bulk~~ residuals are applied through fixed irrigation facilities or irrigation facilities fed through a fixed supply ~~system~~; ~~system~~, or

(c) where the primary use of the land is for the disposal of ~~bulk residuals~~, residuals and agricultural crop production is of secondary importance.

~~(15)~~ ~~(12)~~ ~~(13)~~ "Density of microorganisms" shall mean the number of microorganisms per unit mass of total solids on a dry weight basis (~~i.e., dry weight basis~~) in the residuals.

~~(16)~~ ~~(13)~~ ~~(14)~~ "Dry weight basis" shall mean the weight calculated after the residuals have been dried at 105 degrees Celsius until they reach a constant mass.

~~(17)~~ ~~(14)~~ ~~(15)~~ "Feed crop" shall mean a crop produced for consumption by animals.

~~(18)~~ ~~(15)~~ ~~(16)~~ "Fiber crop" shall mean a crop grown for fiber ~~production~~. ~~This shall include production,~~ including flax and cotton.

~~(19)~~ ~~(16)~~ ~~(17)~~ "Food crop" shall mean a crop produced for consumption by ~~humans~~. ~~This shall include humans, including~~ fruits, vegetables, and tobacco.

~~(20)~~ ~~(17)~~ ~~(18)~~ "Grit" shall mean sand, gravel, cinders, or other materials with a high specific gravity generated during preliminary treatment of wastewater in a wastewater treatment facility.

~~(21)~~ ~~(18)~~ ~~(19)~~ "Incorporation" shall mean the mixing of residuals with top soil to a minimum depth of four inches by methods such as discing, plowing, and rototilling.

~~(22)~~ ~~(19)~~ ~~(20)~~ "Injection" shall mean the subsurface application of liquid residuals to a depth of four to 12 inches.

~~(23)~~ ~~(20)~~ ~~(21)~~ "Land application" shall mean the spraying or spreading of residuals onto the land surface, ~~surface~~; the injection of residuals below the land surface, ~~surface~~; or the incorporation of residuals into the soil so that the residuals can condition the soil or fertilize crops or vegetation grown in the soil.

~~(24)~~ ~~(21)~~ ~~(22)~~ "Lower explosive limit for methane gas" shall mean the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

~~(25)~~ ~~(22)~~ ~~(23)~~ "Monthly average" shall mean the arithmetic mean of all measurements taken during ~~the~~ a month.

~~(26)~~ ~~(23)~~ ~~(24)~~ "Pathogens" shall mean disease-causing ~~organisms~~ organisms, including disease-causing bacteria, protozoa, viruses, and viable helminth ova.

~~(27)~~ ~~(24)~~ ~~(25)~~ "Place residuals" shall mean to dispose of residuals in a surface disposal unit.

~~(28)~~ ~~(25)~~ ~~(26)~~ "Person who prepares residuals" shall mean either the person who generates residuals during the treatment of waste in a wastewater treatment facility or the person who derives a material from residuals.

~~(29)~~ ~~(26)~~ ~~(27)~~ "Pollutant limit" shall mean a numerical value that describes the amount of a pollutant allowed per unit amount of residuals or the amount of a pollutant that can be applied to a unit area of land.

1 (30)(27)(28) "Public contact site" shall mean land with a high potential for contact by the public as
2 defined in 40 CFR 503.11(4). ~~This shall include~~ 503.11(1), including public parks, ball fields,
3 cemeteries, plant nurseries, turf farms, and golf courses.

4 (31)(28)(29) "Runoff" shall mean rainwater, leachate, or other liquid that drains overland and runs off
5 of the land surface.

6 (32)(29)(30) "Screenings" shall mean rags or other relatively large materials generated during
7 preliminary treatment of wastewater in a wastewater treatment facility.

8 (33)(30)(31) "Seismic impact zone" shall mean an area that has a 10 percent or greater probability that
9 the horizontal ground level acceleration of the rock in the area exceeds 0.10 gravity once in 250
10 years.

11 (34)(31)(32) "Specific oxygen uptake rate (SOUR)" shall mean the mass of oxygen consumed per unit
12 time per unit mass of total solids on a dry weight basis ~~(i.e., dry weight basis)~~ in the residuals.

13 (35)(32)(33) "Surface disposal unit" shall mean the land on which only residuals are placed for final
14 disposal, including monofills, lagoons, and trenches and not including land on which residuals is
15 either treated or stored. ~~not including land on which residuals is either treated or stored. This shall~~
16 ~~include monofills, lagoons, and trenches.~~

17 (36)(33)(34) "Surface disposal unit boundary" shall mean the outermost perimeter of a surface disposal
18 unit.

19 (37)(34)(35) "Total solids" shall mean the materials that remain as residue after the residuals have been
20 dried at between 103 and 105 degrees Celsius until they reach a constant mass.

21 (38)(35)(36) "Water treatment residuals" shall mean residuals that have been generated during the
22 treatment of potable or process water.

23 (39)(36)(37) "Unstabilized residuals" shall mean residuals that have not been treated in either an aerobic
24 or an anaerobic treatment process.

25 (40)(37)(38) "Unstable area" shall mean land subject to natural or human-induced forces that may
26 damage the structural components of a surface disposal ~~unit. This shall include~~ unit, including land
27 on which the soils are subject to mass movement.

28 (41)(38)(39) "Vector attraction" shall mean the characteristic of residuals that attracts rodents, flies,
29 mosquitoes, or other organisms capable of transporting infectious agents.

30 (42)(39)(40) "Volatile solids" shall mean the amount of the total solids in the residuals lost when they
31 are combusted at 550 degrees Celsius in the presence of excess air.

32
33 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*
34 *Eff. September 1, 2006, 2006;*
35 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1103

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 7 – page 2, line 1– do not capitalize the beginnings of any subparagraph or part of Paragraph (a)

Lines 8 – 36 – the final punctuation of all subparagraphs and parts on these lines should be semicolons and not periods or commas

Line 10 – add “and” after “Management”

Line 36 – add “and” after the semicolon

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1103 is readopted with changes as published in 32:06 NCR 562 as follows:

2
3 **15A NCAC 02T .1103 PERMITTING BY REGULATION**

4 (a) The following systems ~~are~~ shall be deemed permitted pursuant to Rule .0113 of this Subchapter ~~provided~~ if the
5 system meets the criteria in Rule .0113 of this Subchapter and all criteria required for ~~the specific~~ that system in this
6 Rule:

- 7 (1) Preparation for land application, use, or disposal of residuals in a solid waste facility permitted by
8 the Division of Waste Management that is approved to receive the residuals.
- 9 (2) Land application of residuals that have been prepared for land application in a solid waste facility
10 permitted by the Division of Waste Management approved to receive the residuals ~~as long as~~ if the
11 requirements of this Section are met.
- 12 (3) Land application sites onto which Class A residuals that are sold or given away in a bag or other
13 ~~container~~ container, are ~~applied~~ applied, provided the following criteria ~~is~~ are met:
- 14 (A) the residuals meet the pollutant limits in Rule .1105(a) and Rule .1105(c) of this Section,
15 (B) the residuals meet the pathogen requirements in Rule ~~.1106(a)(1)~~ .1106(a) of this Section,
16 (C) the residuals meet the vector attraction reduction requirements in Rule .1107(a) of this
17 Section, and
18 (D) the land application activities are carried out according to the instructions provided in the
19 informational ~~sheet, sheet or bag bag,~~ or other container label as required in Rule .1109(c)
20 ~~.1109(a)~~ of this Section.
- 21 (4) Land application sites onto which ~~bulk~~ Class A biological residuals are applied, ~~provided that~~ if the
22 residuals and activities ~~meet~~ meeting the following criteria:
- 23 (A) the residuals meet the pollutant limits in Rule .1105(a) and Rule .1105(c) of this Section,
24 (B) the residuals meet the pathogen requirements in Rule ~~.1106(b)~~ .1106(a) of this Section,
25 (C) the residuals meet the vector attraction reduction requirements in Rule .1107(a) of this
26 Section, and
27 (D) the land application activities meet all applicable conditions of Rule .1108(b) ~~.1108(b)(1)~~
28 and Rule .1109(a)(1) ~~.1109(b)~~ of this Section.
- 29 (5) Land application sites onto which Class A non-biological residuals ~~generated from the treatment of~~
30 ~~potable or fresh water or that are generated from the treatment of non biological industrial~~
31 ~~wastewater with no domestic or municipal wastewater contributions~~ are applied, ~~provided that~~ if the
32 residuals and activities meet the following criteria:
- 33 (A) the residuals meet the pollutant limits in Rule .1105(a) and Rule .1105(c) of this Section,
34 (B) the residuals meet the pathogen requirements in Rule .1106(b) of this Section, and
35 (C) the land application activities meet all applicable conditions of Rule .1108(b) ~~.1108(b)(1)~~
36 and Rule ~~.1109~~ .1109(a)(1) of this Section.

1 (6) Transportation of residuals from the ~~residuals-generating~~ residuals-generating source facility to
2 other Division or Division of Waste Management facilities approved to treat, store, use, or dispose
3 the residuals.

4 (b) The Director may determine that a system ~~should~~ shall not be deemed permitted in accordance with this Rule and
5 Rule .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

6
7 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

8 *Eff. September 1, ~~2006~~ 2006.*

9 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1104

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 8 – add a comma after “orientation”

Lines 16-19 – seek permission from the Codifier to list, as follows, if this does not alter the meaning of the Subparagraph:

- (B) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (i) wells, including usage and construction details if available;
 - (ii) ephemeral, intermittent, and perennial streams;
 - (iii) springs;
 - (iv) lakes;
 - (v) ponds; and
 - (vi) other surface drainage features;

Or, alternatively:

- (B) the location of all wells, including usage and construction details if available; ephemeral, intermittent, and perennial streams; springs; lakes; ponds; and other surface drainage features that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries;

Page 2, line 21 – add a comma after “orientation”

Page 2, lines 24-26 – seek permission from the Codifier to list, as follows, if this does not alter the meaning of the Subparagraph:

- (B) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (i) wells, including usage and construction details if available;
 - (ii) ephemeral, intermittent, and perennial streams;
 - (iii) springs;
 - (iv) lakes;

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

- (v) ponds; and
- (vi) other surface drainage features;

Or, alternatively:

- (B) the location of all wells, including usage and construction details if available; ephemeral, intermittent, and perennial streams; springs; lakes; ponds; and other surface drainage features that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries;

Page 3, line 14 – replace the parentheses with commas

Page 3, line 23 – add a comma after “orientation”

Page 3, lines 31-34 – seek permission from the Codifier to list, as follows, if this does not alter the meaning of the Subparagraph:

- (B) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (i) wells, including usage and construction details if available;
 - (ii) ephemeral, intermittent, and perennial streams;
 - (iii) springs;
 - (iv) lakes;
 - (v) ponds; and
 - (vi) other surface drainage features;

Or, alternatively:

- (B) the location of all wells, including usage and construction details if available; ephemeral, intermittent, and perennial streams; springs; lakes; ponds; and other surface drainage features that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries;

Page 4, lines 5-6 – delete the parentheses and move “only” to before “through fixed irrigation” or before “through a fixed supply”

Page 4, line 30 and page 5, lines 1, 7, and 11 – do not capitalize the first word in these lines

Page 4, line 36 and page 5, lines 6 and 10 – replace the periods with semicolons

Page 5, line 1 – add a comma after “constituents”

Page 5, line 2 – delete the parenthesis and “i.e.”

Page 5, lines 3-4 – move “only” to before “through fixed irrigation” or before “through a fixed supply”

Page 5, line 4 – delete the parenthesis

Page 5, line 10 – add “and” after the semicolon

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Page 5, line 24 – replace “is” with “shall be”

Page 7, line 7 – replace “ownership (i.e., contract, deed or article of incorporation);” with “ownership, such as a contract, deed, or article of incorporation;”

Page 7, line 19 – add a comma after “orientation”

Page 7, lines 27-30 – seek permission from the Codifier to list, as follows, if this does not alter the meaning of the Subparagraph:

- (B) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (i) wells, including usage and construction details if available;
 - (ii) ephemeral, intermittent, and perennial streams;
 - (iii) springs;
 - (iv) lakes;
 - (v) ponds; and
 - (vi) other surface drainage features;

Or, alternatively:

- (B) the location of all wells, including usage and construction details if available; ephemeral, intermittent, and perennial streams; springs; lakes; ponds; and other surface drainage features that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries;

Page 8, lines 23 and 30 – do not capitalize the first word in these lines

Page 8, line 29 – replace the period with “; and”

Page 10, line 7 – replace “ownership (i.e., contract, deed or article of incorporation);” with “ownership, such as a contract, deed, or article of incorporation;”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1104 is readopted with changes as published in 32:06 NCR 563-569 as follows:

2
3 **15A NCAC 02T .1104 APPLICATION SUBMITTAL**

4 (a) For new and expanding residuals treatment and storage facilities:

- 5 (1) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information
6 on boundaries and physical features not under the purview of other licensed professions. Site plans
7 or maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location,
8 orientation and relationship of facility ~~components~~ components, including:

9 ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via~~
10 ~~letter dated December 1, 2005, that locating boundaries and physical features, not under the purview~~
11 ~~of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying~~
12 ~~under G.S. 89C.]~~

- 13 (A) a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25
14 percent of total site relief and showing all facility-related structures and fences within the
15 treatment and storage areas;
16 (B) the location of all wells (including ~~usage~~ use and construction details if available), streams
17 (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage
18 features within 500 feet of all treatment and storage facilities and delineation of the review
19 and compliance boundaries;
20 (C) setbacks as required by Rule .1108 of this Section; and
21 (D) site property boundaries within 500 feet of all treatment and storage facilities.

22 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via
23 letter dated December 1, 2005, that locating boundaries and physical features, not under the purview
24 of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying
25 pursuant to G.S. 89C.]

- 26 (2) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these
27 documents. The following documents shall be provided to the Division by the Applicant ~~applicant~~:
28 ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via~~
29 ~~letter dated December 1, 2005, that preparation of engineering design documents pursuant to this~~
30 ~~Paragraph constitutes practicing engineering under G.S. 89C.]~~

- 31 (A) engineering plans for the facilities and equipment except those previously permitted unless
32 they are directly tied into the new units or are ~~critical~~ necessary to the understanding of the
33 complete process;
34 (B) specifications describing materials to be used, methods of construction, and means for
35 ensuring quality and integrity of the finished product, ~~product~~ including leakage testing;
36 and

(C) engineering ~~calculations~~ calculations, including hydraulic and pollutant loading for each unit, unit sizing criteria, hydraulic profile of the facilities, total dynamic head and system curve analysis for each pump, and buoyancy calculations.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering pursuant to G.S. 89C.]

(b) For new and modified sources of residuals:

(1) Site maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location of the source.

(2) ~~A complete~~ An analysis of the residuals shall be provided to the Division by the Applicant. ~~applicant~~. The analysis ~~may include~~ shall include:

(A) all pollutants identified in Rule .1105 of this ~~Section~~; Section,

(B) nutrients and micronutrients; ~~micronutrients~~,

(C) hazardous waste characterization tests; ~~tests~~, and

(D) proof of compliance with Rule .1106 and Rule .1107 of this Section if applicable.

(3) A ~~sampling/monitoring~~ sampling and monitoring plan that describes how compliance with Rule .1105, Rule .1106, and Rule .1107 of this Section if applicable shall be provided to the Division by the Applicant. ~~applicant~~.

(c) For new and expanding non-dedicated land application sites:

(1) ~~Buffer Setback~~ maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location, orientation and relationship of land application site features including:

(A) a scaled map of the land application site, showing all related structures and fences within the land application area;

(B) the location of all wells, streams (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage features within 500 feet of the land application area and delineation of the review and compliance boundaries;

(C) setbacks as required by Rule .1108 of this Section; and

(D) property boundaries within 500 feet of the land application site.

(2) Soils ~~Report-report~~. A soil evaluation of the land application site shall be provided to the Division by the Applicant. ~~applicant~~. This evaluation shall be presented in a report that includes the following. If required by G.S. 89F, a soil scientist shall prepare this evaluation:

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science under G.S. 89F.]

(A) Confirmation of a county soils map, soil evaluation, and verification of the presence or absence of a seasonal high water table within three feet of land surface or establishment of a soil map through field description of soil profile, based on examinations of excavation

pits or auger borings, within seven feet of land surface or to bedrock describing the following parameters by individual diagnostic horizons: thickness of the horizon; texture; color and other diagnostic features; structure; internal drainage; depth, thickness, and type of restrictive ~~horizon; horizon(s);~~ and presence or absence and depth of evidence of any seasonal high water ~~table; table (SHWT).~~

- (B) A representative soils analysis for standard soil fertility and all pollutants listed in Rule .1105(b) of this Section. The Standard Soil Fertility Analysis shall include the following parameters: acidity; base saturation (by calculation); calcium; cation exchange capacity; copper; exchangeable sodium percentage (by calculation); magnesium; manganese; percent humic matter; pH; phosphorus; potassium; sodium, and zinc.

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]

- (3) A project evaluation and a land application site management plan (if applicable) with recommendations concerning cover crops and their ability to accept the proposed application rates of liquid, solids, minerals and other constituents of the residuals shall be provided to the Division.

- (4) Unless the land application site is owned by the Permittee, property ownership documentation consisting of a notarized landowner agreement shall be provided to the Division.

(d) For new and expanding dedicated land application sites:

- (1) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information on boundaries and physical features not under the purview of other licensed professions. Site plans or maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location, orientation and relationship of land application site features including:

~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying under G.S. 89C.]~~

- (A) a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief and showing all facility-related structures and fences within the land application area;

- (B) the location of all wells (including ~~usage~~ use and construction details if available), streams (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage features within 500 feet of the land application site and delineation of the review and compliance boundaries;

- (C) setbacks as required by Rule .1108 of this Section; and

- (D) property boundaries within 500 feet of the land application site.

1 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via
2 letter dated December 1, 2005, that locating boundaries and physical features, not under the purview
3 of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying
4 pursuant to G.S. 89C.]

- 5 (2) Engineering design documents (for land applications sites onto which ~~bulk~~ residuals are applied
6 through fixed irrigation facilities or irrigation facilities fed through a fixed supply system only). If
7 required by G.S. 89C, a professional engineer shall prepare these documents. The following
8 documents shall be provided to the Division by the Applicant; ~~applicant~~:

9 ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via~~
10 ~~letter dated December 1, 2005, that preparation of engineering design documents pursuant to this~~
11 ~~Paragraph constitutes practicing engineering under G.S. 89C.]~~

- 12 (A) engineering plans for the facilities and equipment except those previously permitted unless
13 they are directly tied into the new units or are ~~critical~~ necessary to the understanding of the
14 complete process;
15 (B) specifications describing materials to be used, methods of construction, and means for
16 ensuring quality and integrity of the finished ~~product~~ product, including leakage testing;
17 and
18 (C) engineering ~~calculations~~ calculations, including hydraulic and pollutant loading, sizing
19 criteria, hydraulic profile, total dynamic head and system curve analysis for each pump,
20 and irrigation design.

21 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via
22 letter dated December 1, 2005, that preparation of engineering design documents pursuant to this
23 Paragraph constitutes practicing engineering pursuant to G.S. 89C.]

- 24 (3) Soils Report-report. A soil evaluation of the land application site shall be provided. This evaluation
25 shall be presented to the Division by the Applicant; ~~applicant~~ in a report that includes the following.
26 If required by G.S. 89F, a soil scientist shall prepare this evaluation:

27 ~~[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated~~
28 ~~December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing~~
29 ~~soil science under G.S. 89F.]~~

- 30 (A) Field description of soil profile, based on examinations of excavation pits or auger borings,
31 within seven feet of land surface or to bedrock describing the following parameters by
32 individual diagnostic horizons: thickness of the horizon; texture; color and other diagnostic
33 features; structure; internal drainage; depth, thickness, and type of restrictive ~~horizon(s)~~;
34 horizon; and presence or absence and depth of evidence of any seasonal high water table.
35 ~~table (SHWT)~~. Applicants shall dig pits if necessary for proper evaluation of the soils at
36 the site.

(B) Recommendations concerning loading rates of liquids, solids, other residuals constituents and amendments (i.e., for land application sites onto which ~~bulk~~ residuals are applied through fixed irrigation facilities or irrigation facilities fed through a fixed supply system only). Annual hydraulic loading rates shall be based on in-situ measurement of saturated hydraulic conductivity in the most restrictive horizon for each soil mapping unit. Maximum irrigation precipitation rates shall be provided for each soil mapping unit.

(C) A field-delineated soil map delineating soil mapping units within the land application site and showing all physical features, location of pits and auger borings, legends, scale, and a north arrow. The legends shall also include dominant soil series name and family or higher taxonomic class for each soil mapping unit.

(D) A representative soils analysis for standard soil fertility and all pollutants listed in Rule .1105(b) of this Section. The Standard Soil Fertility Analysis shall include the following parameters: acidity, base saturation (by calculation), calcium, cation exchange capacity, copper, exchangeable sodium percentage (by calculation), magnesium, manganese, percent humic matter, pH, phosphorus, potassium, sodium, and zinc.

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]

(4) Hydrogeologic report. A hydrogeologic description prepared by a Licensed Geologist, Licensed Soil Scientist, or Professional Engineer if required by Chapters 89E, 89F, or 89C, respectively, ~~respectively of the subsurface to a depth of 20 feet or bedrock, whichever is less,~~ shall be provided to the Division by the Applicant. ~~applicant.~~ The hydrogeologic evaluation shall be of the subsurface to a depth of 20 feet or bedrock, whichever is less deep. A greater depth of An investigation to a depth greater than 20 feet is required if the respective depth is used in predictive calculations. This evaluation shall be based on borings for which the numbers, locations, and depths are sufficient sufficient numbers, locations, and depths of borings to define the components of the hydrogeologic evaluation. In addition to borings, other techniques may be used to investigate the subsurface conditions at the site, including site. ~~These techniques may include~~ geophysical well logs, surface geophysical surveys, and tracer studies. This evaluation shall be presented in a report that includes the following components:

~~[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description documents pursuant to this Paragraph constitutes practicing geology under G.S. 89E, soil science under G.S. 89F, or engineering under G.S. 89C.]~~

(A) a description of the regional and local geology and hydrogeology;

- (B) a description, based on field observations of the land application site, of the land application site topographic setting, streams, springs and other groundwater discharge features, drainage features, existing and abandoned wells, rock outcrops, and other features that may affect the movement of the contaminant plume and treated wastewater;
- (C) changes in the lithology underlying the ~~land application~~ site;
- (D) depth to the bedrock and the occurrence of any rock outcrops;
- (E) the hydraulic conductivity and transmissivity of the affected ~~aquifer(s);~~ aquifer as determined by in-situ field testing, such as slug tests or pumping tests, in the intended area of irrigation;
- (F) the depth to the seasonal high water table;
- (G) a discussion of the relationship between the affected aquifers of the land application site to local and regional geologic and hydrogeologic features;
- (H) a discussion of the groundwater flow regime of the ~~land application~~ site prior to the operation of the proposed site and the post operation of the proposed ~~site~~ site, focusing on the relationship of the site to groundwater receptors, groundwater discharge features, and groundwater flow media; and
- (I) if residuals are applied through fixed irrigation facilities or irrigation facilities fed through a fixed supply system only and if the ~~SHWT~~ seasonal high water table is within six feet of the surface, a mounding analysis to predict the level of the ~~SHWT~~ seasonal high water table after residuals land application.

[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description documents pursuant to this Paragraph constitutes practicing geology pursuant to G.S. 89E, soil science pursuant to G.S. 89F, or engineering pursuant to G.S. 89C.]

- (5) For land application sites onto which ~~bulk~~ residuals are applied through fixed irrigation facilities or irrigation facilities fed through a fixed supply system only, the Applicant shall provide to the Division a water balance ~~shall be provided to the Division by the applicant~~ that determines the required residuals storage based upon the following most limiting ~~factor:~~ factor:
- (A) hydraulic loading based on the most restrictive horizon;
- (B) hydraulic loading based on the groundwater mounding analysis;
- (C) nutrient management based on agronomic rates for the specified cover crop; or
- (D) nutrient management based on crop management.
- ~~of the hydraulic loading based on either the most restrictive horizon or groundwater mounding analysis; or nutrient management based on either agronomic rates for the specified cover crop or crop management requirements.~~

- 1 (6) A project evaluation and a receiver site management plan (if applicable) with recommendations
2 concerning cover crops and their ability to accept the proposed application rates of liquid, solids,
3 minerals and other constituents of the residuals shall be provided to the Division by the Applicant.
4 ~~applicant.~~
- 5 (7) Property Ownership Documentation shall be provided to the Division by the Applicant ~~applicant~~
6 consisting of:
- 7 (A) legal documentation of ownership (i.e., contract, deed or article of incorporation);
- 8 (B) ~~written notarized intent to purchase agreement~~ an agreement of an intent to purchase the
9 property that is written, notarized, and signed by both parties, accompanied by a plat or
10 survey map; or
- 11 (C) ~~written notarized lease agreement~~ an agreement to lease the property that is written,
12 notarized, and signed by both parties, ~~specifically~~ indicating the intended use of the
13 property, ~~as well as~~ accompanied by a plat or survey map. Lease agreements shall adhere
14 to the requirements of 15A NCAC 02L .0107.
- 15 (e) For new and expanding surface disposal units:
- 16 (1) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information
17 on boundaries and physical features not under the purview of other licensed professions. Site plans
18 or maps shall be provided to the Division by the Applicant ~~applicant~~ depicting the location,
19 orientation and relationship of the surface disposal unit features including:
20 ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via~~
21 ~~letter dated December 1, 2005, that locating boundaries and physical features, not under the purview~~
22 ~~of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying~~
23 ~~under G.S. 89C.]~~
- 24 (A) a scaled map of the surface disposal unit, with topographic contour intervals not exceeding
25 10 feet or 25 percent of total site relief and showing all surface disposal unit-related
26 structures and fences within the surface disposal unit;
- 27 (B) the location of all wells (including ~~usage~~ use and construction details if available), streams
28 (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage
29 features within 500 feet of the surface disposal unit and delineation of the review and
30 compliance boundaries;
- 31 (C) setbacks as required by Rule .1108 of this Section; and
- 32 (D) site property boundaries within 500 feet of the surface disposal unit.
- 33 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via
34 letter dated December 1, 2005, that locating boundaries and physical features, not under the purview
35 of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying
36 pursuant to G.S. 89C.]

- (2) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents. The following documents shall be provided to the Division by the Applicant; ~~applicant~~; ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]~~
- (A) engineering plans for the surface disposal unit and equipment except those previously permitted unless they are directly tied into the new units or are ~~critical~~ necessary to the understanding of the complete process;
 - (B) specifications describing materials to be used, methods of construction, and means for ensuring quality and integrity of the finished ~~product~~ product, including leakage testing; and
 - (C) engineering ~~calculations~~ calculations, including hydraulic and pollutant loading, sizing criteria, hydraulic profile, and total dynamic head and system curve analysis for each pump.
- ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering pursuant to G.S. 89C.]~~
- (3) Soils ~~Report~~; report. A soil evaluation of the surface disposal unit site shall be provided to the Division by the Applicant; ~~applicant~~ in a report that includes the following. If required by G.S. 89F, a soil scientist shall prepare this evaluation:
- ~~[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science under G.S. 89F.]~~
- (A) Field description of soil profile, based on examinations of excavation pits or auger borings, within seven feet of land surface or to bedrock describing the following parameters by individual diagnostic horizons: thickness of the horizon; texture; color and other diagnostic features; structure; internal drainage; depth, thickness, and type of restrictive horizon; ~~horizon(s)~~; and presence or absence and depth of evidence of any seasonal high water table; ~~table (SHWT)~~. Applicants may be required to dig pits when necessary for proper evaluation of the soils at the site.
 - (B) A field-delineated soil map delineating major soil mapping units within the surface disposal unit site and showing all physical features, location of pits and auger borings, legends, scale, and a north arrow. The legends shall also include dominant soil series name and family or higher taxonomic class for each soil mapping unit.
- ~~[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]~~

(4) Hydrogeologic report. A hydrogeologic description prepared by a Licensed Geologist, Licensed Soil Scientist, or Professional Engineer if required by Chapters 89E, 89F, or 89C, respectively, ~~respectively of the subsurface to a depth of 20 feet or bedrock, whichever is less,~~ shall be provided to the Division by the Applicant, ~~applicant.~~ The hydrogeologic evaluation shall be of the subsurface to a depth of 20 feet or bedrock, whichever is less deep. ~~A greater depth of~~ An investigation to a depth greater than 20 feet is required if the respective depth is used in predictive calculations. This evaluation shall be based on ~~borings for which the numbers, locations, and depths are sufficient~~ sufficient numbers, locations, and depths of borings to define the components of the hydrogeologic evaluation. In addition to borings, other techniques may be used to investigate the subsurface conditions at the site, including site. ~~These techniques may include~~ geophysical well logs, surface geophysical surveys, and tracer studies. This evaluation shall be presented in a report that includes the following components:

~~[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic description documents pursuant to this Paragraph constitutes practicing geology under G.S. 89E, soil science under G.S. 89F, or engineering under G.S. 89C.]~~

- (A) a description of the regional and local geology and hydrogeology;
- (B) a description, based on field observations of the site, of the site topographic setting, streams, springs and other groundwater discharge features, drainage features, existing and abandoned wells, rock outcrops, and other features that may affect the movement of the contaminant plume and treated wastewater;
- (C) changes in the lithology underlying the site;
- (D) the depth to bedrock and the occurrence of any rock outcrops;
- (E) the hydraulic conductivity and transmissivity of the affected ~~aquifer(s);~~ aquifer as determined by in-situ field testing, such as slug tests or pumping tests, in the intended area of irrigation;
- (F) the depth to the seasonal high water table;
- (G) a discussion of the relationship between the affected aquifers of the site to local and regional geologic and hydrogeologic features; and
- (H) a discussion of the groundwater flow regime of the site prior to the operation of the proposed unit and the post operation of the proposed unit, ~~unit~~ focusing on the relationship of the unit to groundwater receptors, groundwater discharge features, and groundwater flow media.

~~[Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board for Licensing of Soil Scientists, via letter dated December 1, 2005, and North~~

1 Carolina Board of Examiners for Engineers and Surveyors, via letter dated December 1, 2005, have
2 determined that preparation of hydrogeologic description documents pursuant to this Paragraph
3 constitutes practicing geology pursuant to G.S. 89E, soil science pursuant to G.S. 89F, or
4 engineering pursuant to G.S. 89C.]

5 (5) Property Ownership Documentation shall be provided to the Division by the Applicant ~~applicant~~
6 consisting of:

7 (A) legal documentation of ownership (i.e., contract, deed or article of incorporation);

8 (B) ~~written notarized intent to purchase agreement~~ an agreement of an intent to purchase the
9 property that is written, notarized, and signed by both parties, accompanied by a plat or
10 survey map; or

11 (C) ~~written notarized lease agreement~~ an agreement to lease the property that is written,
12 notarized, and signed by both parties, ~~specifically~~ indicating the intended use of the
13 property, ~~as well as~~ accompanied by a plat or survey map. Lease agreements shall adhere
14 to the requirements of 15A NCAC 02L .0107.

15
16 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);

17 Eff. September 1, 2006-2006;

18 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1105

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 19 – add “the” before “application”

Line 34 – delete “(1)” and align the text with the text in Paragraph (b)

Page 2, lines 1 and 4 – renumber as “(1)” and “(2)” and move the tab 5 spaces to the left.

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1105 is readopted with changes as published in 32:06 NCR 569-570 as follows:

2
3 **15A NCAC 02T .1105 POLLUTANT LIMITS**

4 (a) ~~Bulk residuals or residuals that are sold or given away in a bag or other container~~ Residuals shall not be land
5 applied ~~to the land~~ if the concentration of any pollutant in the residuals exceeds the ceiling concentration for that
6 pollutant as stipulated in the following on a dry weight basis: (i.e., on a dry weight basis):

7

<u>Pollutant</u>	<u>Ceiling Concentration</u> <u>(milligrams per kilogram)</u>
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

19 (b) ~~Bulk Class B~~ Class B residuals shall not be land applied ~~to the land~~ if the ~~land~~ application causes the ~~exceedance of the~~
20 cumulative pollutant loading ~~rate~~ rate, on a dry weight basis, to be exceeded for any pollutant as stipulated in the
21 following: following (i.e., on a dry weight basis):

22

<u>Pollutant</u>	<u>Cumulative Pollutant</u> <u>Loading Rate</u> <u>(kilograms per hectare)</u>
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2,800

34 (1) ~~A person shall determine compliance~~ Compliance with the cumulative pollutant loading rates shall
35 be determined using one of the following methods:

- (A) by calculating the existing cumulative level of pollutants using ~~actual~~ analytical data from all historical land application events of residuals not otherwise exempted by this Paragraph; or
- (B) for land on which land application events of residuals has not occurred or for which the data required in Rule .1105(b) Paragraph (b) of this Rule is incomplete, by determining background concentrations through representative soil sampling.
- (2) ~~When applied to the land, bulk residuals shall be exempt from complying with this Paragraph as long as they meet all of the following criteria:~~
- (A) ~~the monthly average concentrations stipulated in Rule .1105(c) of this Section.~~
- (B) ~~the pathogen reduction requirements stipulated in Rule .1106(b) of this Section, and~~
- (C) ~~the vector attraction reduction requirements stipulated in Rule .1107 of this Section.~~
- (c) ~~Bulk Class A~~ residuals shall not be applied to a lawn, home garden, or public contact use site nor shall residuals be sold or given away in a bag or other container for application to the land if the concentration of any pollutant in the residuals exceeds the concentration for that ~~pollutant~~ pollutant, as stipulated in the following on a dry weight basis: ~~(i.e., on a dry weight basis):~~

<u>Pollutant</u>	<u>Monthly Average Concentration</u> <u>(milligrams per kilogram)</u>
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2,800

- (d) ~~Bulk residuals~~ Residuals shall not be placed in a surface disposal unit if the concentration of any pollutant in the residuals exceeds the concentration for that ~~pollutant~~ pollutant, as stipulated in the following on a dry weight basis: ~~(i.e., on a dry weight basis):~~

<u>Distance from Surface Disposal Unit</u> <u>Boundary to Closest Property Line</u> <u>(meters)</u>	<u>Ceiling Concentration</u> <u>(milligrams per kilogram)</u>		
	Arsenic	Chromium	Nickel
0 to less than 25	30	200	210
25 to less than 50	34	220	240
50 to less than 75	39	260	270

1	75 to less than 100	46	300	320
2	100 to less than 125	53	360	390
3	125 and greater <u>to less than 150</u>	62	450	420
4	<u>greater than 150</u>	<u>73</u>	<u>600</u>	<u>420</u>

5

6 *History Note:* *Authority G.S. 143-215.1; 143-215.3(a);*
7 *Eff. September 1, ~~2006~~.2006;*
8 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1106

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 28 – add a coma after “application”

Line 36 – replace “Tine/Temperature.” with “Time and Temperature.”

Page 2, line 16 – replace “1” with “Footnote 1”

Page 2, line 23 – replace “Viruses/Viable” with “Viruses and Viable”

Page 2, line 27 – replace “or” with “and”

Page 3, line 1 – replace “Viruses/Viable” with “Viruses and Viable”

Page 3, line 3 – replace “or” with “and”

Page 3, line 22 – replace “exceeds” with “shall exceed”

Page 3, lines 34-35 – add a comma after “temperature and delete the parentheses and “i.e.”

Page 3, line 35 – correctly spell “Celsius”

Page 4, lines 1-2 – add a comma after “temperature and delete the parentheses and “i.e.”

Page 4, line 2 – correctly spell “Celsius”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1106 is readopted with changes as published in 32:06 NCR 570-572 as follows:

2
3 **15A NCAC 02T .1106 PATHOGEN REDUCTION REQUIREMENTS**

4 ~~(a) The following pathogen requirements shall be met when biological residuals are [land] applied to the land or~~
5 ~~placed in a surface disposal unit:~~

6 ~~(1) The Class A pathogen requirements shall be met when bulk biological residuals are applied to a~~
7 ~~lawn, home garden, or public contact use site [site,] or sold or given away in a bag or other container~~
8 ~~for [land application.] application to the land.~~

9 ~~(2) Biological residuals placed in a surface disposal unit shall be exempt from meeting the Class A or~~
10 ~~Class B pathogen requirements if the vector attraction reduction method in Rule .1107(b)(2) of this~~
11 ~~Section is met.~~

12 ~~(3) Programs involving the land application of biological residuals generated by wastewater treatment~~
13 ~~facilities treating industrial wastewater only that are operational at the time of this Rule's effective~~
14 ~~date shall comply with the requirements stipulated in this Rule no later than five years from the~~
15 ~~effective date of this Rule unless the Permittee is adhering to an established schedule in an individual~~
16 ~~permit, settlement agreement, special order pursuant to G.S. 143-215.2, or other similar document~~
17 ~~that establishes a later deadline.~~

18 ~~(3) The pathogen reduction requirements in Subparagraph (b)(2) and Paragraph (c) of this Rule shall~~
19 ~~not apply for biological residuals generated from treatment of waste shown to not contain pathogens.~~

20 ~~(a)(b) For Class A biological residuals to be classified as Class A with respect to pathogens, shall meet~~ the following
21 ~~requirements: shall be met:~~

22 (1) The requirements in this Paragraph ~~are~~ shall be met either prior to no later than meeting or at the
23 ~~same time as the~~ vector attraction reduction requirements in Rule .1107 of this ~~Section. Section are~~
24 ~~met,~~ unless the vector attraction reduction methods ~~stipulated~~ in Rule .1107(a)(6), Rule .1107(a)(7),
25 and Rule .1107(a)(8) of this Section are met.

26 (2) ~~The biological~~ Biological residuals ~~are~~ shall be monitored for the density of fecal coliform or
27 Salmonella sp. bacteria at the time that the ~~biological~~ residuals are used or ~~disposed~~ disposed, or at
28 the time they are prepared for sale or giving away in a bag or other container for land application ~~to~~
29 ~~the land for the density of fecal coliform or Salmonella sp. bacteria to demonstrate that: the~~
30 ~~following:~~

31 (A) the density of fecal coliform is less than 1,000 Most Probable Number per gram of total
32 solids on a dry weight basis; (i.e., dry weight basis), or

33 (B) the density of ~~Salmonella~~ Salmonella sp. bacteria is less than three Most Probable Number
34 per four grams of total solids on a dry weight basis. (i.e., dry weight basis).

35 (3) The biological residuals meet one of the following ~~alternatives:~~ requirements:

36 (A) Time/Temperature. The temperature of the biological residuals shall be maintained at a
37 specific value for a period of consecutive time in accordance with the following:

Total Solids (percent)	Temperature (t) (degrees Celsius)	Time	Equation to Determine Minimum Holding Time (D) (days)
≥ 7	≥ 50	≥ 20 minutes	$\frac{131,700,000}{10^{0.1400t}}$
≥ 7	≥ 50	≥ 15 seconds ¹	$\frac{131,700,000}{10^{0.1400t}}$
< 7	≥ 50	≥ 15 seconds	$\frac{131,700,000}{10^{0.1400t}}$
		< 30 minutes	$10^{0.1400t}$
< 7	≥ 50	≥ 30 minutes	$\frac{50,070,000}{10^{0.1400t}}$

1 – when residuals are heated by warmed gases or an immiscible liquid

(B) Alkaline Treatment. The pH of the biological residuals shall be raised to above 12 and shall remain ~~remains~~ above 12 for 72 consecutive hours. The temperature of the biological residuals shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the biological residuals is above 12. At the end of the 72-hour period during which the pH is above 12, the biological residuals shall be air dried to achieve a total solids greater than 50 ~~percent~~, percent;

(C) Prior Testing for Enteric Viruses/Viable Helminth Ova. The biological residuals shall be analyzed prior to pathogen reduction treatment to determine whether the biological residuals contain enteric viruses or viable helminth ova. The density of enteric viruses prior to pathogen reduction treatment shall be less than one Plaque-forming Unit per four grams of total solids on a dry weight basis ~~(i.e., dry weight basis)~~ or the density of viable helminth ova shall be less than one per four grams of total solids on a dry weight basis, ~~(i.e., dry weight basis)~~. When the density of enteric viruses or viable helminth ova are equal to or greater than these values, the biological residuals shall be considered ~~to be~~ Class A following pathogen reduction treatment if the resultant densities are less than these values and the operating parameters for the pathogen reduction treatment are documented, ~~documented to the satisfaction of the Division~~. After this demonstration, the biological residuals shall be considered ~~to be~~ Class A as long as if the operating parameters for the pathogen reduction treatment are met and documented; ~~documented to the satisfaction of the Division~~;

- (D) No Prior Testing for Enteric Viruses/Viable Helminth Ova. The density of enteric viruses in the biological residuals shall be less than one Plaque-forming Unit per four grams of total solids on a dry weight basis (~~i.e., dry weight basis~~) or the density of viable helminth ova in the biological residuals shall be less than one per four grams of total solids on a dry weight basis (~~i.e., dry weight basis~~) at the time that the biological residuals are used or disposed or ~~is~~ are prepared for sale or giving away in a bag or other container contained for land application; ~~application to the land~~;
- (E) Process to Further Reduce Pathogens - Composting. The biological residuals shall be composted using either the within-vessel method or the static aerated pile method, during which the temperature of the biological residuals is maintained at 55 degrees Celsius or higher for three consecutive days or longer. Alternatively, the biological residuals shall be composted using the windrow method, during which the temperature of the biological residuals is maintained at 55 degrees Celsius or higher for 15 consecutive days or longer. The windrow shall be turned five times during the period when the biological residuals are maintained at 55 degrees Celsius or ~~higher~~, higher. Natural decay of the biological residuals under uncontrolled conditions ~~are not sufficient to meet this process~~; shall not be deemed to comply with these composting requirements;
- (F) Process to Further Reduce Pathogens - Heat Drying. The biological residuals shall be dried by direct or indirect contact with hot gases to reduce the moisture content of the biological residuals to 10 percent or lower. During the process, either the temperature of the biological residuals particles ~~exceeds~~ shall exceed 80 degrees Celsius or the wet bulb temperature of the gas in contact with the biological residuals as they leave the dryer exceeds 80 degrees ~~Celsius~~, Celsius;
- (G) Process to Further Reduce Pathogens - Heat Treatment. The biological residuals shall be heated to a temperature of 180 degrees Celsius or higher for 30 minutes. This process ~~is only available to~~ shall be applied only to biological residuals that are in a liquid ~~state~~, state;
- (H) Process to Further Reduce Pathogens - Thermophilic Aerobic Digestion. The biological residuals shall be agitated with air or oxygen to maintain aerobic conditions, and the mean cell residence time of the biological residuals shall be 10 days at between 55 and 60 degrees Celsius. This process ~~is only available to~~ shall be applied only to biological residuals that are in a liquid ~~state~~, state;
- (I) Process to Further Reduce Pathogens - Beta Ray Irradiation. The biological residuals shall be irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (~~i.e., approximately 20 degrees Celsius~~), (i.e., approximately 20 degrees Celsius);
- (J) Process to Further Reduce Pathogens - Gamma Ray Irradiation. The biological residuals shall be irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium

137, at room temperature (~~i.e., approximately 20 degrees Celsius~~), (i.e., approximately 20 degrees Celcius); or

(K) Process to Further Reduce Pathogens - Pasteurization. The temperature of the biological residuals shall be maintained at 70 degrees Celsius or higher for 30 minutes or longer.

(b)(e) For Class B biological residuals ~~to be classified as Class B with respect to pathogens~~ shall meet one of the following ~~shall be met~~ requirements:

(1) Fecal Coliform Density Demonstration. Seven samples of the biological residuals ~~are~~ shall be collected at the time the residuals are used or disposed, and the geometric mean of the density of fecal coliform in the samples collected ~~is~~ shall be less than either 2,000,000 Most Probable Number per gram of total solids on a dry weight basis (~~i.e., dry weight basis~~) or 2,000,000 Colony Forming Units per gram of total solids on a dry weight basis. (~~i.e., dry weight basis~~).

(2) Process to Significantly Reduce Pathogens. The biological residuals meet one of the following requirements: ~~processed in a process to significantly reduce pathogens. The processes to significantly reduce pathogens are as follows:~~

(A) Aerobic Digestion. Biological residuals ~~are~~ shall be agitated with air or oxygen to maintain aerobic conditions for a specific mean cell time at a specific temperature. Values for the mean cell residence time and temperature ~~are~~ shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees ~~Celcius~~, Celsius;

(B) Air Drying. Biological residuals ~~are~~ shall be dried on sand beds or on paved or unpaved basins for ~~a minimum of~~ three months. During two of the three months, the ambient average daily temperature ~~is~~ shall be above zero degrees ~~Celcius~~, Celsius;

(C) Anaerobic Digestion. Biological residuals ~~are~~ shall be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature ~~are~~ shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees ~~Celcius~~, Celsius;

(D) Composting. Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biological residuals ~~is~~ shall be raised to 40 degrees Celsius or higher and ~~remains~~ shall remain at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile ~~exceeds~~ shall exceed 55 degrees Celsius. Natural decay of the biological residuals under uncontrolled conditions ~~are not sufficient to meet this process~~ shall not be deemed to comply with these composting requirements; or

(E) Lime Stabilization. Sufficient lime ~~is~~ shall be added to the biological residuals to raise the pH to 12 after two hours of contact.

(c) Biological residuals placed in a surface disposal unit shall be exempt from meeting the Class A or Class B pathogen requirements if the vector attraction method in Rule .1107(b)(2) of this Section is met.

1 (d) The pathogen reduction requirements in Subparagraph (a)(2) and Paragraph (b) of this Rule shall not apply
2 for biological residuals generated from treatment of waste to not contain pathogens.

3
4 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

5 *Eff. September 1, 2006-2006;*

6 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1107

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Page 2, line 8 – do you mean to begin this line with “Class B biological residuals” as you did on page 2, line 14?

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1107 is readopted as published in 32:06 NCR 572-573 as follows:

2
3 **15A NCAC 02T .1107 VECTOR ATTRACTION REDUCTION REQUIREMENTS**

4 (a) Biological residuals shall not be ~~land~~ applied to the land unless the requirements of one of the following vector
5 attraction reduction alternatives have been met: ~~met~~. ~~Programs involving the land application of biological residuals~~
6 ~~generated by wastewater treatment facilities treating industrial wastewater only that are operational at the time of this~~
7 ~~Rule's effective date shall comply with the requirements stipulated in this Rule no later than five years from the~~
8 ~~effective date of this Rule unless the Permittee is adhering to an established schedule in an individual permit,~~
9 ~~settlement agreement, special order pursuant to G.S. 143-215.2, or other similar document that establishes a later~~
10 ~~deadline. The vector attraction reduction alternatives shall be as follows:~~

- 11 (1) 38-Percent Volatile Solids Reduction. The mass of the volatile solids in the biological residuals shall
12 be reduced by ~~a minimum of~~ 38 percent between the time that the biological residuals enter the
13 digestion process and the time it is land applied: ~~applied~~;
- 14 (2) 40-Day Bench Scale Test. A portion of previously anaerobically-digested biological residuals shall
15 be further anaerobically-digested in the laboratory in a bench-scale unit for 40 additional days at a
16 temperature between 30 and 37 degrees Celsius. The volatile solids in the biological residuals shall
17 be reduced by less than 17 percent as measured from the beginning to the end of the ~~test~~, test;
- 18 (3) 30-Day Bench Scale Test. A portion of previously aerobically-digested biological residuals shall be
19 further aerobically-digested in the laboratory in a bench-scale unit for 30 additional days at a
20 temperature of 20 degrees Celsius. The previously aerobically-digested biological residuals shall
21 either have a concentration of two percent total solids or less or shall be diluted with effluent down
22 to two percent total solids at the start of the test. The volatile solids in the biological residuals shall
23 be reduced by less than 15 percent as measured from the beginning to the end of the ~~test~~, test;
- 24 (4) Specific Oxygen Uptake Rate Test. The specific oxygen uptake rate (SOUR) for biological residuals
25 treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per
26 gram of total solids on a dry weight basis (~~i.e., dry weight basis~~) corrected to a temperature of 20
27 degrees ~~Celeius~~, Celsius;
- 28 (5) 14-Day Aerobic Processes. The biological residuals shall be treated in an aerobic process for 14
29 days or longer. During that time the temperature of the biological residuals shall be higher than 40
30 degrees Celsius, and the average temperature of the biological residuals shall be higher than 45
31 degrees ~~Celeius~~, Celsius;
- 32 (6) Alkaline Stabilization. The pH of the biological residuals shall be raised to 12 or higher by alkali
33 addition and, without the addition of more alkali, shall remain at 12 or higher for two hours and then
34 at 11.5 or higher for an additional 22 ~~hours~~, hours;
- 35 (7) Drying of Stabilized Residuals. The biological residuals shall be dried to 75 percent total solids if
36 the biological residuals contain no unstabilized solids from a primary wastewater treatment process.

- ~~The biological residuals shall not be mixed with other materials to meet this requirement; Mixing of the biological residuals with other materials shall not be used to meet this alternative;~~
- (8) Drying of Unstabilized Residuals. The biological residuals shall be dried to 90 percent total solids if the biological residuals contain unstabilized solids from a primary wastewater treatment process. ~~The biological residuals shall not be mixed with other materials to meet this requirement; Mixing of the biological residuals with other materials shall not be used to meet this alternative;~~
- (9) Injection.
- (A) Biological residuals shall be injected below the land surface ~~of the land~~ in accordance with ~~40 CFR 503.33(b)(9)(ii).~~ 40 CFR 503.33(b)(9)(ii); and
- (B) ~~If Class A with respect to pathogens,~~ the biological residuals shall be injected below the land surface within eight hours after being discharged from the pathogen treatment ~~process,~~ process; or
- (10) Incorporation.
- (A) ~~If Class B with respect to pathogens,~~ the biological residuals shall be incorporated into the soil within six hours after land application; and application to the land,
- (B) ~~If Class A with respect to pathogens,~~ the biological residuals shall be land applied ~~to the land~~ within eight hours after being discharged from the pathogen treatment process.
- (b) Biological residuals shall not be placed in a surface disposal unit unless one of the following vector attraction reduction alternatives have been met:
- (1) Any alternative stipulated in Paragraph (a) of this ~~Rule,~~ Rule; or
- (2) Daily Cover. Biological residuals shall be covered with soil or ~~other~~ Division-approved material at the end of each operating day.
- (c) For biological residuals generated by wastewater treatment facilities treating industrial wastewater only, the vector attraction reduction requirements in Paragraph (a) of this Rule shall be met unless the Permittee demonstrates that the residuals are pathogen free or meet the pathogen requirements in Rule .1106(b)(2) of this Section.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1108

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Throughout this Rule, replace "any" with "a" or "each"

Lines 8-9 – delete the hard return

Lines 11, 21-22, and page 2, lines 8-9 and 32 – if the parenthetical lists examples, revise as follows: "Surface waters such as intermittent and perennial streams, perennial waterbodies, and wetlands" If the parenthetical is an exclusive list, revise as follows: "Intermittent and perennial streams, perennial waterbodies, and wetlands"

Line 23 and page 2, lines 10 and 33 – if the parenthetical lists examples, revise as follows: "Surface water diversions such as ephemeral streams, waterways, and ditches" If the parenthetical is an exclusive list, revise as follows: "Ephemeral streams, waterways, and ditches"

Lines 24-25 and page 2, lines 11-12 and 34 – delete the parentheses

Page 2, line 3 – replace "lessee/operator" with "lessee or operator" if that is what is meant

Page 3, line 4 – add a comma after "involved"

Page 3, line 6 – replace "when" with "if"

Page 3, line 7 – replace the semicolons with commas

Page 3, line 8 – replace "creating said" with "separated by the"

Page 3, line 10 – delete the comma

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1108 is readopted with changes in 32:06 NCR 573-575 as follows:

3 **15A NCAC 02T .1108 SETBACKS**

4 (a) For residuals treatment and storage facilities, the following ~~minimum~~ setbacks in feet ~~(i.e., in feet)~~ shall be as
5 follows: adhered to:

7 Any habitable residence ~~Habitable residences~~ or place places of public assembly under separate ownership
8 or

9 not to be maintained as part of the project site 100

10 Any private ~~Private~~ or public water supply source ~~sources~~ 100

11 Surface waters (streams – intermittent and perennial, lakes, perennial waterbodies, and wetlands) 50

12 Any well ~~Wells~~ with exception of to monitoring wells 100

13 Any property line ~~Property lines~~ 50

14 (b) For land onto which Class A bulk residuals are applied or stockpiled, the following ~~minimum~~ setbacks in feet
15 ~~(i.e., in feet)~~ shall be as follows: adhered to:

16 (1) ~~If the bulk residuals meet the requirements of Rules .1105(e), .1106(b), and .1107 of this Section:~~

	Liquid Residuals	Cake Residuals
20 <u>Any private</u> Private or public water supply <u>source</u> sources	100	100
21 Surface waters (streams - intermittent and perennial, perennial waterbodies, 22 and wetlands)	100	25
23 Surface water diversions (ephemeral streams, waterways, ditches)	25	0
24 Groundwater lowering ditches (where the bottom of the ditch intersects 25 the SHWT)	25	0
26 <u>Any well</u> Wells with exception of <u>to</u> monitoring wells	100	100
27 Bedrock outcrops	25	0

28 (c) For land onto which Class B residuals are applied or stockpiled, the following setbacks in feet shall be as follows:

29 (2) ~~If the bulk residuals do not meet the requirements of Rules .1105(e), .1106(b), and .1107 of this~~
30 ~~Section:~~

	Surface Application by Vehicle	Surface Application	Injection / Incorporation by Irrigation
35 <u>Any habitable residence</u> Habitable residences or <u>place places</u> of <u>public</u> assembly under 36 separate ownership or not to be maintained as part 37 of the project site	400	400	200

Any habitable residence Habitable residences or place places of public assembly owned by			
the Permittee, permittee , the owner of the land, or the			
lessee/operator of the land to be maintained as part			
of the project site	0	200	0
Any property line Property lines	50	150	50
Public right rights of way	50	50	50
Any private Private or public water supply source sources	100	100	100
Surface waters (streams - intermittent and perennial, perennial			
waterbodies, and wetlands)	400 32.8	400 32.8	50 32.8
Surface water diversions (ephemeral streams, waterways, ditches)	25	400 25	25
Groundwater lowering ditches (where the bottom of the ditch			
intersects the SHWT)	25	100	25
Subsurface groundwater lowering drainage systems	0	100	0
Any well Wells with exception of to monitoring wells	100	100	100
Bedrock outcrops	25	25	25
Top of slope of embankments or cuts of two feet or more in			
vertical height	15	15	15
Any building foundation Building foundations or basement			
basements	0	15	0
Any water line Water lines	0	10	0
Swimming pools	400	400	400
Nitrification field fields	0	20	0

(d)(e) For the construction and operation of surface disposal units, the following ~~minimum~~ setbacks in feet (i.e., in feet) shall be as follows: ~~adhered to:~~

Any habitable residence Habitable residences or place places of public assembly under separate ownership or	
not to be	
maintained as part of the project site	400
Any property line Property lines	50
Public right rights of way	50
Any private Private or public water supply source sources	100
Surface waters (streams - intermittent and perennial, perennial waterbodies, and wetlands)	100
Surface water diversions (ephemeral streams, waterways, ditches)	25
Groundwater lowering ditches (where the bottom of the ditch intersects the SHWT)	100
Subsurface groundwater lowering drainage systems	100
Any well Wells with exception of to monitoring wells	100
Any water line Water lines	10

(c) ~~Setback waivers from habitable residences or places of public assembly under separate ownership, or not to be maintained as part of the project site, shall be written, notarized, and signed by all parties involved.~~ Setback waivers shall be written, notarized, signed by all parties involved and recorded with the county Register of Deeds. Waivers involving the compliance boundary shall be in accordance with 15A NCAC 02L .0107.

(f) Setbacks to property lines established in Paragraphs (a), (c), and (d) of this Rule shall not be applicable when the Permittee; the entity from which the Permittee is leasing; or the entity that executed the notarized landowner agreement in 15A NCAC 02T .1104(c)(4) owns both parcels creating said property line.

(g) Habitable residences or places of ~~public~~ assembly under separate ownership constructed after the non-discharge facilities were originally permitted or subsequently modified, are exempt from the setback requirements in Paragraphs (a) and (d) of this Rule.

History Note: Authority G.S. 143-215.1; 143-215.3(a);

Eff. September 1, 2006-2006;

Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1109

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 14 – add a comma after “1996”

Line 15 – delete or define “prolonged”

Page 3, line 1 – replace “are” with “shall be”

Page 3, line 7 – replace “shall be” with “is”

Page 3, line 9 – replace “shall” with “must”

Page 3, line 12 – replace “For new” with “New”

Page 3, line 34 – delete or define “prolonged”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1109 is readopted with changes as published in 32:06 NCR 575-577 as follows:

2
3 **15A NCAC 02T .1109 OPERATION AND RESIDUALS MANAGEMENT PRACTICES**

4 ~~(a) For residuals that are sold or given away in a bag or other container for application to the land, either a label shall~~
5 ~~be affixed to the bag or other container or an information sheet shall be provided to the person who receives the~~
6 ~~residuals. The label/information sheet shall contain the following information:~~

- 7 (1) ~~the name and address of the person who prepared the residuals and~~
8 (2) ~~a statement that land application of the residuals shall be prohibited except with the instructions on~~
9 ~~the label/sheet.~~
10 (3) ~~that residuals shall be applied at agronomic rates and recommended rates for intended uses.~~

11 ~~(a)(b) Land applied residuals shall meet the following requirements: For land onto which bulk residuals are applied,~~
12 ~~the following shall apply:~~

- 13 (1) ~~Residuals~~ Bulk residuals shall not be land applied to the land under the following conditions:
- 14 (A) if the requirements specified by 40 CFR 503.14(a) as stated on January 1, 1996 and
15 incorporated by reference ~~cannot be~~ have not been met;
- 16 (B) if the application causes prolonged nuisance conditions;
- 17 (C) if the land fails to assimilate the ~~bulk~~ residuals or the application causes the contravention
18 of surface water or groundwater standards;
- 19 (D) if the land is flooded, frozen, or snow-covered or is otherwise in a condition such that
20 runoff of the residuals would occur;
- 21 (E) within the 100-year flood elevation unless the ~~bulk~~ residuals are injected or incorporated
22 within a 24-hour period following the application of residuals to land; ~~land application~~
23 ~~event;~~
- 24 (F) during precipitation events or within 24 hours following a rainfall event of 0.5 inches or
25 greater in a 24-hour period;
- 26 (G) if the slope of the land is greater than 10 percent when ~~bulk~~ liquid residuals are surface
27 applied, and if the slope of the land is greater than 18 percent when ~~bulk~~ liquid residuals
28 are injected or incorporated;
- 29 (H) if the land does not have an established vegetative cover crop unless the land is a Division-
30 approved no-till site ~~[in a state or federal no till program]~~ or the ~~bulk~~ residuals are
31 incorporated within a 24-hour period following the injection or application of residuals to
32 land; ~~land application event or injected;~~
- 33 (I) if the vertical separation of the seasonal high water table and the depth of residuals
34 application is less than one foot;
- 35 (J) if the vertical separation of the depth to bedrock and the depth of residuals application is
36 less than one foot; or

- (K) ~~if the application exceeds agronomic rates rates,~~ except for dedicated sites where the ~~Applicant applicant~~ has specifically requested higher rates in an applications pursuant to Rule .1104(d) of this Section.
- (L) new land application sites located within a WS-I watershed pursuant to 15A NCAC 02B .0212 or within the Critical Area of a WS-II pursuant to Sub-Item (4)(g) of Rule 15A NCAC 02B .0212, or within the Critical Area of a WS-III or WS-IV watershed pursuant to Sub-Item (4)(h) of Rules 15A NCAC 02B .0215, and .0216.
- (2) ~~Class B land application sites shall have For land onto which bulk residuals that do not meet the requirements of Rule .1106(b) of this Section are applied,~~ the following public access restrictions:
~~restrictions shall be adhered to:~~
- (A) public access to public contact sites shall be restricted for one calendar year after any ~~residuals land application event;~~ land application of residuals;
- (B) public access to land that is not a public contact site shall be restricted for 30 days after any ~~residuals land application event;~~ land application of residuals; and
- (C) public access to land associated with a dedicated land application site shall be restricted continuously while the land is permitted for active use and for one calendar year after the ~~final residuals land application event.~~ land application of residuals.
- (3) ~~Class B land application sites shall have For land onto which bulk residuals that do not meet the requirements of Rule .1106(b) of this Section are applied,~~ the following harvesting and grazing restrictions:
~~restrictions shall be adhered to:~~
- (A) animals shall not be allowed to graze on land for 30 calendar days after any ~~residuals land application event;~~ land application of residuals;
- (B) food crops, feed crops, and fiber crops shall not be harvested for 30 calendar days after any ~~residuals land application event;~~ land application of residuals;
- (C) food crops with harvested parts that touch the ~~residuals/soil~~ mixture of residuals and soil and are totally above the land surface shall not be harvested for 14 months after any ~~residuals land application event;~~ land application of residuals;
- (D) food crops with harvested parts below the land surface ~~of the land~~ shall not be harvested for 20 months after any ~~residuals land application event~~ land application of residuals ~~when~~ if the residuals remain on the land surface for four months or longer prior to incorporation into the soil;
- (E) food crops with harvested parts below the land surface ~~of the land~~ shall not be harvested for 38 months after any ~~residuals land application event~~ land application of residuals ~~when~~ if the residuals remain on the land surface for less than four months prior to incorporation into the soil; and
- (F) turf grown on land where residuals are applied shall not be harvested for one calendar year after any ~~residuals land application event.~~ land application of residuals.

1 (b) Class A residuals that are sold or given away in a bag or other container for land application are exempt from
2 Paragraph (a) of this Rule.

3 (c) Class A residuals that are sold or given away in a bag or other container for land application, shall either have a
4 label affixed to the bag or other container, or an information sheet shall be provided to the person who receives the
5 residuals. The label or information sheet shall contain the following information:

6 (1) the name and address of the person who prepared the residuals;

7 (2) a statement that land application of the residuals shall be prohibited except with the instructions on
8 the label or information sheet; and

9 (3) that residuals shall be applied at agronomic rates and recommended rates for intended uses.

10 (d)(e) Surface disposal units shall meet the following requirements: For surface disposal units, the following
11 conditions shall be met:

12 (1) For new and expanding surface disposal units shall meet the following requirements: units, the
13 following conditions shall be met.

14 (A) Surface disposal units shall not be located in a seismic impact zone unless designed to
15 withstand the maximum recorded horizontal ground level ~~acceleration~~, acceleration;

16 (B) Surface disposal units shall not be located less than 60 meters from a fault that has
17 displacement in Holocene ~~time~~, time;

18 (C) Surface disposal units shall not be located within ~~an a geologically unstable area~~, area;

19 (D) Surface disposal units shall not be located within the 100-year ~~floodplain~~, floodplain;

20 (E) Surface disposal units shall not restrict base flood ~~flow~~, flow;

21 (F) The vertical separation of the seasonal high water table and the bottom of surface disposal
22 units shall not be less than three ~~feet~~, feet; and

23 (G) Surface disposal units shall be provided with a liner system with a maximum hydraulic
24 conductivity of 10^{-7} centimeters per second. Units into which cake residuals are to be
25 placed shall be equipped with a leachate collection system. Units into which liquid
26 residuals are to be placed shall be equipped with a decanting system and freeboard marker.
27 If cake residuals are to be placed in the unit, a leachate collection system shall be required.
28 If liquid residuals are to be placed in the unit, a decanting system and freeboard marker
29 shall be required.

30 (2) The following ~~conditions~~ requirements shall be met while surface disposal units are permitted for
31 active use and for three calendar years after closure:

32 (A) The requirements specified by 40 CFR 503.24(a) as stated on January 1, 1996 and
33 incorporated by reference shall be ~~met~~, met;

34 (B) Surface disposal units shall not cause prolonged nuisance ~~conditions~~, conditions;

35 (C) Surface disposal units shall not cause the contravention of surface water or groundwater
36 ~~standards~~, standards;

- (D) Runoff from a 24-hour 25-year storm event, decant water, and leachate (~~i.e., as applicable~~) shall be collected from surface disposal ~~units, units;~~ units;
- (E) If biological residuals are placed in the surface disposal unit, the concentration of methane gas shall not exceed 25 percent of the lower explosive limit for methane gas in any structure within the surface disposal unit ~~boundary, boundary;~~ boundary;
- (F) If biological residuals are placed in the surface disposal unit, the concentration of methane gas shall not exceed the lower explosive limit for methane gas at any property line of the surface disposal ~~unit, unit;~~ unit;
- (G) Public access to surface disposal units shall be restricted ~~continuously, continuously;~~ continuously;
- (H) Animals shall not be allowed to graze on surface disposal ~~units, units; and~~ units;
- (I) Food crops, feed crops, and fiber crops shall not be harvested from surface disposal units.
- (3) Following active use, surface disposal units shall be closed. Permits for surface disposal units shall be maintained for ~~a minimum of~~ three years following successful closure. Requests for approval of closure plans shall be submitted to the Division at least 180 days prior to the date that a surface disposal unit is to be closed and shall include the following information:
- (A) how the surface disposal unit will be closed;
- (B) a discussion of how the leachate collection system will be operated and maintained, if applicable;
- (C) a description of the system used to monitor the air for methane gas in the air in any structures within the surface disposal unit boundary and at the property line of the surface disposal unit, if applicable;
- (D) a discussion of how public access to the surface disposal unit will be restricted; and
- (E) proof that the deed for the surface disposal unit property has been amended to provide permanent written notification to subsequent owners of the property that the property was used for the purposes of operating a surface disposal unit.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .1110 is readopted as published in 32:06 NCR 577 as follows:

2
3 **15A NCAC 02T .1110 OPERATION AND MAINTENANCE ~~PLAN~~**

4 (a) An Operation and Maintenance Plan shall be maintained for all residuals management programs. The plan shall:

- 5 (1) describe the operation of the program and ~~any~~ all associated facilities and equipment in sufficient
- 6 detail to show what operations are necessary for the program to function and by whom the functions
- 7 are to be conducted;
- 8 (2) describe anticipated maintenance of facilities and equipment that are associated with the ~~program,~~
- 9 program;
- 10 (3) include provisions for safety ~~measures~~ measures, including restriction of access to the site and
- 11 equipment, as appropriate;
- 12 (4) include spill control ~~provisions~~ provisions, including:
- 13 (A)(a) response to upsets and ~~bypasses~~ bypasses, including control, containment, and
- 14 remediation; and
- 15 (B)(b) contact information for program personnel, emergency responders, and regulatory
- 16 agencies;
- 17 (5) detail procedures for sampling and monitoring to ensure that the program stays in compliance with
- 18 this Section and ~~any~~ each issued permit; and
- 19 (6) for surface disposal units, detail procedures for post-closure care management.

20 (b) The Permittee shall ensure that an electronic or physical copy of their permit and the Operation and Maintenance

21 Plan required by Paragraph (a) of this Rule is available when land applying residuals.

22 (c) Residuals shall be stored or staged in a manner to prevent runoff of leachate and other wastewaters generated from

23 residuals storage or staging.

24 (d) Class A residuals may be staged at the application site for up to 30 days for biological residuals and 60 days for

25 non-biological residuals. Storage or staging that exceeds these limits shall require written approval from the Division.

26 (e) Class B residuals shall not be stored or staged at any land application site without prior written approval from the

27 Division.

28 (f) The Permittee shall perform inspections and maintenance on storage, distribution, and application facilities.

29 (g) Class B land application areas shall be clearly marked on each site prior to and during any land application of

30 residuals.

31
32 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

33 *Eff. September 1, 2006-2006;*

34 *Readopted Eff. September 1, 2018.*

35

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1111

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – Paragraph (b) is a sentence fragment. If you are simply incorporating, replace the comma with “shall be” In addition, state whether the incorporation include subsequent amendments and editions, where the incorporated document may be found, and what if costs. If this information is included in another rule, cite that rule.

Line 9 – I know I asked for this phrasing in a pre-review, but why not this instead: “required by Rules .1105(a), .1105(d), .1106, and .1107 of this Section, as”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1111 is readopted as published in 32:06 NCR 577-578 as follows:

2
3 **15A NCAC 02T .1111 MONITORING AND REPORTING**

4 (a) Representative samples of residuals that are prepared for land application ~~to the land~~ or placed in a surface disposal
5 unit shall be collected and analyzed.

6 (b) The analytical methods listed in 40 CFR ~~503.8(b)~~ 503.8(b), incorporated by reference with subsequent
7 amendments and editions, ~~as stated on January 1, 1996 shall be incorporated into this Section by reference.~~

8 (c) Residuals land applied ~~to the land~~ or placed in a surface disposal unit shall be monitored for pollutants as ~~listed in~~
9 required by Rule .1105(a) and Rule .1105(d) of this Section and Rule .1106 and Rule .1107 of this Section, as
10 applicable, at the following frequency: Rule .1105(a) and Rule .1105(d) of this Section as well as Rule .1106 and Rule
11 .1107 as applicable at the frequency as stipulated in the following:

Metric Tons per 365 day period (Dry Weight Basis)	Monitoring Frequency
Greater than zero but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once per quarter (four times per year)
Equal to or greater than 1,500 but less than 15,000	Once per 60 days (six times per year)
Equal to or greater than 15,000	Once per month (12 times per year)

19 (d) A report of all monitoring and reporting requirements as specified in the permit shall be submitted to the Division
20 by the Permittee ~~permittee~~ annually on or before March 1st of each calendar year.

21 (e) All records shall be retained for ~~a minimum of~~ five years.

22
23 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

24 *Eff. September 1, ~~2006-2006~~;*

25 *Readopted Eff. September 1, 2018.*

1 15A NCAC 02T .1201 is readopted as published in 32:06 NCR 578 as follows:

2
3 **SECTION .1200 – COAL COMBUSTION PRODUCTS MANAGEMENT**
4

5 **15A NCAC 02T .1201 SCOPE**

6 (a) This Section ~~shall apply~~ applies to the treatment, storage, transportation, and beneficial reuse use, and disposal of
7 coal combustion products (CCPs) that ~~are defined as meet the definition of~~ wastewater treatment residuals. ~~Not~~
8 ~~regulated under this Section is~~ This Section shall not regulate the treatment, storage, transportation, use, or disposal
9 of:

- 10 (1) CCPs that are not generated from a wastewater treatment facility; ~~and~~
11 (2) CCPs that are transported out of state for treatment, storage, use, or ~~disposal~~; disposal; and
12 (3) CCPs that are used for structural fill.

13 (b) CCPs may be distributed for the following ~~uses including~~ uses:

- 14 (1) ~~fuel~~ Fuel for combustion for energy recovery in equipment such as in boilers, boilers and furnaces,
15 ~~etc. for energy recovery.~~ furnaces;
16 (2) ~~material~~ Material for manufacturing ~~of~~ concrete products, asphalt products, brick products,
17 lightweight aggregate, roofing materials, insulation products, plastics, paints, bowling balls,
18 cosmetics, and other manufactured products in which the CCPs are encapsulated in the
19 manufactured ~~product.~~ product;
20 (3) ~~daily~~, Daily, intermediate, and final cover as well as any other use at a landfill as approved by the
21 Division of Waste ~~Management.~~ Management;
22 (4) ~~material~~ Material for traction control during snow and ~~ice events.~~ ice events;
23 (5) ~~substitute~~ Substitute for blasting grit, roofing granules, and filter cloth precoat for residuals
24 ~~dewatering.~~ dewatering;
25 (6) ~~flowable~~ Flowable fill for backfill of trenches for potable water mains as approved by the Division
26 of Environmental Health, sanitary sewers, storm drainage structures, and other similar uses where
27 flowable fill is used in lieu of compacted ~~soil.~~ soil;
28 (7) ~~raw~~ Raw product for the stabilization of ~~residuals.~~ residuals;
29 (8) ~~soil~~ Soil nutrient additive, amendment, or other agricultural ~~purpose.~~ purpose;
30 (9) ~~overlay~~ Overlay for roads, residential driveways, farm roads, and high-traffic farm ~~areas.~~ areas; or
31 (10) ~~bedding~~ Bedding for pipes, railroad beds, and underground storage tanks.
32 (11) ~~Structural fill.~~

33
34 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);
35 Eff. September 1, 2006-2006;
36 Readopted Eff. September 1, 2018.
37

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1202

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 11 – do you mean “mass” or “weight”?

Lines 15 and 16 – replace the semicolons with commas

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1202 is readopted as published in 32:06 NCR 578-579 as follows:

2
3 **15A NCAC 02T .1202 DEFINITIONS**

4 As used in this Section:

- 5 (1) "Coal combustion products" or "CCPs" is defined in G.S. 130A-309.201(4). ~~shall mean fly ash,~~
6 ~~bottom ash, boiler slag, flue gas emission control products, mill rejects, and cenospheres resulting~~
7 ~~from the combustion solely of coal, oil, or natural gas; the combustion of any mixtures of coal, oil,~~
8 ~~or natural gas; or the combustion of any mixture of coal and up to a 50 percent mixture of other~~
9 ~~fuels as provided for in 58 FR 42466.~~
- 10 (2) "Dry weight basis" shall mean the weight calculated after the CCPs have been dried at 105 degrees
11 Celsius until they reach a constant mass.
- 12 (3) "Flowable fill" shall mean a controlled, low strength, cementitious material that is used primarily as
13 a backfill in lieu of compacted soil and typically exhibits a compressive strength of greater than 30
14 pounds per square inch.
- 15 (4) "Land application" shall mean the spraying or spreading of CCPs onto the land surface; the injection
16 of CCPs below the land surface; or the incorporation of CCPs into the soil so that the CCPs can
17 condition the soil or fertilize crops or vegetation grown in the soil.
- 18 (5) "Monthly average" shall mean the arithmetic mean of all measurements taken during ~~the~~ a month.
- 19 (6) "Pollutant limit" shall mean a numerical value that describes the amount of a pollutant allowed per
20 unit amount of CCPs.
- 21 (7) "Source of CCPs" shall mean the point of origin of the ~~CCPs~~ CCPs, such as a coal fired power
22 plant's wastewater treatment system.
- 23 (8) ~~"Structural fill" shall mean an engineered fill constructed using CCPs that is properly placed in~~
24 ~~accordance with this Section and compacted. This shall include fill used for embankments,~~
25 ~~greenscapes, foundations, construction foundations, and for bases/sub-bases under a structure or a~~
26 ~~footprint of a paved road, parking lot, sidewalk, walkway, or similar structure.~~
- 27 (8)(9) "Toxicity Characteristic Leaching Procedure" shall mean EPA Test Method Number 1311 as
28 described in EPA publication SW-846, entitled Test Methods for Evaluating Solid Waste,
29 Physical/Chemical Methods.

30
31 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*
32 *Eff. September 1, 2006-2006;*
33 *Readopted Eff. September 1, 2018.*
34

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1203

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 26 – delete the semicolon

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1203 is readopted with changes as published in 32:06 NCR 579 as follows:

2
3 **15A NCAC 02T .1203 PERMITTING BY REGULATION**

4 (a) The following activities ~~are~~ shall be deemed permitted in accordance with Rule .0113 of this Subchapter ~~provided~~
5 ~~if the activity does not result in any violations of groundwater or surface water quality standards (i.e., ground or~~
6 ~~surface), standards,~~ standards, there is no direct discharge to surface waters, the generator of the ~~CCPs, CCPs~~ provides the
7 information required by Rule .1207(a) of this Section to the recipient of the CCPs, and all other ~~specified~~ criteria
8 required for the specific activity ~~is~~ are met:

- 9 (1) ~~use~~ Use of CCPs as fuel for combustion in boilers, furnaces, etc. for energy ~~recovery.~~ recovery;
10 (2) ~~use~~ Use of CCPs as material for manufacturing concrete products, asphalt products, brick products,
11 lightweight aggregate roofing materials, insulation products, plastics, paints, bowling balls,
12 cosmetics and other manufactured products in which the CCPs are encapsulated in the manufactured
13 ~~product.~~ product;
14 (3) ~~use~~ Use or disposal of CCPs in a solid waste facility permitted by the Division of Waste
15 Management that is approved to receive the ~~CCPs, CCPs;~~
16 (4) ~~use~~ Use of CCPs as material for traction control during snow and ice events, ~~provided that if the~~
17 CCPs do not exceed the leachate concentrations ~~of concern set forth~~ in Rule .1205(a) of this ~~Section.~~
18 Section;
19 (5) ~~use~~ Use of CCPs as a substitute for blasting grit, roofing granules, and filter cloth precoat for
20 residuals dewatering, ~~provided that if the CCPs do not exceed the leachate concentrations of concern~~
21 in Rule .1205(a) of this ~~Section.~~ Section;
22 (6) ~~use~~ Use of CCPs in flowable fill for backfill of trenches for potable water mains as approved by the
23 Division of Environmental Health, sanitary sewers, storm drainage structures, and other trenching
24 uses ~~provided that if the CCPs do not exceed the leachate concentrations of concern set forth~~ in Rule
25 ~~.1206(a).~~ .1205(a) of this ~~Section.~~ Section;
26 (7) ~~use~~ Use of CCPs as a raw product for the stabilization of ~~residuals.~~ residuals; and
27 (8) ~~land~~ Land application ~~of sites onto which CCPs are land applied,~~ provided that if the following
28 criteria are met:
29 (A) the CCPs meet the pollutant limits in Rule .1205 of this ~~Section.~~ Section; and
30 (B) the land application activities meet all applicable conditions of Rule .1108(b)(1) and
31 Rule.1109(b)(1) of this ~~Subchapter.~~ Subchapter; and
32 (C) less than 12,400 tons are applied to any one site.
33 (9) ~~Use of CCPs as a base or subbase under a structure or footprint of a paved road, parking lot,~~
34 ~~sidewalk, or similar structure as long as the total depth of CCPs does not exceed one foot.~~

35 (b) Unless otherwise specified in Rule .1203(a) of this Section, Paragraph (a) of this Rule, CCPs that are used for the
36 activities deemed permitted in this Rule are not subject to the pollutant limits in Rule .1205 of this Section.

(c) The Director may determine that a system should not be deemed permitted in accordance with this Rule and Rule .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, ~~2006~~2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1204

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Page 2, lines 12-14 – consider revising as follows, if this is what is meant:

(e) Information listed in Paragraph (c) of this Rule shall not be required if a permit from the Division has been issued to the source of CCPs that addresses the use of CCPs at sites where the CCPs are used for bedding.

In any event, add “(e)” to line 12

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1204 is readopted as published in 32:06 NCR 579-580 as follows:

2
3 **15A NCAC 02T .1204 APPLICATION REQUIREMENTS**

4 (a) The requirements in this Rule shall apply to activities not deemed permitted under Rule .1203 of this Section.

5 (b) For new and modified sources of CCPs:

6 (1) ~~site~~ Site plans or maps shall be provided to the Division by the Applicant, ~~applicant~~ depicting the
7 location of the ~~source~~, source;

8 (2) ~~an~~ An analysis of the CCPs shall be provided to the Division by the Applicant, ~~applicant~~. The
9 analysis shall include all pollutants identified in Rule .1205 of this Section. If the CCPs are to be
10 used in a land application, the analyses shall also include nutrients and ~~micronutrients~~,
11 micronutrients; and

12 (3) ~~a~~ A sampling/monitoring plan that describes how Rule .1205 of this Section shall be complied with
13 shall be provided to the Division by the Applicant, ~~applicant~~.

14 (c) For uses of CCPs not already approved by the ~~applicant's/Permittee's~~ Applicant's or Permittee's individual permit,
15 information shall be provided to the Division by the Applicant ~~applicant~~ that describes and explains site-specific
16 engineering or institutional controls proposed to prevent adverse impacts to public health and the environment.

17 (d) For the use of CCR for land application with greater than 12,400 tons of CCP to be applied to a single site,
18 documentation shall be provided to the Division by the Applicant, showing that environmental releases to
19 groundwater, surface water, and soil are comparable to or lower than those from analogous products made without
20 CCR, or that environmental releases to groundwater, surface water, or soil will be at or below relevant regulatory and
21 health-based benchmarks for human and ecological receptors during use.

22 ~~(d) For new and expanding structural fill sites or sites where CCPs are used for bedding if the bedding is applied at a~~
23 ~~depth greater than two feet underneath the structure:~~

24 ~~(1) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information~~
25 ~~on boundaries and physical features not under the purview of other licensed professions. Site plans~~
26 ~~or maps shall be provided to the Division by the applicant depicting the location, orientation, and~~
27 ~~relationship of the CCPs use site's features including:~~

28 ~~[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via~~
29 ~~letter dated December 1, 2005, that locating boundaries and physical features, not under the purview~~
30 ~~of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying~~
31 ~~under G.S. 89C.]~~

32 ~~(A) a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25~~
33 ~~percent of total site relief and showing all site related structures and fences within the site;~~

34 ~~(B) the location of all wells (including usage and construction details if available), streams~~
35 ~~(ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage~~
36 ~~features within 500 feet of the CCPs use boundry and delineation of the review and~~
37 ~~compliance boundaries;~~

- 1 ~~(C) setbacks as required by Rule .1206 of this Section; and~~
2 ~~(D) site property boundaries within 500 feet of the CCPs use boundary.~~
- 3 (2) Information shall be provided to the Division that describes and explains site specific engineering
4 or institutional controls proposed to prevent adverse impacts to public health and the environment.
- 5 (3) Property Ownership Documentation of the site where the CCPs are to be used shall be provided to
6 the Division. This documentation shall consist of:
- 7 (A) legal documentation of ownership (i.e., contract, deed or article of incorporation);
8 (B) written notarized intent to purchase agreement signed by both parties, accompanied by a
9 plat or survey map; or
10 (C) easements specifically indicating the intended use of the property, as well as a plat or
11 survey map. Easements shall adhere to the requirements of 15A NCAC 02L .0107.
- 12 ~~(e) The submittal process for information Information listed in Paragraph (c) of this Rule shall not be required if a~~
13 ~~permit from the Division has been issued that specifically addresses the use of CCPs from the source of CCPs, at new~~
14 ~~and expanding structural fill sites or sites where CCPs are used for bedding.~~
- 15 ~~(f) A compliance boundary shall be established for all structural fill sites not subject to Rule .1203 of this Section and~~
16 ~~the permittee shall comply with the provisions of 15A NCAC 02L .0107.~~
- 17
- 18 History Note: Authority G.S. 143-215.1; 143-215.3(a);
19 Eff. September 1, 2006-2006;
20 Readopted Eff. September 1, 2018.

1 15A NCAC 02T .1205 is readopted as published in 32:06 NCR 580-581 as follows:

2
3 **15A NCAC 02T .1205 POLLUTANT LIMITS**

4 (a) Except as provided for in Rule .1203 of this Section, CCPs shall not be distributed for use or used if the
5 concentration of any pollutant during the performance of a Toxicity Characteristic Leaching Procedure of the CCPs
6 exceeds the leachate concentration of concern for that pollutant as follows: stipulated in the following:

Pollutant	Leachate Concentration of Concern (milligrams per liter)
Arsenic	5.0
Barium	100.0
Cadmium	1.0
Chromium	5.0
Lead	5.0
Mercury	0.2
Selenium	1.0
Silver	5.0

17
18 (b) Except as provided for in Rule .1203 of this Section, CCPs shall not be distributed for use or used if the
19 concentration of any pollutant in the CCPs exceeds the ceiling concentration for that pollutant on a dry weight basis
20 as ~~stipulated in the following (i.e., on a dry weight basis):~~ follows:

Pollutant	Ceiling Concentration (milligrams per kilogram)
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

32 (c) Except as provided for in Rule .1203 of this Section, CCPs shall not be distributed for use or used if the
33 concentration of any pollutant in the CCPs exceeds the concentration for that pollutant on a dry weight basis as follows:
34 ~~stipulated in the following (i.e., on a dry weight basis):~~

Pollutant	Monthly Average Concentration (milligrams per kilogram)
Arsenic	41

1	Cadmium	39
2	Copper	1,500
3	Lead	300
4	Mercury	17
5	Molybdenum	75
6	Nickel	420
7	Selenium	100
8	Zinc	2,800

9 (d) CCPs may be distributed for use or used if the limits specified in Paragraphs (a), (b), or (c) of this Rule are not
10 met ~~provided that~~ if the following criteria are met:

- 11 (1) ~~the~~ The potential release of pollutants from the CCPs to the environment is minimized to the extent
12 ~~practicable, practicable; and~~
- 13 (2) ~~the~~ The Applicant applicant demonstrates that it will meet the applicable surface water and
14 groundwater quality standards at the compliance boundary at the site of use. shall demonstrate to
15 the Division the ability to meet the applicable surface water quality or groundwater quality standards
16 at the compliance boundary at the site of use is demonstrated.

17
18 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);
19 Eff. September 1, 2006-2006;
20 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1206

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “For areas for the storage of CCPs” with “For areas in which CCPs are stored,”

Line 5 – add commas around “in feet”

Line 10 – replace “to” with “of”

Line 12 – replace “is a” with “is”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1206 is readopted as published in 32:06 NCR 581 as follows:

2
3 **15A NCAC 02T .1206 SETBACKS**

4 For areas for the storage of CCPs ~~and sites where CCPs are used for structural fill and bedding, where the bedding is~~
5 ~~applied at a depth greater than two feet underneath the structure,~~ the following ~~minimum~~ setbacks ~~(i.e., in feet)~~ in feet
6 shall be adhered to:

7 Private or public water supply sources	100
8 Surface waters (streams - intermittent and perennial, lakes,	
9 perennial waterbodies, and wetlands)	50
10 Wells with exception to monitoring wells	100
11 Seasonal high water table	2

12 All distances are horizontal distances except for the distance from a seasonal high water ~~table~~ table, which is a
13 measured as a vertical distance.

14
15 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*
16 *Eff. September 1, ~~2006-2006~~;*
17 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1207

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “to be” with “that are”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1207 is readopted as published in 32:06 NCR 581 as follows:

2
3 **15A NCAC 02T .1207 ~~OPERATION AND~~ MANAGEMENT PRACTICES**

4 (a) For CCPs to be distributed for use, the following shall be provided by the ~~Permittee~~ permittee to the person who
5 receives the CCPs:

- 6 (1) the name and address of the person who distributed the CCPs;
7 (2) materials safety data, pursuant to 29 CFR 1910.1200, for the CCPs;
8 (3) guidance regarding how to comply with Paragraphs (b), (c), and (d) of this Rule;
9 (4) guidance regarding requirements ~~stipulated~~ required by this Section that are specific to the intended
10 use and must be followed by the recipient of the CCPs; and
11 (5) a statement that use of the CCPs ~~shall be~~ is prohibited unless in compliance with the guidance
12 provided.

13 (b) CCPs shall be transported in a manner that does not cause nuisances and hazards to public health or safety or
14 otherwise cause an adverse impact.

15 (c) The person distributing CCPs shall take preparatory measures to store CCPs prior to distribution for use, as well
16 as prior to use, to prevent unpermitted runoff to surface waters.

17 (d) The person distributing CCPs shall take actions necessary to prevent wind erosion and surface runoff from
18 conveying CCPs onto adjacent property or into any surface waters prior to distribution for use as well as after use.

19
20 *History Note:* *Authority G.S. 143-215.1; 143-215.3(a);*
21 *Eff. September 1, ~~2006~~ 2006;*
22 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1208

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 5 – delete “any”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1208 is readopted with changes as published in 32:06 NCR581 as follows:

2
3 **15A NCAC 02T .1208 OPERATION AND MAINTENANCE ~~PLAN~~**

4 **~~(a)~~** An Operation and Maintenance Plan shall be maintained for all CCPs management programs. The plan shall:

- 5 (1) describe the operation of the program and any associated wastewater treatment systems and
6 equipment in sufficient detail to show what operations are necessary for the program to function and
7 by whom the functions are to be conducted;
- 8 (2) describe anticipated maintenance of wastewater treatment systems and equipment that are
9 associated with the program;
- 10 (3) include provisions for safety ~~measures~~ measures, including restriction of access to the site and
11 equipment, as appropriate;
- 12 (4) include spill control ~~provisions~~ provisions, including:
13 (a) response to ~~spills~~ spills, including control, containment, and ~~remediation~~ remediation; and
14 (b) contact information for program personnel, emergency responders, and regulatory ~~agencies~~;
15 agencies; ~~and~~
- 16 (5) describe the sampling and analysis protocol used to ensure that the program complies with this
17 Section and ~~any~~ all issued permits.

18
19 *History Note:* Authority G.S. 143-215.1; 143-215.3(a);
20 Eff. September 1, ~~2006~~ 2006;
21 Readopted Eff. September 1, 2018.
22

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1209

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add a comma after “volume”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1209 is readopted as published in 32:06 NCR 581 as follows:

2
3 **15A NCAC 02T .1209 MONITORING AND REPORTING**

4 (a) Records shall be maintained by the Permittee ~~permittee~~ of all CCPs distributed for use or used and shall include
5 the following:

6 (1) the source, volume and type of CCPs distributed for use or used;

7 (2) the date of CCPs distributed for use or used; and

8 (3) the name of the initial recipient of the CCPs and a description of their intended use.

9 (b) A report of all monitoring and reporting requirements as specified in the permit shall be submitted annually to the
10 Division by the Permittee on or before March 1st of each calendar year.

11 (c) All records shall be retained for ~~a minimum of~~ five years.

12
13 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

14 *Eff. September 1, ~~2006-2006~~;*

15 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1301

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add “shall” before “apply”

Line 7 – replace “do” with “shall”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1301 is readopted as published in 32:06 NCR 582 as follows:

2
3 **SECTION .1300 – ANIMAL WASTE MANAGEMENT SYSTEMS**
4

5 **15A NCAC 02T .1301 SCOPE**

6 The rules in this Section apply to all persons proposing to construct, modify, expand, or operate an animal waste
7 management system. These Rules do not apply to manure haulers regulated pursuant to Section .1400 of this
8 Subchapter.
9

10 *History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A;*

11 *Eff. September 1, ~~2006~~2006;*

12 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1302

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – delete “used for the purpose of this Section shall be as defined”

Line 5 – add “shall apply to this Section” after “follows”

Line 19 – replace “which” with “that”

Line 22 – delete “is”

Line 24 – delete the quotation marks

Line 24 – replace “apply to” with “include”

Line 25 – replace “which” with “that”

Line 26 – replace “all of the following conditions are met” with “the facility”

Lines 27, 28, and 32 – do not capitalize the first word in these lines

Line 30 – replace “The system” with “was”

Line 32 – delete “the system”

Line 34 – replace “The Division issues” with “was issued”

Page 2, line 1 – revise as follows: “was issued a permit that does not allow...”

Page 2, line 4 – delete “No component of the animal waste management system,”

Page 2, line 5 – replace “shall be” with “was not”

Page 2, line 6 – delete “The inactive animal waste management system”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1302 is readopted with changes as published 32:06 NCR 582 as follows:

2
3 **15A NCAC 02T .1302 DEFINITIONS**

4 The definitions used for the purpose of this Section shall be as defined in G.S. 143-215.10B, in Rule .0103 and .1102
5 of this Subchapter, [of Rule .1102 in this Subchapter,] and as follows:

6 (1) "Animal waste management plan" means a plan to properly collect, store, treat or apply animal
7 waste to the land in an environmentally safe manner developed in accordance with G.S. 143-
8 215.10C.

9 (2) "Animal Waste Residuals" means residuals that have been generated during the treatment of animal
10 waste.

11 (3) "Bag or other container" shall mean a bag, bucket, bin, box, carton, vehicle, trailer, tanker, or an
12 open or closed receptacle with a load capacity of 1.102 short tons or one metric ton or less.

13 ~~[(4) "Bulk animal waste residuals" shall mean animal waste residuals that are transported and not sold~~
14 ~~or given away in a bag or other container for application to the land.]~~

15 ~~[(4)(2)(5)]~~ "Expanded animal waste management system" means ~~animal waste treatment and storage~~
16 ~~facilities which require an increase over the existing animal waste design treatment and storage~~
17 ~~capacity due to an increase in the permitted steady state live weight~~ at the feedlot associated with
18 the animal waste management system.

19 ~~[(5)(3)(6)]~~ "New animal waste management system" means animal waste management systems which
20 are constructed and operated at a site where no feedlot existed previously or ~~where a system serving~~
21 ~~a feedlot has been abandoned or unused for a period of four years or more and is then put back into~~
22 ~~service.~~ where a permit for a system has been rescinded and is then reissued when the permittee
23 confines animals in excess of the thresholds established in G.S. 143-215.10B. Notwithstanding Rule
24 .1307(a) of this Section, a 'new animal waste management system' shall not apply to a facility where
25 a system serving a feedlot which has been abandoned or unused for a period of less than five years
26 and then put back into service or if all of the following conditions are met:

27 ~~[(A)]~~ (a) Has had no animals on site for five continuous years or more;

28 ~~[(B)]~~ (b) Notifies the Division in writing at least 60 days prior to bringing any animals back on to
29 the site;

30 ~~[(C)]~~ (c) The system depopulated after January 1, 2005, and the system ceased operation no longer
31 than 10 years prior to the current date;

32 ~~[(D)]~~ (d) At the time the system ceased operation, the system was in compliance with an individual
33 permit or a general permit issued pursuant to G.S. 143-215.10C;

34 ~~[(E)]~~ (e) The Division issues an individual permit or certificate of coverage under a general permit
35 issued pursuant to G.S. 143-215.10C for operation of the system before any animals are
36 brought on the facility;

1 ~~(F)~~(f) The permit for the animal waste management system does not allow production, measured
2 by steady state live weight, to exceed the greatest steady state live weight previously
3 permitted for the system under G.S. 143-215.10C;

4 ~~(G)~~(g) No component of the animal waste management system, other than an existing barn or land
5 application site, shall be constructed on land that is located within the 100-year floodplain;
6 and

7 ~~(H)~~(h) The inactive animal waste management system was not closed using the expenditure of
8 public funds and was not closed pursuant to a settlement agreement, court order, cost share
9 agreement, or grant condition.

10 ~~(6)(4)(7)~~ "NRCS" means the U.S. Department of Agriculture - Natural Resources Conservation
11 Service.

12
13 *History Note:* Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; S.L. 2013-413; S.L. 2015-263;
14 Eff. September 1, 2006-2006;
15 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1303

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “are” with “shall be”

Line 5 – replace “in this” with “by this”

Line 13 – delete the comma

Line 17 – replace “which” with “that”

Line 19 – delete “a minimum of”

Line 19 – replace “which” with “that”

Line 20 – add a comma after “removed”

Line 23 – delete “(separation)”

Lines 25 and 28 – delete the comma

Line 33 – replace “must” with “are”

Line 34 – add “the” before “name”

Line 34 – add a comma after “address”

Page 2, line 1 – replace “, received” with “that receive”

Page 2, line 2 – replace “which” with “that”

Page 2, line 6 – delete the comma

Page 2, line 7 – delete “(separation)”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1303 is readopted with changes as published in 32:06 NCR 582-583 as follows:

2
3 **15A NCAC 02T .1303 PERMITTING BY REGULATION**

4 (a) The following systems are deemed permitted pursuant to Rule .0113 of this Subchapter provided the system meets
5 the criteria in Rule .0113 of this Subchapter and all criteria required for the specific system in this Rule:

6 (1) Systems that do not meet the criteria of an animal operation permitted under Rule .1304 or Rule
7 .1305 of this Subchapter and all other systems not specifically mentioned in this ~~Section.~~ Section
8 if:

9 (A) the animal waste is land applied at no greater than agronomic rates to land owned by the
10 waste generator or under the waste generators generator's authority, authority: agronomic
11 rates must be met.

12 (B) the storage and land application of animal waste is ~~not~~ no closer than 100 feet ~~feet~~ from
13 a ~~well;~~ well, other than a monitoring well.

14 (C) animal waste is not applied on land that is flooded, saturated with water, frozen, or snow
15 covered at the time of land application; and

16 (D) no animal waste is land applied during precipitation events.

17 (2) Poultry operations which use a dry litter system with more than 30,000 birds and that do not meet
18 the criteria specified in Rule .1305 of this Subchapter if:

19 (A) records are maintained for a minimum of three years which include the dates the litter was
20 removed, the estimated amount of litter removed and the location of the sites where the
21 litter was land applied by the poultry operation;

22 (B) the waste is applied at no greater than agronomic rates;

23 (C) a vegetative buffer (separation) of at least 25 feet is maintained from a perennial stream or
24 perennial waterbody for land application sites;

25 (D) land application of litter is ~~not~~ no closer than 100 feet from a ~~well;~~ well, other than a
26 monitoring well;

27 ~~(C)~~(E) litter is stockpiled ~~not~~ no closer than 100 feet from a perennial stream, stream, or perennial
28 waterbody; waterbody, or ~~well;~~ well, other than a monitoring well;

29 ~~(D)~~(F) litter is not stockpiled uncovered for greater than 15 days; and

30 (G) litter ~~animal waste~~ is not applied on land that is flooded, saturated with water, frozen, or
31 snow covered at the time of land application;

32 (H) no ~~animal waste~~ litter is land applied during precipitation events; and

33 ~~(E)~~(I) if a manure hauler is used, records must be maintained of the dates the litter was removed,
34 the estimated amount of litter removed, and name, address and phone number of the
35 manure hauler.

(3) Land application sites under separate ownership from the waste generator, receiving animal waste from animal waste management systems which are deemed permitted, when all the following conditions are met:

(A) the waste is applied at no greater than agronomic rates; ~~and~~

(B) the storage and land application of animal waste is ~~not~~ no closer than 100 feet from a ~~well;~~ well, other than a monitoring well:

~~(B)(C)~~ a vegetative buffer (separation) of at least 25 feet is maintained from a perennial stream or perennial ~~waterbody-~~ waterbody;

(D) animal waste is not applied on land that is flooded, saturated with water, frozen, or snow covered at the time of land application; and

(E) no animal waste is land applied during precipitation events.

(b) The Director may determine that a system should not be deemed permitted in accordance with this Rule and Rule .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

*History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A;
Eff. September 1, 2006-2006;
Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1304

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “applies” with “shall apply”

Line 5 – replace “under” with “pursuant to”

Line 7 – replace “which” with “that”

Line 8 – replace “must” with “shall”

Line 8 – delete “or”

Line 10 – replace “which” with “that”

Line 11 – capitalize “State” if you mean North Carolina

Line 13 – replace “are not” with “shall not be”

Lines 14-18 – consider revising (b)(2) as follows:

- (2) Animal waste management plans shall be submitted for review by a technical specialist to certify whether the best management practices that comprise the plan meet the applicable standards and specifications. If the technical specialist certifies the plan, the certificate shall be submitted to the Division on forms supplied by the Division or approved by the Division as providing the same information as required by the Division's forms.

Question – who must supply the certification and the forms – the technical specialist or the operator of the animal waste system?

Line 20 – replace “must” with “shall”

Line 21 – add “waste is first applied at” before “the land”

Line 22 – delete “is first put into use”

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Line 24 – delete the commas

Line 25 – add “waste is first applied at” before “the land”

Lines 25-26 – delete “is first put into use”

Line 27 – add a comma after “involved”

Line 29 – delete “(separation)”

Line 33 – replace “is” with “shall be”

Line 34 – replace “must” with “shall”

Line 35 – replace “must” with “shall”

Page 2, line 1 – define or delete “Highly”

Page 2, line 5 – add commas after “systems” and “structures”

Page 2, lines 12, 13, and 15 – replace “must” with “shall”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1304 is readopted with changes as published in 32:06 NCR 583-584 as follows:

2
3 **15A NCAC 02T .1304 STATE PERMITTING REQUIREMENTS**

4 (a) This rule applies to animal waste management systems that meet the definition of an animal operation in G.S.
5 143-215.10B but are not subject to regulation under Rule .1305- Rule .1305 of this Section.

6 (b) An animal waste management plan shall be submitted as follows:

7 (1) The animal waste management practices or combination of practices which are selected to comprise
8 a plan for a specific facility must meet NRCS standards, or the standard of practices adopted by the
9 Soil and Water Conservation Commission pursuant to 15A NCAC 06F .0104, 02 NCAC 59E .0104,
10 or standards for any combination of practices which provide water quality protection and are
11 approved by one of these two agencies; and all applicable state statutes and rules at the time of
12 development or design. NRCS standards relating to phosphorus application rates for animal waste
13 are not incorporated as part of this rule.

14 (2) As required by G.S. 143-215.10C, plans must be approved by a technical specialist and the
15 certificate must be submitted to the Division on Division supplied forms or forms approved by the
16 Division as providing the same information as required by the Division's forms. The technical
17 specialist must certify that the best management practices that comprise the plan meet the applicable
18 standards and specifications.

19 ~~(5)(3)~~ The waste shall not be applied at greater than agronomic rates.

20 ~~(3)(4)~~ The land application and siting setbacks must meet the applicable conditions established in G.S.
21 106-803 and NRCS standards at the time of ~~construction.~~ site construction or at the time the land
22 application site is first put into use.

23 ~~(5)~~ Notwithstanding ~~Rule .1304~~ Subparagraph (b)(4) of this ~~Section,~~ Rule, land application of waste
24 shall be no closer than 100 feet from a ~~well,~~ well, other than a monitoring well, and no closer than
25 200 feet from a dwelling not owned by the waste generator at the time the land application site is
26 first put into use. Setback waivers related to distance of land application of waste from a dwelling
27 not owned by the waste generator shall be written, notarized, signed by all parties involved and
28 recorded with the county of Register of Deeds.

29 ~~(6)~~ Notwithstanding Rule .1304(b)(4) of this Section, a vegetative buffer (separation) of at least 25 feet
30 is maintained from a perennial stream or perennial waterbody for land application sites.

31 ~~(7)~~ The waste shall not be applied on land that is flooded, saturated with water, frozen, or snow covered
32 at the time of land application.

33 ~~(8)~~ Land application of waste is prohibited during precipitation events.

34 ~~(9)~~ All waste application equipment must be tested and calibrated at least once every two calendar years,
35 and the results must be documented on forms supplied by or approved by the Division as providing
36 the same information as required by the Division's forms.

1 (10) Highly visible waste-level gauges shall be installed and maintained to mark the level of the waste
2 in each animal waste lagoon or storage pond that does not gravity feed through a free flowing
3 transfer pipe into a subsequent waste storage structure. The gauge shall have readily visible
4 permanent markings.

5 (4)(11) New and expanded animal waste treatment systems such as lagoons and waste storage structures
6 shall be located at least 100 feet from a perennial stream or perennial waterbody. For new and
7 expanding systems, this setback requirement shall also apply to areas in feedlots where an
8 established vegetative cover will not be maintained because of the concentration of animals, with
9 the exception of stock trails and stream crossings.

10 (6)(12) For animal waste management facilities desiring to increase their animal population beyond that
11 permitted, a new individual permit or new certificate of coverage to operate under a general permit
12 must be issued before the additional animals are stocked.

13 (c) For each change of ownership of the system, the new owner must notify the Division in writing within 60 days of
14 transfer of ownership.

15 (d) New and expanding swine facilities must demonstrate compliance with Rule .1307 of this Section prior to
16 receiving a permit from the Division.

17
18 History Note: Authority G.S. 106-803; 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10C; 143-215.10I;
19 Eff. September 1, 2006-2006;
20 Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1305

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “applies” with “shall apply”

Line 4 – replace “under” with “pursuant to”

Line 9 – replace “which” with “that”

Line 10 – replace “must” with “shall”

Line 10 – delete “or”

Line 12 – replace “which” with “that”

Line 13 – capitalize “State” if you mean North Carolina

Lines 15-19 – consider revising (b)(2) as follows:

- (2) Animal waste management plans shall be submitted for review by a technical specialist to certify whether the best management practices that comprise the plan meet the applicable standards and specifications. If the technical specialist certifies the plan, the certificate shall be submitted to the Division on forms supplied by the Division or approved by the Division as providing the same information as required by the Division's forms.

Question – who must supply the certification and the forms – the technical specialist or the operator of the animal waste system?

Line 21 – replace “must” with “shall”

Line 23 – add “waste is first applied at” before “the land”

Line 23 – delete “is first put into use”

Line 27 – delete the commas

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Line 28 – add “waste is first applied at” before “the land”

Lines 28 – delete “is first put into use”

Line 30 – add a comma after “involved”

Line 34 – replace “is” with “shall be”

Line 35 – replace “must” with “shall”

Line 36 – replace “must” with “shall”

Page 2, line 1 – define or delete “Highly”

Page 2, line 5 – add commas after “systems” and “structures”

Page 2, line 15 – replace “which” with “that”

Page 2, line 16 – replace “must” with “shall”

Page 2, line 16 – delete “or”

Page 2, line 17 – replace “which” with “that”

Page 2, line 19 – capitalize “State” if you mean North Carolina

Page 2, line 20 – replace “must” with “shall”

Page 2, line 22 – add commas after “structures” and “stacks”

Page 2, line 26 – delete the commas

Page 2, line 27 – add “waste is first applied at” before “the land”

Page 2, line 28 – delete “is first put into use”

Page 2, line 30 – add a comma after “involved”

Page 2, line 33 – replace “is” with “shall be”

Page 2, line 34 – replace “must” with “shall”

Page 2, line 35 – replace “must” with “shall”

Page 3, line 1 – define or delete “Highly”

Page 3, lines 7, 8, and 11 – replace “must” with “shall”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1305 is readopted with changes as published in 32:06 NCR 584-585 as follows:

2
3 **15A NCAC 02T .1305 NPDES PERMITTING REQUIREMENTS**

4 (a) This Rule applies to animal waste management systems subject to regulation under G.S. 143-215.10C and 40 CFR
5 § 122.23 40 CFR 122.23, which is incorporated by reference including subsequent amendments and editions and shall
6 apply throughout this Rule. 40 CFR 122.23 can be accessed free of charge at <http://www.gpo.gov/fdsys/>. and G.S.
7 143-215.10C.

8 (b) With the exception of dry litter poultry systems, an animal waste management plan shall be submitted as follows:

9 (1) The animal waste management practices or combination of practices which are selected to comprise
10 a plan for a specific facility must meet NRCS standards, or the standard of practices adopted by the
11 Soil and Water Conservation Commission pursuant to ~~15A NCAC 06F .0104~~, 02 NCAC 59E .0104,
12 or standards for any combination of practices which provide water quality protection and are
13 approved by one of these two agencies; and all applicable state statutes and rules and all applicable
14 federal requirements at the time of development or design.

15 (2) As required by G.S. 143-215.10C, plans must be approved by a technical specialist and the
16 certificate must be submitted to the Division on Division supplied forms or forms approved by the
17 Division as providing the same information as required by the Division's forms. The technical
18 specialist must certify that the best management practices that comprise the plan meet the applicable
19 standards and specifications.

20 ~~(5)(3)~~ The waste shall not be applied at greater than agronomic rates.

21 ~~(3)(4)~~ The land application and siting setbacks must meet the applicable conditions established in G.S.
22 106-803, and NRCS standards and 40 CFR Part 412 at the time of site construction or at the time
23 the land application site is first put into use.

24 (5) The land application and siting setbacks must meet the applicable conditions established in 40 CFR
25 Part 412.

26 (6) Notwithstanding Subparagraph (b)(4) of this Rule, land application of waste shall be no closer than
27 100 feet from a ~~[well]~~ well, other than a monitoring well, and no closer than 200 feet from a dwelling
28 not owned by the waste generator at the time the land application site is first put into use. **Setback**
29 **waivers related to distance of land application of waste from a dwelling not owned by the waste**
30 **generator shall be written, notarized, signed by all parties involved and recorded with the county of**
31 **Register of Deeds.**

32 (7) The waste shall not be applied on land that is flooded, saturated with water, frozen, or snow covered
33 at the time of land application.

34 (8) Land application of waste is prohibited during precipitation events.

35 (9) All waste application equipment must be tested and calibrated at least once every calendar year, and
36 the results must be documented on forms supplied by or approved by the Division as providing the
37 same information as required by the Division's forms.

- 1 (10) Highly visible waste-level gauges shall be installed and maintained to mark the level of the waste
2 in each animal waste lagoon or storage pond that does not gravity feed through a free flowing
3 transfer pipe into a subsequent waste storage structure. The gauge shall have readily visible
4 permanent markings.
- 5 (4)(11) New and expanded animal waste treatment systems such as lagoons and waste storage structures
6 shall be located at least 100 feet from a perennial stream or perennial waterbody. For new and
7 expanding systems, this setback requirement shall also apply to areas in feedlots where an
8 established vegetative cover will not be maintained because of the concentration of animals, with
9 the exception of stock trails and stream crossings.
- 10 (6)(12) For animal waste management facilities desiring to increase their animal population beyond that
11 permitted, a new individual permit or new certificate of coverage to operate under a general permit
12 must be issued before the additional animals are stocked.
- 13 (c) Dry litter poultry systems, for the purpose of this Rule and G.S. 143-215.10C, shall submit an animal waste
14 management plan as follows:
- 15 (1) The animal waste management practices or combination of practices which are selected to comprise
16 a plan for a specific facility must meet NRCS standards, or the standard of practices adopted by the
17 Soil and Water Conservation Commission, or standards for any combination of practices which
18 provide water quality protection and are approved by one of these two agencies; and all applicable
19 state statutes and rules and all applicable federal requirements at the time of development or design.
- 20 (2) The land application and siting setbacks must meet the conditions established in NRCS standards
21 and 40 CFR Part 412 at the time of construction.
- 22 (3) New and expanded animal waste structures such as houses and dry stacks shall be protected from
23 the 100-year flood as determined by the Federal Emergency Management Agency.
- 24 (4) The waste shall not be applied at greater than agronomic rates.
- 25 (5) Notwithstanding Subparagraph (c)(2) [of this Section,] of this Rule, land application of [waste] litter
26 shall be no closer than 100 feet from a [well] well, other than a monitoring well, and no closer than
27 200 feet from a dwelling not owned by the waste [generator.]generator at the time the land
28 application site is first put into use. Setback waivers related to distance of land application of waste
29 from a dwelling not owned by the waste generator shall be written, notarized, signed by all parties
30 involved and recorded with the county Register of Deeds.
- 31 (6) The waste shall not be applied on land that is flooded, saturated with water, frozen, or snow covered
32 at the time of land application.
- 33 (7) Land application of [waste] litter is prohibited during precipitation events.
- 34 (8) All waste application equipment must be tested and calibrated at least once every calendar year, and
35 the results must be documented on forms supplied by or approved by the Division as providing the
36 same information as required by the Division's forms.

1 (9) Highly visible waste-level gauges shall be installed and maintained to mark the level of the waste
2 in each animal waste lagoon or storage pond that does not gravity feed through a free flowing
3 transfer pipe into a subsequent waste storage structure. The gauge shall have readily visible
4 permanent markings.

5 ~~(5)~~(10) For animal waste management facilities desiring to increase their animal population beyond that
6 permitted, a new individual permit or new certificate of coverage to operate under a general permit
7 must be issued before the additional animals are stocked.

8 (d) For each change of ownership of the system, the new owner must notify the Division in writing within 60 days of
9 transfer of ownership.

10 (e) Systems shall meet all applicable requirements of 40 CFR Part 122 and 40 CFR Part 412.

11 (f) New and expanding swine facilities must demonstrate compliance with Rule .1307 of this Section prior to receiving
12 a permit from the Division.

13
14 *History Note: Authority G.S. 106-803; 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10C; 143-215.10I;*
15 *Eff. September 1, ~~2006~~2006;*
16 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1306

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 5 – replace “under” with “pursuant to”

Line 6 – replace “until closed to NCRS standards” with “until it is closed in compliance with NRCS standards”

Lines 7-8 – consider revising as follows: “the Division and the submittal of a closure form within 15 days of completion of closure to the Division on a closure form supplied by the Division or a form approved by the Division as providing the same information as required by the Division's forms.”

Line 9 – replace “under” with “pursuant to”

Line 11 – do you mean “may” or “shall”? If may, what standards, factors, or circumstances determine whether the permit will be rescinded?

Line 15 – replace “the Subchapter” with “this Subchapter”

Line 15 – replace “closed to NCRS standards” with “closed in compliance with NRCS standards”

Lines 18-20 – consider revising as follows:

- (3) Closure shall include pre-notification to the Division and the submittal of a closure form within 15 days of completion of closure to the Division on a closure form supplied by the Division or a form approved by the Division as providing the same information as required by the Division's forms.

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1306 is readopted as published in 32:06 NCR 585 as follows:

2
3 **15A NCAC 02T .1306 CLOSURE REQUIREMENTS**

4 (a) Any containment basin, such as a lagoon or a waste storage structure, permitted at an animal operation other than
5 a cattle facility under this Section shall continue to be subject to the conditions and requirements of the facility's permit
6 until closed to NRCS standards and the permit is rescinded by the Division. Closure shall include pre-notification to
7 the Division and submittal of closure form supplied by the Division or forms approved by the Division as providing
8 the same information as required by the Division's forms within 15 days of completion of closure.

9 (b) Any Containment basin, such as a lagoon or a waste storage structure, permitted at a cattle facility under this
10 Section shall continue to be subject to the conditions and requirements of the facility's permit until that permit is
11 rescinded by the Division. Upon request of the permittee, the permit may be rescinded by the Division prior to closure
12 of the containment basin if the cattle facility has not met the definition of an animal operation as established in G.S.
13 143-215.120B for the previous three years or longer. Upon permit rescission, the following requirements shall apply:

14 (1) The cattle facility shall be subject to the requirements of Rule .1303 of this Section and Rule .0113
15 of the Subchapter until the containment basin is closed to NRCS standards.

16 (2) The farm owner shall maintain records of land application and weekly records of containment basin
17 waste levels on forms provided by or approved by the Division.

18 (3) Closure shall include pre-notification to the Division and submittal of closure form supplied by the
19 Division or forms approved by the Division as providing the same information as required by the
20 Division's forms within 15 days of completion of closure.

21 (c) The Division shall have the authority to deny a request for permit rescission based on the factors set out in Rule
22 .0113(e) of this Subchapter.

23
24 *History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; S.L.2013-413;*

25 *Eff. September 1, ~~2006~~ 2006;*

26 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1307

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 4 and 6 – replace “under” with “pursuant to”

Line 6 – delete the comma

Beginning on line 8, the first word of each subparagraph and part through the end of this Rule should not be capitalized.

Line 10 – replace “must” with “shall”

Lines 11, 13, 20, 31, 33, page 2 lines 4, 8, 13, 18, and 20 – replace the periods with semicolons

Line 13 – add “and” after the semicolon

Line 14 – replace “must” with “shall”

Line 14 – delete “as”

Line 15 – replace “and” with a comma

Line 16 – add a comma after “requirements”

Line 18 – replace “by” with “in the”

Line 20 – delete “any”

Line 24 – replace “must” with “shall”

Page 2, line 7 – replace “must” with “shall”

Page 2, line 12 – replace “in” with “of”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

Page 2, line 14 – replace “in” with “of”

Page 2, line 15 – add a space before “of”

Page 2, line 16 – replace “or” with a semicolon

Page 2, line 17 – add a semicolon after “application”

Page 2, line 17 – replace “in” with “of”

Page 2, lines 18 and 20 – add “and” after the semicolons

Page 2, line 30 – replace “under” with “set forth in”

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

1 15A NCAC 02T .1307 is readopted with changes as published in 32:06 NCR 586-587 as follows:

2
3 **15A NCAC 02T .1307 SWINE WASTE MANAGEMENT SYSTEM PERFORMANCE STANDARDS**

4 (a) This Rule applies to animal waste management systems subject to regulation under ~~G.S. 143-215.10I~~. G.S. 143-
5 215. 10I and S.L. 2015-263.

6 (b) An animal waste management system that serves a swine farm subject to regulation under G.S. 143-215.10I, shall
7 meet all of the following performance standards:

8 (1) Eliminate the discharge of animal waste to surface waters and groundwater through direct discharge,
9 seepage, or runoff. To meet this standard:

10 (A) Earthen structures must be designed and constructed with synthetic liners to eliminate
11 seepage.

12 (B) Solids storage structures shall meet applicable engineering practices and NRCS design
13 standards.

14 (C) The Certified Animal Waste Management Plan (CAWMP) must include all components as
15 listed in G.S. 143-215.10C(e) and meet current North Carolina NRCS 590 Nutrient
16 Management Conservation Practice Standard requirements standards for a and comply
17 with the NRCS national policy for Comprehensive Nutrient Management Plan Plans
18 (CNMP) as defined by Part [600] 600, Subpart E of the NRCS General Manual, Title 190,
19 Part 405. National Planning Procedures Handbook, which are hereby incorporated by
20 reference, including any subsequent additions or amendments. The handbook may be
21 downloaded at no cost from the NRCS website: <http://www.nrcs.usda.gov/technica>
22 [l/afn/cnmp_guide_index.html](http://www.nrcs.usda.gov/technica/afn/cnmp_guide_index.html)

23 [\[http://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/\]](http://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/)

24 (D) Swine waste treatment structures that automatically convey swine waste using pumps must
25 have audible and visible high water alarms with an auto dialer device set to contact the
26 farm owner or farm manager; a gravity overflow to a basin that can contain the flow rate
27 of the largest pump in the system for the maximum amount of time that an operator will
28 not be on-site; or a secondary containment structure designed, constructed, and operated to
29 contain the volume of the largest animal waste treatment structure and the flow rate of the
30 largest pump in the system for the maximum amount of time that an operator will not be
31 on-site.

32 (E) No more than the equivalent volume of one month of design flow of untreated swine waste
33 shall be accumulated and stored prior to the initiation of treatment.

34 (2) Substantially eliminate atmospheric emission of ammonia. To meet this standard:

35 (A) Combined ammonia emissions from swine waste treatment and storage structures may shall
36 not exceed an annual average of 0.2 kg NH₃-N/wk/1,000 kg of steady-state live weight;

- (B) Ammonia emissions from land application sites shall not exceed an annual average of 0.2 kg NH₃-N/wk/1,000 kg of steady-state live weight; and
- (C) Ammonia emissions from the swine farm ~~must~~shall not exceed an annual average of 0.9 kg NH₃-N/wk/1,000 kg of steady-state live weight.
- (3) Substantially eliminate the emission of odor that is detectable beyond the boundaries of the parcel or tract of land on which the swine farm is located. To meet this standard, swine waste management systems must reduce odor levels, frequency, and duration from the whole farm, such that the requirements of 15A NCAC 02D .1808 are met at the property boundary.
- (4) Substantially eliminate the release of disease-transmitting vectors and airborne pathogens. To meet this standard:
- (A) Swine waste management systems shall meet the vector attraction reduction requirements in Rule .1107 of this Subchapter for the land application of separated solids and animal waste ~~residuals~~residuals for operations subject to this Rule.
- (B) Swine waste management systems shall meet the pathogen reduction requirements in Rule ~~.1106~~.1106(a) of this Subchapter for Class A biosolids that are to be ~~land~~ applied ~~to a lawn, home garden, or public contact use site or sold or given away in a bag or container for land application.~~ pursuant to Rule .1106(a)(1) or ~~meet the pathogen reduction requirements in Rule .1106(b)~~ for Class B biosolids that are to be otherwise applied to land.
- (C) Fecal coliform concentrations in the final liquid effluent shall not exceed an annual average of 7,000 Most Probable Number/100mL.
- (5) Substantially eliminate nutrient and heavy metal contamination of soil and groundwater. To meet this standard, swine waste management systems that land apply effluent shall:
- (A) Meet the current ~~North Carolina~~ NRCS ~~590 Nutrient Management Conservation Practice Standard~~ requirements ~~for a~~ and comply with the NRCS national policy for Comprehensive Nutrient Management ~~Plan~~ Plans (CNMP) as defined by ~~Part 600, Subpart E [600] of the NRCS National Planning Procedures Handbook;~~ NRCS General Manual, Title 190, Part ~~405;~~ and
- (B) Demonstrate through predictive calculations or modeling that land application of swine waste at the proposed rate will not cause or contribute to a violation of groundwater standards under 15A NCAC 02L.

History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10C; 143-215.10I; S.L.2015-263; Eff. January 1, ~~2009~~2009; Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1308

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 5-6 – delete Paragraph (a) entirely.

Line 9 – add “the” before “system” and “proposed”

Line 9 – add a comma after “entity”

Line 13 – delete “any”

Line 15 – add “the” before “results”

Line 15 – add a comma after “research”

Line 15 – replace “system(s)” with “systems”

Line 16 – add a comma after “research”

Line 20 – replace “any” with “the”

Line 25 – replace the semicolon with a comma

Line 32 – replace “critical to the understanding of the complete process” with “necessary to understand the complete process”

Line 35 – add a comma after “product”

Page 2, line 1 – add a comma after “calculations”

Page 2, line 4 – replace “accordance” with “compliance”

Page 2, line 5 – do not capitalize “in”

Page 2, line 9 – delete the comma and replace “when” with “if”

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Page 2, line 11 – “within six months” of what, exactly?

Page 2, line 13 – delete the comma

Page 2, lines 13-14 – replace “is compliant” with “complies”

Page 2, line 19 – replace “having sampling” with “sampled”

Page 2, line 20 – replace the comma with a semicolon

Page 2, line 21 – do not capitalize “liquid”

Page 2, line 23 – replace “having sampling” with “sampled”

Page 2, line 25 – revise as follows:

- (3) Effluent shall be monitored once per quarter.

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

1 15A NCAC 02T .1308 is readopted as published in 32:06 587 as follows:

2
3 **15A NCAC 02T .1308 EVALUATION AND APPROVAL OF SWINE WASTE MANAGEMENT**
4 **SYSTEMS**

5 (a) This Rule establishes requirements for the evaluation, approval and permitting of swine waste management
6 systems that are required to meet the performance standards in Rule .1307 of this Section.

7 (b) APPLICATION: The applicant shall submit a permit application in writing to the Division showing that a swine
8 waste management system meets the performance standards. The application shall include the following:

9 (1) operation and maintenance procedures, system classification, proposed management entity and
10 system operator requirements;

11 (2) a description of the swine waste management system, including materials used in construction, and
12 its proposed use;

13 (3) a summary of any literature, published research, and previous experience with and performance of
14 a waste management system of similar waste characteristics;

15 (4) results of 12 months of testing, research or monitoring of pilot- or full-scale operational system(s);
16 and shall identify whether the testing, research or monitoring provided was conducted by a third
17 party research or testing organization;

18 (5) documentation of the protocol used to evaluate the performance of the swine waste management
19 system;

20 (6) the identity and qualifications, if applicable, of any proposed research or testing organization and
21 the principal investigators, and an affidavit certifying that the organization and principal
22 investigators have no conflict of interest and do not stand to gain financially from the sale of the
23 technology;

24 (7) an affidavit certifying that the swine waste management system submitted for approval is the same
25 as the certified or listed product; or identify any modifications made to the submitted system;

26 (8) a procedure to address system malfunction and replacement;

27 (9) notification of any proprietary or trade secret information, system, component, or device;

28 (10) engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these
29 documents. The following documents shall be provided to the Division by the applicant:

30 (A) engineering plans for the entire system, including treatment, storage, application, and
31 disposal facilities and equipment except those previously permitted unless those previously
32 permitted are directly tied into the new units or are critical to the understanding of the
33 complete process;

34 (B) specifications describing materials to be used, methods of construction, and means for
35 ensuring quality and integrity of the finished product including leakage testing; and

- (C) engineering calculations including hydraulic and pollutant loading for each treatment unit, treatment unit sizing criteria, hydraulic profile of the treatment system, total dynamic head and system curve analysis for each pump, buoyancy calculations, and irrigation design;
- (11) a complete permit application in accordance with Section .0100 of this Subchapter; and
- (12) In lieu of the requirements of Subparagraphs (b)(3) through (b)(6), the applicant may submit data from a full-scale facility previously permitted by the Division.
- (c) APPROVAL OF NEW OR EXPANDING SWINE WASTE MANAGEMENT SYSTEMS: The Division shall review all applications submitted in accordance with Rule .0107 of this Subchapter. The Division shall approve the swine waste management system in accordance with Rule .0108 of this Subchapter, when the applicant can show that the performance standards of Rule .1307 of this Section will be met.
- (d) MONITORING REQUIREMENTS: Once the newly permitted system reaches full capacity or within six months, whichever comes sooner, the permittee shall monitor system performance for two years with quarterly sampling to assure that the treatment system is meeting performance standards. If, after two years the treatment system is compliant with Rule .1307 of this Section, the permittee shall monitor for compliance with the performance standards in Rule .1307 on the following schedule:
- (1) Ammonia emissions monitoring from swine waste treatment and storage structures shall be as follows:
- (A) Ammonia air emissions from open-air structures shall be directly sampled once per calendar year, with alternating years having sampling during the summer and winter seasons, or
- (B) Liquid from open-air waste treatment and storage structures shall be sampled at a minimum of once per quarter.
- (2) Monitoring of odor intensity shall be on an annual basis, with alternating years having sampling during the summer and winter seasons.
- (3) Effluent monitoring shall be at a minimum of once per quarter.

History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10I;
Eff. January 1, ~~2009~~2009.
Readopted Eff. September 1, 2018.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1309

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “applies” with “shall apply”

Line 6 – delete the comma

Line 7 – delete “out”

Lines 10, 12, 14, and 16 – do not capitalize “the”

Line 11 – replace “according” with “pursuant”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1309 is readopted with changes as published in 32:06 NCR 587 as follows:

2
3 **15A NCAC 02T .1309 LAGOON CONVERSION REQUIREMENTS**

4 (a) This Rule applies to existing swine animal waste management systems that convert from anaerobic lagoons as the
5 primary method of treatment to an animal waste management system that meets the requirements of Rule .1307 of
6 this Section, and have not expanded the steady-state live weight of the swine farm.

7 (b) Upon approval by the Division, a permittee may abandon and close out an animal waste management system
8 permitted under Rules .1307 and .1308 of this Section and revert to the requirements of Rule .1304 or .1305 of this
9 Section. The Division shall approve the reversion if all of the following criteria are met:

- 10 (1) The animal waste management system is constructed according to the design and specifications
11 approved by the Division according to the rules in this section;
- 12 (2) The animal waste management system is operated and maintained in accordance with the rules in
13 this Section;
- 14 (3) The permit for the anaerobic lagoon animal waste management system issued prior to 1 September
15 2007 pursuant to S.L. 2007-523(1)(b) remains valid; and
- 16 (4) The anaerobic lagoon animal waste management system has been maintained and can operate in
17 compliance with the requirements of its permit.

18
19 *History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10I;*
20 *Eff. January 1, ~~2009~~2009;*
21 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1310

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “applies” with “shall apply”

Line 6 – revise as follows: “... the land. This Rule shall not apply to the treatment, storage, transportation, use, or disposal of:”

Line 8 – add “or” before “Rule .1307”

Line 8 – delete the comma after “Section”

Line 12 – add a comma after “grit”

Line 22 – replace “(i.e., dry weight basis) and;” with “on a dry weight basis; and”

Line 23 – replace “mortality” with “remains” if that is what is meant.

Line 24 – replace “application” with “applicant”

Lines 26, 29, 32, 34, and 36 – do not capitalize the first word on these lines.

Line 26 – delete “shall be provided to the Division by the applicant”

Line 28 – delete the comma

Line 31 – add “the” before “pathogen”

Line 32 – replace “sampling/monitoring” with “sampling and monitoring”

Line 32 – replace “compliance” with “the source will comply”

Line 33 – add a comma after “Rule”

Line 33 – delete “shall be provided to the Division by the applicant”

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

Line 36 – replace “Label/information” with “label or information”

Page 2, line 18 – add “following” before “concentration”

Page 2, lines 18-19 – replace as stipulated in the following (i.e., on a dry weight basis):” with “on a dry weight basis:”

Page 2, line 30-32 – revise as follows: “Animal waste residuals to be applied to a lawn, home garden, or public contact use site or sold or given away in a bag or other container for application to the land shall meet the pathogen requirements of Rule .1106(a)(2) of this Subchapter.”

Page 3, line 33 – add a comma after “container”

Page 3, lines 34 and 37 – replace “label/information” with “label and information”

Lines 35 and 36 – do not capitalize the first word on these lines.

Line 36 – replace “shall be” with “is”

Page 4, lines 1, 3, 5, 7, 9, and 10 – do not capitalize the first word on these lines.

Page 4, line 1 – replace “shall” with “must”

Page 4, line 3 – replace “shall” with “may”

Page 4, line 5 – replace “shall” with “must”

Page 4, line 7 – replace “which” with “that”

Page 4, line 7 – replace “shall” with “must”

Page 4, line 8 – revise as follows: “supply source, including wells, streams, lakes, or rivers;”

Page 4, line 9 – add “the” before “pollutant”

Page 4, line 10 – add “the” before “nitrogen”

Page 4, line 12 – replace “applied” with “that are subject to this Rule”

Page 4, line 12 – delete “as”

Page 4, line 13 – delete “as”

Page 4, line 13 –add a comma after “(d) of this Rule”

Page 4, line 14 – add a comma after “applicable”

Page 4, line 14 – delete “as”

Page 4, line 14 – delete “in the following”

Page 4, line 22 – delete “as”

Page 4, line 23 – add a comma after “annually”

Page 4, line 24 – add “required by this Paragraph” after “records”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1310 is adopted with changes as published in 32:06 NCR 587-589 as follows:

2
3 **15A NCAC 02T .1310 ANIMAL WASTE RESIDUALS MANAGEMENT**

4 (a) This Rule applies to the treatment, storage, transportation, use, and disposal of animal waste residuals to be applied
5 to a lawn, home garden, or public contact use site or sold or given away in a bag or other container for application to
6 the land. Not regulated under this Rule is the treatment, storage, transportation, use, or disposal of:

- 7 (1) animal waste residuals applied to agricultural land in accordance with Rule .1303, Rule .1304, Rule
8 1305, Rule .1307 of this Section, or Rule .1403 of this Subchapter;
- 9 (2) up to four cubic yards of animal waste residuals distributed from a facility subject to regulation
10 under Rule .1303 or Rule .1304 of this Section per visit to individuals for personal use, with a
11 maximum of ten cubic yards per year per individual;
- 12 (3) oil, grease, grit and screenings from wastewater treatment facilities;
- 13 (4) septage from wastewater treatment facilities;
- 14 (5) ash that is regulated in accordance with Section .1200 of this Subchapter;
- 15 (6) residuals that are regulated in accordance with Section .1100 of this Subchapter;
- 16 (7) residuals that are prepared for land application, used, or disposed of in a solid waste management
17 facility permitted by the Division of Waste Management;
- 18 (8) residuals that are disposed of in an incinerator permitted by the Division of Air Quality;
- 19 (9) residuals that are transported out of state for treatment, storage, use, or disposal; ~~and~~
- 20 (10) residuals that meet the definition of a hazardous waste in accordance with 40 CFR 260.10 as adopted
21 by reference in 15A NCAC 13A .0102(b) or that have a concentration of polychlorinated biphenyls
22 equal to or greater than 50 milligrams per kilogram of total solids (i.e., dry weight ~~basis~~ basis) ~~and~~;
- 23 (11) animal mortality.

24 (b) For new and modified sources of animal waste residuals, the application shall submit a permit application in
25 writing to the Division that includes the following:

- 26 (1) Site maps shall be provided to the Division by the applicant depicting the location of the source and
27 demonstrate compliance with siting setbacks applicable to animal waste management systems
28 established in G.S. 106-803, and NRCS standards at the time of construction;
- 29 (2) A complete analysis of the animal waste residuals. The analysis ~~may~~ shall include all pollutants
30 identified in Paragraph (c) in this Rule, nutrients and micronutrients, and proof of compliance with
31 pathogen and vector requirements in Paragraphs (f) and (g) of this Rule if applicable;
- 32 (3) A sampling/monitoring plan that describes how compliance with Paragraphs (c), ~~(f)~~, and ~~(g)~~ (d) of
33 this Rule if applicable shall be provided to the Division by the applicant;
- 34 (4) A marketability statement detailing destinations and approximate amounts of the final product to be
35 distributed; and
- 36 (5) A copy of the label/information sheet that complies with Paragraph ~~(h)~~ (e) of this Rule.

~~(c) Bulk animal waste residuals shall not be applied to a lawn, home garden, or public contact use site nor shall animal waste residuals be sold or given away in a bag or other container for application to the land if the concentration of any pollutant in that residual exceeds the ceiling concentration for that pollutant as stipulated in the following (i.e., on a dry weight basis):~~

Pollutant	Ceiling Concentration
(milligrams per kilogram)	
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

~~(d)(c) Bulk animal~~ Animal waste residuals shall not be applied to a lawn, home garden, or public contact use site nor shall animal waste residuals be sold or given away in a bag or other container for application to the land if the concentration of any pollutant in that residual exceeds the concentration for that pollutant as stipulated in the following (i.e., on a dry weight basis):

Pollutant	Monthly Average Ceiling Concentration
(milligrams per kilogram)	
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2,800

~~(e)(d) The Class A~~ Animal waste residuals shall meet the pathogen requirements of Rule .1106(a)(2) of this Subchapter ~~shall be met when bulk animal waste residuals are~~ to be applied to a lawn, home garden, or public contact use site or sold or given away in a bag or other container for application to the land.

~~(f) For animal waste residuals to be classified as Class A with respect to pathogens, the requirements of Rule .1106(b) of this Subchapter shall be met.~~

~~(g) Animal waste residuals shall not be applied to a lawn, home garden, or public contact use site or sold or given away in a bag or other container for application to the land unless the requirements of one of the vector attraction reduction alternatives have been met. The vector attraction reduction alternatives shall be as follows:~~

- ~~(1) 38 Percent Volatile Solids Reduction. The mass of the volatile solids in the animal waste residuals shall be reduced by a minimum of 38 percent between the time that the animal waste residuals enter the digestion process and the time it is land applied.~~
 - ~~(2) 40 Day Bench Scale Test. A portion of previously anaerobically digested animal waste residuals shall be further anaerobically digested in the laboratory in a bench scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. The volatile solids in the animal waste residuals shall be reduced by less than 17 percent as measured from the beginning to the end of the test.~~
 - ~~(3) 30 Day Bench Scale Test. A portion of previously aerobically digested animal waste residuals shall be further aerobically digested in the laboratory in a bench scale unit for 30 additional days at a temperature of 20 degrees Celsius. The previously aerobically digested animal waste residuals shall either have a concentration of two percent total solids or less or shall be diluted with effluent down to two percent total solids at the start of the test. The volatile solids in the animal waste residuals shall be reduced by less than 15 percent as measured from the beginning to the end of the test.~~
 - ~~(4) Specific Oxygen Uptake Rate Test. The specific oxygen uptake rate (SOUR) for animal waste residuals treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (i.e., dry weight basis) corrected to a temperature of 20 degrees Celsius.~~
 - ~~(5) 14 Day Aerobic Processes. The animal waste residuals shall be treated in an aerobic process for 14 days or longer. During that time the temperature of the animal waste residuals shall be higher than 40 degrees Celsius, and the average temperature of the animal waste residuals shall be higher than 45 degrees Celsius.~~
 - ~~(6) Alkaline Stabilization. The pH of the animal waste residuals shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.~~
 - ~~(7) Drying of Stabilized Residuals. The animal waste residuals shall be dried to 75 percent total solids if the animal waste residuals contain no unstabilized solids from a primary wastewater treatment process. Mixing of the animal waste residuals with other materials shall not be used to meet this alternative.~~
 - ~~(8) Drying of Unstabilized Residuals. The animal waste residuals shall be dried to 90 percent total solids if the animal waste residuals contain unstabilized solids from a primary wastewater treatment process. Mixing of the animal waste residuals with other materials shall not be used to meet this alternative.~~
- ~~(b)(c)~~ For animal waste residuals that are sold or given away in a bag or other container for application to the land, either a label shall be affixed to the bag or other container or an information sheet shall be provided to the person who receives the animal waste residuals. The label/information sheet shall contain the following information:
- (1) The name and address of the person who prepared the animal waste residuals;
 - (2) A statement that land application of the animal waste residuals shall be prohibited except in accordance with the instructions on the label/information sheet;

- (3) A statement that animal waste residuals shall be applied at agronomic rates and recommended rates for intended uses;
- (4) A statement that the animal waste residuals shall not be applied to any site that is flooded, frozen, or snow covered;
- (5) A statement that adequate procedures shall be provided to prevent surface runoff from carrying any disposed or stored animal waste residuals into any surface waters;
- (6) A statement which identifies that this material shall be prevented from entering any public or private water supply source (including wells), stream, lake, or river;
- (7) Pollutant concentration for pollutants listed in Paragraph (c) of this Rule; and
- (8) Nitrogen and phosphorous concentration.

~~(i)(f)~~ Monitoring and Reporting.

- (1) Animal waste residuals applied shall be monitored for pollutants as listed in Paragraph ~~(b)~~(c) of this Rule ~~as well as and for pathogens as described in Paragraph (e)-(d) of this Rule and Paragraph (f) of this Rule~~ as applicable at the frequency as stipulated in the following for each residuals source facility:

Metric Tons per 365 day period (Dry Weight Basis)	Monitoring Frequency
Greater than zero but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once per quarter (four times per year)
Equal to or greater than 1,500 but less than 15,000	Once per 60 days (six times per year)
Equal to or greater than 15,000	Once per month (12 times per year)

- (2) A report of all monitoring and reporting requirements as specified in the permit shall be submitted to the Division by the permittee annually on or before March 1st of each calendar year.
- (3) All records shall be retained for a minimum of five years.

*History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A;
Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1401

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – replace “applies” with “shall apply”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1401 is readopted as published in 32:06 NCR 589 as follows:

2
3 **SECTION .1400 – MANURE HAULER OPERATIONS**

4
5 **15A NCAC 02T .1401 SCOPE**

6 The rules in this Section apply to all manure hauler operations.

7
8 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

9 *Eff. September 1, ~~2006~~2006;*

10 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1402

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 5 – replace “any” with “a”

Line 6 – replace “covered” with “governed”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1402 is readopted as published in 32:06 NCR 589 as follows:

2
3 **15A NCAC 02T .1402 DEFINITIONS**

4 As used in this Section:

5 "Manure Hauler" means any person who accepts or purchases animal waste and land applies the animal waste
6 on land not covered by the generator's permit.

7
8 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

9 *Eff. September 1, ~~2006~~2006;*

10 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1403

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “are” with “shall be”

Line 5 – replace “in” with “by”

Lines 6, 10, 17, and 19 – do not capitalize “Manure Hauler”

Lines 6 and 10 – replace “Hauler” with “haulers”

Lines 8 and 14 – delete “(separation)”

Lines 17 and 19 – replace “Manure Hauler” with “the manure hauler”

Line 17 – delete “must”

Line 18 – replace “register” with “registers”

Line 19 – replace “specified in” with “required by”

Lines 23-24 – why is “Standard Soil Fertility Analysis” capitalized?

Line 24 – replace “Division certified” with “Division-certified”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1403 is readopted with changes as published in 32:06 NCR 589 as follows:

2
3 **15A NCAC 02T .1403 PERMITTING BY REGULATION**

4 (a) The following systems are deemed permitted pursuant to Rule .0113 of this Subchapter provided the system meets
5 the criteria in Rule .0113 of this Subchapter and all criteria required for the specific system in this Rule:

6 (1) Manure Hauler that land apply a total of 100 tons or less of animal waste per calendar year if:

7 (A) animal waste is applied at no greater than agronomic rates; and

8 (B) a ~~setback~~ vegetated buffer (separation) of at least 25 feet is maintained from a perennial
9 stream or perennial waterbody during land application.

10 (2) Manure Hauler that land apply a total of more than 100 tons of animal waste per calendar year if:

11 (A) animal waste is applied at no greater than agronomic rates;

12 (B) animal waste is not stockpiled uncovered for greater than 15 days;

13 (C) animal waste is not stockpiled within 100 feet of a perennial stream or perennial waterbody;

14 (D) a ~~setback~~ vegetated buffer (separation) of at least 25 feet is maintained from a perennial
15 stream or perennial waterbody during land application;

16 (E) ~~the Manure Hauler registers with the Division by one year from the effective date of this~~
17 ~~Rule. Manure Hauler that begin operation following the effective date of this Rule must~~
18 register with the Division prior to accepting or purchasing ~~manure-manure;~~

19 (F) the Manure Hauler submits an annual report, as specified in this Section, to the Division
20 by March 1 of each year; and [keeps records of land application activity including the date,
21 location and amount of all animal waste received, and the date locations, application rate,
22 acreage, waste analysis, and receiving crops of all animal waste land application; and]

23 (G) the field on which animal waste is applied has had a representative Standard Soil Fertility
24 Analysis within the last three years from a Division certified laboratory pursuant to 15A
25 NCAC 02H .0800.

26 (b) The Director may determine that a system should not be deemed permitted in accordance with this Rule and Rule
27 .0113 of this Subchapter. This determination shall be made in accordance with Rule .0113(e) of this Subchapter.

28
29 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*

30 *Eff. September 1, 2006-2006;*

31 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1404

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 5 and 10 – do not capitalize “haulers”

Lines 7, 8, 9, 12, 13, and 14 – do not capitalize the first word on these lines.

Lines 7 and 12 – do not capitalize “manure hauler”

Line 15 – add “that was” before “land”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1404 was proposed for readoption as a repeal as published in 32:06 NCR 589 but instead is readopted
2 with changes as follows:

3
4 **15A NCAC 02T .1404 ANNUAL REPORTS**

5 (a) Manure Haulers that land apply more than 100 tons but less than 750 tons of animal waste per calendar year shall
6 submit to the Division a report of the activities for the calendar year that includes the following:

- 7 (1) Name, mailing address, and phone number of the Manure Hauler;
8 (2) ~~Date,~~ **Dates,** location, and amount of all animal waste received; and
9 (3) ~~Date,~~ **Dates,** location, amount, and acreage of all animal waste land application.

10 (b) Manure Haulers that land apply 750 tons or more of animal waste per calendar year shall submit to the Division
11 a report of the activities for the calendar year that includes the following:

- 12 (1) Name, mailing address, and phone number of the Manure Hauler;
13 (2) Dates, locations, and amounts of animal waste received; and
14 (3) Dates, locations, application rate, acreage, waste analysis, and receiving crop of all animal waste
15 land applied.

16 (c) Annual reports shall be submitted by March 1 for the preceding calendar year, on Division supplied forms or
17 forms approved by the Division as providing the same information as required by the Division's forms.

18
19 *History Note: Authority G.S. 143-215.1; 143-215.3(a);*
20 *Eff. September 1, ~~2006~~ 2006;*
21 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1601

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – add “shall” after “Section”

Line 8 – add “systems shall” before “include”

Lines 8-9 – delete the sentence that begins “Such systems typically...”

Line 9 – replace “does” with “shall”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1601 is readopted as published in 32:06 NCR 590 as follows:

2
3 **SECTION .1600 –GROUNDWATER REMEDIATION SYSTEMS**
4

5 **15A NCAC 02T .1601 SCOPE**

6 The rules in this Section apply to all persons proposing to construct, modify, expand, or operate a groundwater
7 treatment system that extracts and treats contaminated groundwater and reintroduces the treated groundwater. These
8 include closed-loop groundwater remediation systems as defined in G.S. 143-215.1A. Such systems typically use
9 infiltration galleries or injection wells. This Section does not apply to in-situ groundwater remediation wells, as
10 defined by ~~15A NCAC 02C .0209(e)(3)(C)~~, 15A NCAC 02C .0225(a), unless such a system includes the withdrawal,
11 treatment, and reintroduction of the treated groundwater.

12
13 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*

14 *Eff. September 1, ~~2006~~2006;*

15 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1602

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Throughout the Rule – delete “as”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1602 is readopted as published in 32:06 NCR 590 as follows:

2
3 **15A NCAC 02T .1602 DEFINITIONS**

4 The terms used for the purpose of this Section shall be defined as follows:

5 (1) "Closed-loop groundwater remediation system" is as defined in G.S. 143-215.1A.

6 (2) "Contaminant" is as defined in 15A NCAC 02L .0102.

7 (3) "Infiltration gallery" means a subsurface ground absorption system expressly designed for the
8 introduction of wastewater into the subsurface environment.

9 (4) "Injection well" is as defined in 15A NCAC 02C .0204.

10 (5) "Oversight agency" means the state or local agency with jurisdiction over the contamination
11 incident.

12 (6) "Receptor" is as defined in 15A NCAC 02L .0102.

13 (7) "Water table" is as defined in 15A NCAC 02L .0102.

14
15 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*
16 *Eff. September 1, ~~2006~~2006;*
17 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1604

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Throughout this Rule, replace every parenthetical plural (such as "source(s)" or "gallery(ies)") with the simple plural form of the noun ("sources" and "galleries").

Line 6 – replace "must" with "shall"

Line 7 – delete the parentheses and add a comma after "agency"

Line 8 – replace "must" with "shall"

Lines 9-12 – replace the commas with semicolons

Lines 18-19 and elsewhere throughout this Rule – in other rules in this Subchapter, this note has been moved to the end of the Paragraph.

Line 32 – replace "when" with "if"

Line 32 – replace "for evaluation of" with "to evaluate"

Line 34 – add a comma after "constituents"

Page 2, line 19 – replace "(specific yield if unconfined aquifer)" with "including specific yield if an aquifer is unconfined"

Page 2, line 30 – replace ", and" with "; or" if that is what is meant

Page 3, line 5 – add a comma after "storage"

Page 3, line 7 – delete the parentheses

Page 3, lines 7-10 – revise as follows:

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

- (3) the location of all wells, including usage and construction details if available; designated wellhead protection areas; ephemeral, intermittent, and perennial streams; springs; lakes; ponds; other surface drainage features; and other site activities or features that may involve exposure to contamination within 500 feet of all waste treatment, storage, and disposal sites;

Page 3, lines 34-37 and page 4, lines 3-4 – replace all commas with semicolons

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1604 is readopted as published in 32:06 NCR 590 as follows:

2
3 **15A NCAC 02T .1604 APPLICATION SUBMITTAL**

4 (a) Site Description and Incident Information shall be provided by the applicant to the Division including the
5 following:

6 (1) The applicant must identify the site by name, address, permit number, and incident number assigned
7 by the oversight agency (if applicable).

8 (2) The applicant must briefly describe the site, noting pertinent site information including:

9 (A) contaminant(s) of concern,

10 (B) source(s) and date(s) of the contaminant release,

11 (C) remedial actions to date,

12 (D) current land use, and

13 (E) potential receptors.

14 (b) Soils Evaluation. For systems with proposed discharge within seven feet of land surface and above the seasonal
15 high water table, a soil evaluation of the disposal site shall be provided to the Division by the applicant. If required
16 by G.S. 89F, a soil scientist shall submit this evaluation. This evaluation shall be presented in a report that includes
17 the following components:

18 [Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005,
19 that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science under G.S. 89F.]

20 (1) Field description of soil profile. Based on examinations of excavation pits or auger borings, the
21 following parameters shall be described by individual diagnostic horizons to a depth of seven feet
22 below land surface or to bedrock:

23 (A) thickness of the horizon;

24 (B) texture;

25 (C) color and other diagnostic features;

26 (D) structure;

27 (E) internal drainage;

28 (F) depth, thickness, and type of restrictive horizon(s);

29 (G) pH;

30 (H) cation exchange capacity; and

31 (I) presence or absence and depth of evidence of any seasonal high water table.

32 Applicants shall dig pits when necessary for evaluation of the soils at the site.

33 (2) Recommendations concerning annual and instantaneous loading rates of liquids, solids, other
34 wastewater constituents and amendments. Annual hydraulic loading rates shall be based on in-situ
35 measurement of saturated hydraulic conductivity in the most restrictive horizon.

36 (c) Hydrogeologic Evaluation. A hydrogeologic evaluation prepared by a Licensed Geologist, License Soil Scientist,
37 or Professional Engineer if required by Chapters 89E, 89F, or 89C respectively of the disposal site shall be provided

1 to the Division by the applicant. This evaluation shall be conducted to a depth that includes the depth of existing
2 contamination and the total depth of the injection well(s) or infiltration gallery(ies). This evaluation shall be based on
3 borings for which the numbers, locations, and depths are sufficient to define the components of the hydrogeologic
4 evaluation. In addition to borings, other techniques may be used to investigate the subsurface conditions at the site.
5 These techniques may include geophysical well logs, surface geophysical surveys, and tracer studies. This evaluation
6 shall be presented in a report that includes the following components:

7 [Note: The North Carolina Board for Licensing of Geologists, via letter dated April 6, 2006, North Carolina Board
8 for Licensing of Soil Scientists, via letter dated December 1, 2005, and North Carolina Board of Examiners for
9 Engineers and Surveyors, via letter dated December 1, 2005, have determined that preparation of hydrogeologic
10 description documents pursuant to this Paragraph constitutes practicing geology under G.S. 89E, soil science under
11 G.S. 89F, or engineering under G.S. 89C.]

- 12 (1) a description of the regional and local geology and hydrogeology;
- 13 (2) a description, based on field observations of the site, of the site topographic setting, streams, springs
14 and other groundwater discharge features, drainage features, existing and abandoned wells, rock
15 outcrops, and other features that may affect the movement of the contaminant plume and treated
16 wastewater;
- 17 (3) changes in lithology underlying the site;
- 18 (4) depth to bedrock and occurrence of any rock outcrops;
- 19 (5) the hydraulic conductivity, transmissivity, and storativity (specific yield if unconfined aquifer) of
20 the affected aquifer(s);
- 21 (6) depth to the seasonal high water table;
- 22 (7) a discussion of the relationship between the affected aquifers of the site to local and regional
23 geologic and hydrogeologic features; and
- 24 (8) a discussion of the groundwater flow regime of the site focusing on the relationship of the plume
25 and remediation system to groundwater receptors, groundwater discharge features, and groundwater
26 flow media.

27 (d) Demonstration of Hydraulic Control. Computer modeling or predictive calculations based on site-specific
28 conditions shall be provided to the Division by the applicant to demonstrate that operation of the system will not cause
29 or contribute to:

- 30 (1) the migration of contaminants into previously uncontaminated areas, and
- 31 (2) a violation of the groundwater standards at the compliance boundary.

32 (e) Maps and Cross-Sections. If required by G.S. 89C, a professional land surveyor shall provide location information
33 on boundaries and physical features not under the purview of other licensed professions. Site plans or maps shall be
34 provided to the Division by the applicant depicting the location, orientation and relationship of facility components
35 including:

1 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated
2 December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions,
3 on maps pursuant to this Paragraph constitutes practicing surveying under G.S. 89C.]

- 4 (1) a scaled map of the site, with site-specific topographic contour intervals and showing all facility-
5 related structures and fences within the treatment, storage and disposal areas;
- 6 (2) locations of all test auger borings or inspection pits;
- 7 (3) the location of all wells (including usage and construction details if available), designated wellhead
8 protection areas, streams (ephemeral, intermittent, and perennial), springs, lakes, ponds, other
9 surface drainage features, and any other site activities or features that may involve possible exposure
10 to contamination within 500 feet of all waste treatment, storage, and disposal site(s);
- 11 (4) setbacks as required by Rule .1606 of this Section;
- 12 (5) delineation of the property boundary(ies), review boundary(ies), and compliance boundary(ies);
- 13 (6) the horizontal and vertical extent of the contaminant plume for each of the contaminants of concern,
14 including isoconcentration lines and plume cross-sections;
- 15 (7) cross-section(s) depicting soil and rock layers and features to a depth including the depth of existing
16 contamination and the total depth of the injection well(s) or infiltration gallery(ies); and
- 17 (8) hydrologic features such as potentiometric surface / water table contours and the direction of
18 groundwater flow.

19 (f) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents.
20 The following documents shall be provided to the Division by the applicant:

21 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated
22 December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing
23 engineering under G.S. 89C.]

- 24 (1) engineering plans for the entire system, including treatment, storage, application, and disposal
25 facilities and equipment except those previously permitted unless they are directly tied into the new
26 units or are critical to the understanding of the complete process;
- 27 (2) specifications describing materials to be used, methods of construction, and means for ensuring
28 quality and integrity of the finished product; and
- 29 (3) plans that include construction details of recovery, injection, and monitoring wells and infiltration
30 galleries.

31 (g) Operating and Monitoring Plans. An operation and monitoring plan shall be provided to the Division by the
32 applicant. These documents shall be specific to the site and include:

- 33 (1) The operating plan shall include:
 - 34 (A) the operating schedule including any periodic shut-down times,
 - 35 (B) required maintenance activities for all structural and mechanical elements,
 - 36 (C) all consumable and waste materials with their intended source and disposal locations,
 - 37 (D) restrictions on access to the site and equipment, and

1 (E) compliance with Rule .1605(b) of this Section.
2 (2) The monitoring plan shall include:
3 (A) the monitoring well(s) that will be sampled.
4 (B) the constituent(s) for which those samples will be analyzed, and
5 (C) the schedule for sampling.
6
7 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*
8 *Eff. September 1, ~~2006~~2006;*
9 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1605

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Lines 4-5 – replace every parenthetical plural with the simple plural form of the noun

Line 4 – replace “must” with “shall”

Line 5 – replace “shall” with “will”

Line 7 – delete the parenthesis

Line 7 – add “the” before “discharge”

Line 8 - delete the parenthesis

Line 8 – replace “and” with “or” if this is what is meant

Lines 9-10 - delete the parentheses

Line 12 – replace the parenthesis and “e.g.” with “, such as”

Line 13 – delete the parenthesis

Line 14 – replace “Design shall” with “The infiltration galleries and injection wells shall be designed to”

Line 14 – delete “a minimum”

Line 15 – delete “at least”

Line 15 – replace “must” with “shall”

Line 16 – replace “which” with “that”

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1605 is readopted as published in 32:06 NCR 590 as follows:

2
3 **15A NCAC 02T .1605 DESIGN CRITERIA**

4 (a) The infiltration gallery(ies) or injection well(s) must be designed such that the infiltration gallery(ies) or injection
5 well(s) shall not cause or contribute to:

6 (1) the migration of contaminants into previously uncontaminated areas;

7 (2) a violation of the groundwater standards at the compliance boundary (if discharge is within the
8 compliance boundary of the disposal facility); and

9 (3) a violation of the groundwater standards at the point of discharge (if discharge is not within the
10 compliance boundary of the disposal facility).

11 (b) There shall be provisions in the operating plan to ensure the quality of the treated effluent and hydraulic control
12 of the system at all times when any portion of the system ceases to function (e.g. standby power capability, complete
13 system-off status, or duplicity of system components).

14 (c) Design shall include a minimum elevation protection of two feet above the 100-year flood elevation.

15 (d) Flow equalization of at least 25 percent of the facility's permitted hydraulic capacity must be provided for facilities
16 with fluctuations in influent flow which may adversely affect the performance of the system.

17
18 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*

19 *Eff. September 1, 2006-2006;*

20 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1606

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “gallery” with “galleries”

Lines 4-6 – replace every parenthetical plural with the simple plural form of the noun

Line 4 – replace “must” with “shall”

Line 5 – delete the comma

Line 7 – delete the comma

Line 8 – replace the parentheses with commas

Line 8 – replace “are” with “shall be”

Lines 10, 12, and 15 – replace “any” with “a” or “each”

Line 11 – if the parenthetical lists examples, revise as follows: “Surface waters such as intermittent and perennial streams, perennial waterbodies, and wetlands” If the parenthetical is an exclusive list, revise as follows: “Intermittent and perennial streams, perennial waterbodies, and wetlands”

Lines 13 and 14 – replace the parentheses and “e.g.” with “, such as”

Line 18 – delete the parentheses

Line 19 – if the parenthetical lists examples, revise as follows: “Surface water diversions such as ephemeral streams, waterways, and ditches” If the parenthetical is an exclusive list, revise as follows: “Ephemeral streams, waterways, and ditches”

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

Jason Thomas
Commission Counsel

Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1606 is readopted as published in 32:06 NCR 590 as follows:

2
3 **15A NCAC 02T .1606 SETBACKS**

4 The location of the infiltration gallery or injection well(s) must meet the setback requirements specified below unless
5 it can be demonstrated that these requirements cannot be met, and that operation of the infiltration gallery(ies) or
6 injection well(s) at the proposed location(s) will not result in the migration of contaminants into previously
7 uncontaminated areas, and a contravention of groundwater standards beyond the compliance boundary. The following
8 setbacks (in feet) are applicable to these systems:

any well with the exception of an approved groundwater monitoring well	100
surface waters streams – intermittent and perennial, perennial waterbodies, and wetlands)	100
any property under separate ownership	50
structures – above-ground (e.g. buildings, retention walls)	10
structures – subsurface (e.g. utilities, basements, swimming pools)	15
any water line	10
rock outcrops	50
top of slope of embankments or cuts of two feet or more in vertical height	15
groundwater lowering ditches (where the bottom of the ditch intersects the SHWT)	100
surface water diversions (ephemeral streams, waterways, ditches)	25
subsurface groundwater lowering drainage systems	100

21
22 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*
23 *Eff. September 1, ~~2006~~2006;*
24 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1607

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 4 – replace “monitoring system” with “system monitoring”

Lines 7 and 9 – replace the commas with semicolons

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1607 is readopted as published in 32:06 NCR as follows:

2
3 **15A NCAC 02T .1607 MONITORING AND REPORTING REQUIREMENTS**

4 (a) A monitoring system plan shall be established to assess the impact of the discharge on groundwater quality. The
5 monitoring plan shall:

6 (1) be based on reaction rates, discharge rates, likelihood of secondary impacts, and site-specific
7 hydrogeologic information.

8 (2) track the performance of the permitted remediation system and verify that the intended remediation
9 processes are occurring, and

10 (3) include water level and flow meter measurements to ensure the system is operating properly.

11 (b) All sampling results shall be reported by the permittee to the Division on a frequency determined by the reaction
12 rates, discharge rates, likelihood of secondary impacts, and site-specific hydrogeologic information.

13 (c) A report of the summarized results of related groundwater, influent, and effluent monitoring shall be submitted
14 by the permittee to the Division annually.

15
16 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*

17 *Eff. September 1, 2006-2006;*

18 *Readopted Eff. September 1, 2018.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02T .1608

DEADLINE FOR RECEIPT: Friday, August 10, 2018

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

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

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

Line 6 – replace “reason(s)” with “reasons”

Lines 6, 7, and 10 – replace the commas with semicolons

Line 18 – delete the comma

Line 19 – add a comma after “facual”

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

Jason Thomas
Commission Counsel
Date submitted to agency: Tuesday, July 31, 2018

1 15A NCAC 02T .1608 is readopted as published in 32:06 NCR 590 as follows:

2
3 **15A NCAC 02T .1608 REQUIREMENTS FOR CLOSURE**

4 (a) 30 days prior to initiation of closure of a groundwater remediation system, the permittee shall submit the following
5 documentation to the Division:

- 6 (1) the reason(s) for closure,
7 (2) a letter from the oversight agency authorizing closure of the system, and
8 (3) a description of the proposed closure procedure.

9 (b) The following closure procedures shall be followed:

- 10 (1) injection well closure procedures as specified in 15A NCAC 02C .0214, and
11 (2) infiltration galleries shall be closed such that the infiltration gallery will be rendered permanently
12 unusable for the disposal or infiltration of fluids and will not serve as a source or channel of
13 contamination.

14 (c) Within 30 days following upon completion of the closure of a groundwater remediation system, the permittee
15 shall submit the following documentation to the Division:

- 16 (1) a description of the completed closure procedure;
17 (2) the dates of all actions taken relative to the procedure; and
18 (3) a written certification that the closure has been accomplished, and that the information submitted is
19 complete, factual and accurate.

20
21 *History Note: Authority G.S. 143-214.2(b); 143-215.1; 143-215.1A;*
22 *Eff. September 1, ~~2006~~2006;*
23 *Readopted Eff. September 1, 2018.*