Regulatory Impact Analysis
Proposed Amendments and Rule Readoption
15A NCAC 13B Section .0800 Septage Management

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Basic Information

Commission:	Environmental Management Commission (Groundwater and Waste Management Committee)
Agency	Department of Environmental Quality, Division of Waste Management, Solid Waste Section
Title	Septage Management
Citations	15A NCAC 13B .0830 - .0846
Description of the Proposed Rules	It is the responsibility of the Division of Waste Management to regulate how solid waste is managed within the state under the statutory authority of the Solid Waste Management Act, Article 9 of Chapter 130A of the General Statutes; specifically, G.S. 130A-291.1 for septage management. Rules 15A NCAC 13B .0830 - .0846 collectively establish standards for the transportation, storage, treatment, and disposal of septage; operator registration and training; the issuance, suspension, and revocation of permits; and procedures for the payment of annual fees.
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Authority	G.S. 130A-291.1; G.S. 150B-21.3A
Statement of Necessity	Rules .0831 - .0846 are proposed for readoption in accordance with G.S. 150B-21.3A. Rule .0830 is proposed for amendment to make some clarifying changes and updates.
Impact Summary	State government: No Local government: No Substantial impact: No
Acronyms	EMC: Environmental Management Commission GWWMC: Groundwater and Waste Management Committee RRC: Rules Review Commission OAH: Office of Administrative Hearings SLAS: Septage Land Application Site SDTF: Septage Detention and Treatment Facility NC DACS: NC Department of Agriculture and Consumer Services DSWC: NC DACS Division of Soil and Water Conservation

Rule Summary and Reason for Rule Changes

It is the responsibility of the Division of Waste Management (Division) Solid Waste Section (Section) to regulate how solid waste is managed within the state under the statutory authority of the Solid Waste Management Act, Article 9 of Chapter 130A of the General Statutes. State rules governing solid waste management are found in Title 15A, Subchapter 13B of the North Carolina Administrative Code. Rules adopted under the authority of 130A-291.1 which govern the management of septage are found in Subchapter 13B, Rules .0830 - .0846 *Septage Management.*

In accordance with G.S. 150B-21.3A, the report of final determinations for the review of rules in Subchapter 13B became effective June 24, 2017. The final determinations for the rules in Section .0800 were necessary with public interest, except that Rule .0830 was necessary without public interest effective June 24, 2017. The rules determined to be necessary with substantive public interest (Rules .0831 - .0846) are proposed for readoption pursuant to G.S. 150B-21.3A, and are required to be readopted by the deadline established by the RRC of April 30, 2021. Rule .0830 is being proposed for amendment to update addresses and make clarifications. The proposed rule text is included in Appendix 1. The proposed rule-making schedule is as follows:

Date	Action
5/9/2018	GWWMC Meeting: Approval of proposed text to go to EMC.
7/12/2018	EMC Meeting: Approval of rule text and impact analysis for public comment.
7/25/2018	Submit rule text to OAH for publication in NC Register.
8/15/2018	Rules published in NC Register and Agency website; Comment Period Begins.
8/30/2018	Earliest date for public hearing.
10/15/2018	Comment Period Ends.
11/8/2018	EMC Meeting: Approval of Hearing Officer's Report and Adoption of Rules.
11/20/2018	Submit text and forms to OAH
12/20/2018	RRC meeting: Approval of rule text
1/1/2019	Earliest effective date for rules.

Interested or Affected Parties

The parties who may have an interest in Subchapter 13B Section .0800 rules for septage management which are proposed for amendment and readoption are as follows:

Septage Management Permitted Facilities:
The following is a list of open/active (in April 2018) septage management permits issued by the Division that are open/active as of April 2018 which make up the current regulated community for septage management:

540 Septage Management Firm Permits (firms with trucks used to pump and transport septage).
117 Septage Land Application Site Permits.
186 Septage Detention and Treatment Facility Permits.

State Agencies:
DEQ DWM Solid Waste Section Environmental Compliance Branch staff that issue permits and provide regulatory compliance, enforcement, and technical assistance for permitted septage management firms, septage land application sites, and septage detention and treatment facilities; and take enforcement action against unpermitted septage management and/or illegal dumping of septage.

Local Governments:
Local Governments that approve zoning of septage management facilities.
Local Government wastewater treatment plants that accept septage waste.

Citizens of North Carolina:
Citizens who hire septage management firms to pump their septic tanks.
Citizens who live near septage land application sites or septage detention and treatment facilities.
Citizens who share the road with septage firm pump trucks.
Citizens who are affected by the unpermitted dumping or disposal of septage, and/or poorly managed permitted septage management facilities.

Comments which were received during or following the public comment period for the Periodic Review of Existing Rule Reports are included in Appendix 2.

Impact Summary

Pursuant to G.S. 150B-21.3A(d)(2), if a rule is readopted without substantive change or if the rule is amended to impose a less stringent burden on regulated persons, the agency is not required to prepare a fiscal note as provided by G.S. 150B-21.4. Also, pursuant to G.S. 150B-21.4(d), if an agency proposes the repeal of an existing rule, the agency is not required to prepare a fiscal note on the proposed rule change as provided by this section. Throughout 13B Section .0800, Federal and State Department and Division titles, addresses, and website information have been updated to current information, and other changes have been made for technical corrections, clarifications, or to remove unnecessary or redundant language. The Division is also proposing that the order of the Rules in this Section be rearranged, so that the rules for each permit type are grouped together and can easily be referenced depending on the type of permit (septage firm, land application sites, and treatment and detention sites). However, for ease of review, this proposed change of order and citations *is not* being included or addressed in this analysis. Following is a summary of the impacts of the proposed substantive changes.

Rule .0830 Incorporation by Reference

Paragraph (b):
Benefit: The proposed amendment clarifies which agency's test methods are being incorporated by reference.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0831 Definitions

Multiple definitions are proposed to be amended to directly reference the statutes which contain the definitions for these terms, or are proposed to be removed because the term is defined in statute or in 15A NCAC 13B Rule .0101 Definitions, which apply to the entire Subchapter.

Paragraph (14):
Benefit: The proposed amendment revises the definition for "seasonal high water table" to make the wording consistent with definitions in other Subchapters in Title 15A; however the amendment is not a substantive change, and does not change any requirements regarding the seasonal high water table.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (15):
The proposed amendment references the statute definition of septage. The additional language requiring that washings from the interior of containers being managed as septage was moved to Rule .0832(h).

Paragraph (20):
Benefit: The proposed amendment removes the definition for "Technical Specialist" as this term would no longer be used in Section .0800 if the proposed amendments are adopted.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0832 General Provisions

Paragraph (a)(8):
Benefit: The proposed amendment allows SLAS or SDTF permits issued after the initial permit to be valid for up to five years. This change gives the Division the ability to assist the applicant in customizing the length of their permit if needed. The proposed amendment also removes the requirement that the permit holder has not had a major violation and maintained records in accordance with the Section to renew their permit. This language is not necessary as G.S. 130A-23 allows for the suspension or revocation of permits for non-compliance.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (d)(4):
Benefit: The proposed amendment clarifies what the paint filter test is and where information can be found, to be consistent with similar language in paragraph (d)(5) of this rule.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (d)(5):
Benefit: The proposed amendment updates the website address and removes as unnecessary the requirement that the landfill operator provide written documentation that septage will be accepted, as a landfill permit would contain information on what types of waste they can accept.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (h):
Benefit: This paragraph is proposed to be removed as it is unnecessary, and is proposed to be replaced with a requirement that washings from containers be managed as septage. The requirement is proposed to be added here to replace the requirement which is proposed to be removed from the definition of "septage" in existing Rule .0831(15), because "septage" is a term defined in statute.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0833 Septage Management Firm Permits

Paragraph (c)(13):
Benefit: The proposed amendment clarifies what is meant by "technical information". The intention of requiring "technical information" was to require any firm who has unforeseen equipment or processes outside of the "normal" or that is designed to function in a way that is not typical of pump trucks (often an improvement or more advanced system) to submit information regarding the specifications or operation of that vehicle to provide the Division with a record of the alternative operations of that firm. The proposed language is intended to clarify the requirement to allow the Division to request this type of additional information pertinent to the firm's operations that cannot be anticipated or specified in the rule.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0834 Permit Fees

No fiscal note is required for this rule change as no substantive changes are being proposed in readoption.

Rule .0835 Septage Land Application Site Permits

Paragraph (a):
Benefit: The proposed amendment clarifies what is meant by "his land" to be consistent with existing permit requirement language in Rule .0201(b) of Subchapter 13B.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (c)(6):
Benefit: The proposed amendment removes the photo scale requirement on the aerial photographs required to be submitted with the application as it is unnecessary. With the online availability of GIS mapping and current satellite imagery, the photo scale is generally no longer relevant. This change reduces the burden on the regulated community and is similarly proposed for amendment throughout Section .0800 of Subchapter 13B.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (c)(7):
Benefit: The proposed amendment clarifies that the alternative disposal sites may be used during any conditions which make the site unavailable for use, instead of the possible interpretation in existing rule that they can only utilize the plan for alternative disposal sites during times of adverse

weather. This amendment does not change the plan submittal requirements on the part of the owner or operator, as the alternative disposal sites should be able to remain the same under the broader set of circumstances, so the plan would not need to be revised because of this amendment. The purpose of the amendment is only to allow the site owners or operators to use their alternative sites, if needed, under a broader set of circumstances.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraphs (c)(12) and (c)(12)(K):
The proposed amendment to the introductory sentence to Paragraph (c)(12) and to Subparagraph (c)(12)(K) of this Rule removes the requirement that all nutrient management plans be prepared by a Technical Specialist as defined in existing Rule .0831(20), and replaces it with the requirement that the plan be prepared by an environmental professional, as defined in the proposed amendment added as the last two sentences of Paragraph (c)(12) of this Rule. The reason for the removal of the requirement is that the definition of Technical Specialist in Rule .0831(20) references certification pursuant to rules adopted by the Soil and Water Conservation Commission; however, the Department of Agriculture which provides the training and certification in accordance with the Soil and Water Conservation Commission's rules does not provide training or certification for septage waste specifically, therefore this certification cannot be directly applied nutrient management plans developed for septage waste. The Technical Specialists referred to in existing rule are generally state government employees within the Department of Agriculture's Division of Soil and Water Conservation. As the proposed rule would no longer specifically require a Technical Specialist to prepare the plan, but would allow any professional with the stated minimum level of education and training, this amendment allows for additional options for plan preparation and reduces the burden on the regulated community in finding the appropriate specific individual to prepare the plan.

Paragraph (c)(12)(A):
Benefit: The proposed amendment removes the scale requirement for aerial photographs or plat maps submitted with the nutrient management plan as it is unnecessary. With the online availability of GIS mapping and current satellite imagery, the photo scale is generally no longer relevant.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (c)(12)(G):
Benefit: The proposed amendment clarifies the types of septage included in this requirement, so that it would not be misinterpreted to include domestic septage that has not been treated, or to exclude grease septage.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (c)(20):
Benefit: The proposed amendment clarifies what is meant by "technical information" in existing rule. The intention of requiring "technical information" was to require any firm who has unforeseen equipment or processes outside of the "normal" or that is designed to function in a way that is not typical of septage land application sites (often an improvement or more advanced system) to submit information regarding the specifications or operation of that vehicle to provide the Division with a record of the alternative operations of that site. The proposed language is

intended to clarify the requirement to allow the Division to request this type of additional information pertinent to the site's operations that cannot be anticipated or specified in the rule.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraphs (c)(24) and (l):
Benefit: The proposed amendment in Paragraph (c)(24) states that the applicant needs to include a copy of their zoning approval letter with their permit application, to replace the requirement that zoning approval must be obtained in Paragraph (l) of existing rule, which is proposed to be removed. Since existing language requires that zoning approval be obtained, the only change is to include this approval documentation with permit application.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

<u>Rule .0836 Septage Detention and Treatment Facility Permits</u>

Paragraph (a):
Benefit: The proposed amendment clarifies what is meant by "his land" to be consistent with existing permit requirement language in Rule .0201(b) of this Subchapter.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (c)(9):
Benefit: The proposed amendment removes the scale requirement for aerial photographs or plat maps submitted with the nutrient management plan as it is unnecessary. With the online availability of GIS mapping and current satellite imagery, the photo scale is generally no longer relevant.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (c)(11):
Benefit: The proposed amendment clarifies what is meant by "technical information" in existing rule. The intention of requiring "technical information" was to require any facility who has unforeseen equipment or processes outside of the "normal" or that is designed to function in a way that is not typical of septage detention and treatment facilities (often an improvement or more advanced system) to submit information regarding the specifications or operation of that facility to provide the Division with a record of the alternative operations of that site. The proposed language is intended to clarify the requirement to allow the Division to request this type of additional information pertinent to the facility's operations that cannot be anticipated or specified in the rule.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraphs (c)(12) and (u):
Benefit: The proposed amendment in Paragraph (c)(12) states that the applicant needs to include a copy of their zoning approval letter with their permit application, to replace the requirement that zoning approval must be obtained in Paragraph (u) of existing rule, which is proposed to be removed. Since existing language requires that zoning approval be obtained, the only change is to include this approval documentation with permit application.

Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (e)(4):
The proposed amendment adds the requirement that the operation and maintenance manual for treatment facilities include information and instruction on how the facility will meet the requirement established in Rule .0841(g) that the facility control or minimize odors from the facility.
Benefit: The proposed amendment provides clarification to Division staff and to the regulated community as to how odors will be minimized in the initial application stage of permitting.
Cost: The facility is required in existing rule to control odors, so this amendment adds only the requirement that a brief description of the steps the site will take to minimize odors be added to the operation manual when submitting to the Division. State government staff review time is unlikely to be increased since the description would be brief and would not require additional verification or research; and it is not expected that this description would create any additional amount of compliance action, since any action on odors would already have been occurring under the existing rule requirement to control odors. Therefore, no costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (f)(5):
Benefit: The proposed amendment clarifies what is meant by “acceptable compliance history” in existing rule.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (l):
Benefit: The proposed amendment clarifies what is meant by the term “certified” in existing rule, to state that certification of engineering design documents must be certified by a professional engineer if required by G.S. 89C.
Cost: As this is an existing requirement in G.S. 89C, and the addition of the language to this paragraph only makes a clarification and references the statute, no costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

<u>Rule .0837 Location of Septage Land Application Sites</u>

Paragraph (c):
Benefit: The existing language is proposed to be removed as unnecessary as failure to comply with the rules would result in normal Division procedures for enforcement and compliance, including possible permit suspension or revocation as allowed for in G.S. 130A-23.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (d)(2):
Benefit: The proposed amendment clarifies that a buffer exception applies to buildings related to the septage firm business, not strictly the office.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (h):
Benefit: The proposed amendment updates a reference to a CFR.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0838 Management of Septage Land Application Sites

Paragraph (a)(2):
Benefit: The proposed amendment changes the existing requirement that the No Trespassing signs must be a specific minimum size of 2 feet by 2 feet, and proposes that they only need to be visible and legible, which reduces the burden on the regulated community.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (a)(10):
Benefit: The proposed amendment clarifies what is meant by "clearly marked on the ground" to reflect the Division's interpretation in practice that a clearly marked boundary means a boundary with markers placed such that, when standing at one marker, the next marker is visible.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (a)(14) of existing rule:
Benefit: The proposal to remove Paragraph (a)(14) of existing rule is a result of the fact that the concern or intent is to regulate the quality of the grease septage to avoid damage to vegetation when applied, and not necessarily the length of time it is left in the grease trap. However, grease septage treatment standards to ensure quality and avoid damage to vegetation are included in the subsequent subparagraph, and in paragraph (c) of this Rule.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (a)(20) of existing rule:
Benefit: The proposal to remove Paragraph (a)(20) of existing rule is a result of the fact that this requirement is redundant as the requirement for an alternate disposal location is already included in the permit application requirements in Rule .0835(c)(7).
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraphs (e)(2) and (e)(4) of existing rule:
Benefit: The requirement in Paragraph (e)(4) of existing rule that test results be maintained is proposed to be removed from this Paragraph and added to Paragraph (e)(2).
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (g):
Benefit: Paragraph (g) of existing rule is proposed to be removed as this requirement is proposed to be included in Rule .0842 for innovative or alternative treatment or storage methods.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0839 Record Keeping for Septage Management Firms

Benefit: The proposed amendment clarifies that the location information for portable toilets may be provided as a route, since they do not have a permanent location.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0840 Sampling and Analysis

No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment since the proposed amendments are clarification only and are not substantive.

Rule .0841 Standards for Septage Detention and Treatment Facilities

Paragraph (a):
Benefit: The proposed amendment clarifies that the size requirement for all septage detention facilities used at land application sites be two percent of the maximum application rate and combines the requirements in existing rule Paragraphs (a) and (b). This changes the language for determining the minimum tank size for sites applying less than 50,000 gallons per year, however, the existing language stating that it be based on the "average volume of septage pumped per week" is unclear and may be able to be interpreted in various ways. However, in practice, the Division has calculated the per-week average volume by dividing the site's maximum annual application rate by 52 weeks per year, which equates to being approximately 1.9% of the maximum annual application rate. Therefore, the proposed language does not change the minimum tank sizes in practice, but makes clear how the value shall be derived.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (b):
The proposed language for paragraph (b) requires that all facilities have an all-weather access road to be consistent with similar language for land application sites in existing Rule .0838(a)(3), and to allow facilities to achieve compliance with Rule .0832(g)(1) and (g)(3). As septage land application sites are required to have all weather access roads in existing rule, and the majority of septage detention and treatment facilities are located either adjacent to an existing state or local road, accessible parking area, or on septage land application sites with existing all weather access roads, the Division expects that all operators of septage detention tanks would comply with the proposed rule without any required changes to their operation. Additionally, all facilities are required by existing rule to allow a representative to inspect and facilities or equipment, which would in practice require that the tanks be accessible at any time and in any weather. Also, logically in practice any operator of a detention tank would already need to have a road that allowed them to access the tank in any weather with a truck hauling septage in order to operate their business. Based on the above information, this additional language is for clarification and is not expected to have a substantial impact, and would not have an impact on state or local governments as these sites are owned and operated by private entities.
Benefit: The benefits of the proposed language are that the requirement would allow facilities to achieve compliance with Rule .0832(g)(1) and (g)(3) for accessibility during inspections. The proposed requirement would also reduce damage to vehicles accessing the tanks, allow continued operation of the business when the path to access the tank may have been inaccessible under

existing rule, and reduce the occurrence of vehicles becoming stuck and potentially having to unload a full tank of septage to reduce the weight of the vehicle while trying to move it.
Cost: While no costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment, if a septage detention tank operator were required to put in a new all-weather access road to the tank to comply with this proposed rule, the following costs might be incurred:

Assumptions:

- There are 186 active permits for septage detention tanks
- Approximately 81 of these sites are located on an SLAS, and are required by existing rule to have an all-weather access road
- A review of aerial imagery of the remaining 105 sites indicated that they all appear to have existing access roads of some kind, and the large majority of these sites clearly have all-weather access roads such as paved or gravel roads. Approximately 20-30 sites were unclear as to the type of road on site based on satellite imagery.
- Assume cost to install basic gravel road on a flat surface without complications is $10.00 to $12.00 per foot, based on inquiry with road construction industry staff.
- As the sites would not be installing a new road, but only improving an existing road, assume a reduced cost per foot of $7.00 - $9.00.
- Assume length of roads may be between 250 feet and 1,000 feet long.
- Estimate that approximately 20 -30 sites may need to improve their access roads as a result of this rule change as a worst-case scenario.

Table 1 – Possible Costs of One-Time Road Improvements; Although not Expected to Occur

SDTF permits		Per foot cost for road improvement		Length of road		Potential Statewide Total Cost
20	X	$7.00	X	250	=	$35,000
20	X	$9.00	X	1,000	=	$180,000
30	X	$7.00	X	250	=	$52,500
30	X	$9.00	X	1,000	=	$270,000

Based on the information in Table 1, the costs for the proposed language range from no cost if all septage detention tanks are currently accessible by an all-weather access road, or may be as high as $270,000 if up to 30 sites which could not be confirmed as having an existing all-weather access road were required to improve a road that is 1,000 feet long at $9.00 per foot, which is unlikely to be the case. If required, the cost to improve the road would be a one-time cost, but could potentially also incur annual maintenance costs for sites that had to improve their roads, although this amount is uncertain and would vary on a case-by-case basis depending on use of the road. However, the maintenance cost could be offset by a reduction in vehicle maintenance costs for the facility or any other staff or individuals taking vehicles onsite; or by income added for days that the tank would now be accessible for conducting septage pumping and storage operations, when it previously was not accessible under existing rule.

Paragraph (c):
Benefit: The proposed amendment adds plastic as an acceptable construction material for tanks. This provides the regulated community a potentially less expensive option for tank construction amendment which reduces the burden on the regulated community.

Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (g):
Benefit: The proposed amendment clarifies what is meant by "control" odors.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (h):
Benefit: The proposed amendment clarifies who determines whether groundwater monitoring wells are required, and what is meant by "if necessary".
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (m)(1):
Benefit: The proposed amendment allows an exception to the tank buffer requirement for places of business that are a part of the septage firm business, similar to the exception in Rule .0837(d)(2).
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (n):
Benefit: The proposed amendment clarifies what is meant by "setbacks shall be maintained" to be consistent with similar language for maintaining setbacks in Rule .0837(c).
Costs: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (o):
Benefit: The proposed amendment clarifies that the setback shall be increased to twice the minimum distance unless the listed circumstances dictate that it must be less, which will be determined by the Division.
Costs: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment as the amendment only clarifies the rule to state what is currently being done in practice.

Paragraph (r) in existing rule:
Benefit: This Paragraph is proposed to be removed as it is unnecessary and was rarely practical to enforce, which reduces the burden on the regulated community. The Paragraph has been replaced with the requirement to maintain records for detention and treatment facilities to be consistent with similar language for records retention in Rule .0838(e) for land application sites and Rule .0839(b) for firms. This would not be considered a new requirement since any septage detention and treatment facility is also required to have a septage management firm permit, and is required by existing rule to maintain records in accordance with Rule .0839.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (t):
Benefit: The proposed amendment clarifies the information that is required to be submitted to the Division for facility closure, instead of referring to a form. However, the form will remain

available on the Division's website to download and fill out for ease of submittal of the required information.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0842 Innovative or Alternative Treatment or Storage Methods

Benefit: The proposed amendment clarifies that the rule applies to any alternative septage management methods for treatment, storage, or land application, and includes the reference to alternative methods or land application found in existing rule Paragraph .0838(g) which is proposed to be removed.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Rule .0843 Land Application Site Land Use and Site Closure

The proposed amendment to the name of the rule clarifies what type of septage management the rule applies to.

Paragraph (a):
Benefit: The proposed amendment provides further clarification as to what type of site and the situation that the rule applies to.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment.

Paragraph (d):
Benefit: The proposed amendment clarifies how notification shall be provided and what information shall be included.
Cost: No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment as the amendment clarifies in rule what is currently being done in practice.

Rule .0844 Transportation of Septage

No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment as the proposed amendments are all for clarification and do not change the requirements on the regulated community.

Rule .0845 Revocation of Permits

No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule repeal as it is unnecessary because G.S. 130A-23 provides for the authority of the Division to suspend or revoke permits.

Rule .0846 Appeals

No costs to the state or local government or the regulated community are expected to be incurred as a result of the rule amendment as no substantive changes are proposed.

Conclusion

Based on the above, none of the proposed rule amendments to 15A NCAC 13B Section .0800 Septage Management are expected to affect expenditures or revenues of any local government or the expenditure or distribution of State funds.

Also based on the above, the only potential impact to the regulated community and the public from the proposed rule amendments to 15A NCAC 13B Section .0800 Septage Management is from the amendment to Rule .0841(b) requiring an all-access road for septage detention and treatment facilities, and while any impact is unlikely and is not expected, any potential impact would not cause an aggregate annual impact to all affected parties of greater than or equal to one million dollars.

APPENDIX 1
Proposed Amendments
15A NCAC 13B Section .0800 Septage Management

15A NCAC 13B .0830 is proposed for amendment as follows:

15A NCAC 13B .0830 INCORPORATION BY REFERENCE

(a) All Sections of the Code of Federal Regulations (CFR) cited in this Section are hereby incorporated by reference, including subsequent amendments or ~~additions.~~ additions, and may be obtained free of charge at https://www.gpo.gov/fdsys/.

(b) ~~Copies of Federal statutes,~~ US Environmental Protection Agency (EPA) and American Society for Testing Materials (ASTM) test methods and procedures, and other published standards referenced in this Section are hereby incorporated by reference, including subsequent amendments or additions.

(c) Copies of all material incorporated by reference are available for inspection at the Department of Environmental Quality ~~Environment and Natural Resources,~~ Division of Waste Management, Solid Waste Section, 217 West Jones Street, Raleigh, N.C. 27603 or the Division's website at https://deq.nc.gov/about/divisions/waste-management.~~401 Oberlin Road, Raleigh, N.C. 27699-1646.~~

~~(d) Material incorporated by reference in the Federal Register may be obtained at Government Institutes, 15200 NBN Way, Blue Ridge Summit, PA 17214 at a cost of one thousand five hundred sixty seven dollars and fifty cents ($1,567.50). Federal Register materials are codified once a year and may be obtained at the above address for a cost of: 40 CFR 190-259 thirty-nine dollars and seventy-five cents ($39.75), 40 CFR 425-699 sixty dollars and seventy five cents ($60.75) or at http://www.gpoaccess.gov/cfr.~~

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, 2009;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. June 24, ~~2017.~~2017;
Amended Eff. January 1, 2019.

15A NCAC 13B .0831 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0831 DEFINITIONS

In addition to the terms defined in G.S. 130A-290, as used in this Section the following terms are defined as follows:~~have the following meanings:~~

(1) "Agronomic rates" ~~are defined as~~ means those rates that provide the nitrogen and other nutrient needs of the crop based on available realistic yield expectations (RYE) established for a soil series through published Cooperative Extension Service bulletins, Natural Resources Conservation Service ~~publications~~publications, or county soil surveys, but do not overload the soil with nutrients or other constituents ~~which~~ that may eventually leach to groundwater, limit crop growth, or degrade ~~adversely impact~~ soil quality.

(2) "Annual septage application rate" means the maximum amount, in gallons, of septage that ~~can~~ may be applied to a unit area of land during a 365-day period.

~~(3) "CFR" means Code of Federal Regulations.~~

~~(4) "Department" means Department as defined in G.S. 143-212.~~

~~(5) "Division" means the Division of Waste Management in the Department. All rules cited in this Section, under the authority of the Division, may be obtained at 401 Oberlin Road, Raleigh, North Carolina 27604, or at the Division's web page at www.wastenotnc.org.~~

(6) "Land application" ~~shall mean~~ means the spraying or spreading of septage onto the land surface; the injection of septage below the land surface; or the incorporation of septage into the soil so that the septage ~~can condition~~ conditions the soil or ~~fertilize~~ fertilizes crops or vegetation grown in the soil.

(7) "Licensed Geologist" means licensed geologist as defined in G.S. 89E-3.~~an individual who is licensed to practice geology in accordance with G.S. 89E.~~

(8) "Nutrient Management Plan" means a plan to define the management requirements and nutrient needs of crops to be grown on a septage land application site, including the amount, sources, ~~placement~~placement, and timing of nutrient applications to maximize the nutrient uptake of the crop. Plan implementation shall protect the environment and maintain crop productivity.

(9) "Place of business" means place of business as defined in G.S. 130A-334. ~~any store, warehouse, manufacturing establishment, place of amusement or recreation, service station, food handling establishment, office, or any other place where people work or are served.~~

(10) "Place of public assembly" means place of public assembly as defined in G.S. 130A-334. ~~any fairground, auditorium, stadium, church, campground, theater, school, or any other place where people gather or congregate.~~

(11) "Professional Engineer" means professional engineer as defined in G.S. 89C-3.~~an individual who is licensed to practice engineering in accordance with G.S. 89C.~~

(12) "Residence" means residence as defined in G.S. 130A-334. ~~any habitable home, hotel, motel, summer camp, labor work camp, mobile home, dwelling unit in a multiple-family structure, or any other place where people reside.~~

(13) "Rock" means the consolidated or partially consolidated mineral matter or aggregate, including bedrock or weathered rock, not exhibiting the properties of soil.

(14) "Seasonal High Water Table" or "SHWT" ~~is~~ means the highest level of the saturated zone in the soil during a year with normal rainfall. ~~to which the soil is saturated, as~~ SHWT may be determined in the field through identification of redoximorphic features in the soil profile, monitoring of the water table elevation, or modeling of predicted groundwater elevations.~~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.~~

(15) "Septage" means septage as defined in G.S. 130A-290(a)(32).~~130A-290(a)(32) and also shall include washings from the interior of septage handling containers, including pumper trucks.~~

(16) "Septage Management Facility" means land, personnel, and equipment used in the management of septage, including ~~but not limited to,~~ septage management firms as defined in G.S. 130A-290(a)(33), septage detention and treatment facilities, and septage land application sites.

(17) "Soil" means the unconsolidated mineral and organic material of the land surface. It consists of sand, silt, and clay minerals and variable amounts of organic materials.

(18) ~~"Soil~~ "Licensed Soil Scientist" means licensed soil scientist as defined in G.S. 89F-3. ~~an individual who is licensed to practice soil science in accordance with G.S. 89F.~~

(19) "Soil textural classes" means soil classification based upon size distribution of mineral particles in the fine-earth fraction less than two millimeters in diameter. The fine-earth fraction includes sand (2.0 – 0.05 mm in size), silt (0.05 mm – 0.002 mm), and clay (less than 0.002 mm in size) particles. The specific textural classes ~~are~~ shall be defined as follows:

(a) "Sand" means soil material that contains 85 percent or more of sand; the percentage of silt plus 1.5 times the percentage of clay less than 15;

(b) "Loamy sand" means soil material that contains at the upper limit 70 to 91 percent sand, and the percentage silt plus 1.5 times the percentage of clay is not less than 15; at the lower limit contains not less than 70 to 85 percent sand, and the percentage of silt plus twice the percentage of clay is less than 30;

(c) "Sandy loam" means soil material that contains 7 to 20 percent clay, and the percentage of silt plus twice the percentage of clay exceeds 30, and contains 52 percent or more sand; or less than 7 percent clay, less than 50 percent silt, and more than 43 percent sand;

(d) "Loam" means soil material that contains 7 to 27 percent clay, 28 to 50 percent silt, and 52 percent or less sand;

(e) "Silt loam" means soil material that contains 50 percent or more silt and 12 to 27 percent clay; or contains 50 to 80 percent silt and less than 12 percent clay;

(f) "Silt" means soil material that contains 80 percent or more silt and less than 12 percent clay;

(g) "Sandy clay loam" means soil material that contains 20 to 35 percent clay and less than 28 percent silt, and more than 45 percent sand;

(h) "Clay loam" means soil material that contains 27 to 40 percent clay and more than 20 to 46 percent sand;

(i) "Silty clay loam" means solid material that contains 27 to 40 percent clay and 20 percent or less sand;

(j) "Sandy clay" means soil material that contains 35 percent or more clay and 45 percent or more sand;

(k) "Silty clay" means soil material that contains 40 percent or more clay and 40 percent or more silt; and

(l) "Clay" means soil material that contains 45 percent or less sand, and less than 40 percent silt.

~~(20) "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.~~

~~(21)~~(20) "Treatment of septage" means the preparation of septage for final use or disposal. Treatment may include ~~includes,~~ ~~but is not limited to,~~ thickening, stabilization, and dewatering of septage. Treatment ~~does~~ shall not include storage of septage.

Definitions in 40 CFR 503.9(d), (g), (h), (j), (k), (l), (r), (t), (u), (v), (w), (bb), and in 40 CFR 503.11(a), ~~(b),~~ (c), (d), (f), (g), ~~(h), (l),~~ (i), (k), (l), (m), (n) are incorporated by reference including subsequent amendments and editions. ~~Copies of the Code of Federal Regulations may be obtained from the Solid Waste Section at no cost.~~

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0832 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0832 GENERAL PROVISIONS

(a) General permitting requirements.

(1) No person shall manage septage, or any part of septage, or operate a Septage Management Firm without first obtaining a permit from the Division as required under G.S. 130A-291.1(c);

(2) The permit requirement of G.S. 130A-291.1(c) applies to persons who remove septage, and other waste materials or spent media from wastewater systems permitted by the Department of Health and Human Services, ~~Division of Environmental Health,~~ under the authority of Article 11, Chapter 130A of the North Carolina General Statutes;

(3) The permit requirement of G.S. 130A-291.1(c) applies to persons who manage septage generated from properties ~~which~~ that they own, ~~lease~~ lease, or manage as part of a business, including ~~but not limited to~~ mobile homes, mobile home parks, restaurants, and other residential and commercial property;

(4) The Division may deny a permit ~~application,~~ application in accordance with G.S. 130A-295.3(c);

(5) The Division may require an applicant to demonstrate substantial compliance in accordance with G.S. 130A-294(b2)(2);

(6) ~~All conditions for permits~~ Permits issued in accordance with this Section shall be followed;

(7) Where specified in this Section, permit applications or specific portions of applications shall be prepared by a qualified environmental professional in accordance with Rule .0202(a)(3) of this Subchapter; and

(8) Initial septage land application site and detention and treatment facility permits shall be ~~issued~~ valid for a maximum of one year. Subsequent permits may be valid for up to five years.~~Renewal permits shall be issued for five years if the facility has not had a major violation and records have been maintained in accordance with this Section.~~

(b) Portable sanitation permitting provisions.

(1) A mobile or modular office that meets the criteria of G.S. 130A-291.2 shall be considered a chemical or portable toilet as defined in G.S. 130A-290(a)(1c). Leaks or overflows of the storage tank at a mobile or modular office shall be considered illegal land application. The office occupant and owner of the mobile or modular office shall be considered to be the responsible party and shall ~~will~~ be subject to the requirements of Paragraph (a) of this Rule.

(2) No person shall rent or lease portable toilet(s) or contract or subcontract to rent or lease portable toilet(s) or manage or dispose of waste from portable toilet(s), regardless of ownership of the toilet(s) unless that person is permitted to operate a septage management firm.

(3) Placement of a chemical or portable toilet as defined in G.S. 130A-290(a)(1c) for potential use in North Carolina shall be considered operation of a septage management firm ~~which~~ that requires a permit.

(c) Recreational vehicle waste provisions.

(1) Domestic septage from a recreational vehicle shall be managed in accordance with this Section or shall flow directly into a wastewater treatment system permitted by the Department of Environmental Quality. ~~Environment and Natural Resources.~~

(2) Wastewater from recreational vehicles that are tied down, blocked up, or that are not relocated on a regular basis, and that are not connected to an approved wastewater system shall be managed in accordance with Article 11, Chapter 130A of the NC General Statutes.

(3) Recreational vehicle dump stations that do not discharge directly to a wastewater treatment system permitted by the Department of Environmental Quality ~~Environment and Natural Resources~~ shall be permitted as a septage detention and treatment facility in accordance with Rule .0836 of this Section.

(d) Alternate septage management method limitations.

(1) Grease septage, or any part of grease septage, shall not be introduced or reintroduced into a grease trap, interceptor, separator, or other appurtenance used for the purpose of removing cooking oils, fats, grease, and food debris from the waste flow generated from food handling, preparation, and cleanup unless the Division has received written approval from the wastewater treatment plant operator or the onsite wastewater system permitting authority that reintroduction is acceptable.

(2) Septage, or any part of septage, shall not be reintroduced into an onsite wastewater system unless approved pursuant to G.S. 130A-343(c).

(3) Septage, or any part of septage, shall not be placed in containers at restaurants designated for yellow grease.

(4) Septage, or any part of septage, shall not be disposed of in a municipal solid waste landfill unless the waste passes the ~~paint filter test~~ Paint Filter Liquids Test as defined by EPA S.W. 846 Test Method 9095B which can be accessed at no cost at https://www.epa.gov/hw-sw846, and the landfill receiving the waste has provided the Division written documentation that the specific material will be accepted.

(5) Septage, or any part of septage, shall not be disposed of in a dumpster unless the waste passes the Paint Filter Liquids Test as defined by EPA S.W. 846 Test Method 9095B which can be accessed at no cost at ~~http://www.epa.gov/osw/hazard/testmethods/sw846/online/index.htm,~~ https://www.epa.gov/hw-26 sw846, and the landfill receiving the waste is a ~~properly~~ permitted municipal solid waste landfill, in accordance with Section .1600 of this Subchapter.~~Subchapter, and the landfill operator has provided the Division written documentation that the specific material will be accepted.~~

(6) Septage, or any part of septage, managed through subsurface disposal shall be considered a treatment facility and shall require a permit in accordance with this Section and G.S. 130A-343.

(7) Facilities receiving septage, or any part of septage, for composting shall be permitted in accordance with Section .1400 of this Subchapter.

(e) All ~~training,~~ training to meet the requirements of G.S. 130A-291.3(a) and ~~(b), must~~ (b) shall be pre-approved by the Division.

(f) Waste from holding tanks not otherwise addressed in this Section, and from wastewater systems pumped more often than every 30 days, shall not be considered domestic septage and shall not be land applied at a permitted septage land application site.

(g) Inspection and entry. The permit holder of a septage management firm or facility shall allow a representative of the Division to:

(1) ~~Enter~~ enter the permit holder's premises where a regulated facility or activity is located or conducted;

(2) ~~Access~~ access and copy any records required in accordance with this Section or conditions of the permit;

(3) ~~Inspect~~ inspect any facilities, equipment (including monitoring and control equipment), ~~practices~~ practices, or operations regulated by the Division;

(4) ~~Sample~~ sample or monitor for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or the North Carolina Solid Waste Management Act, any substances, ~~parameters~~ parameters, or soils at any location; and

(5) ~~Photograph~~ photograph for the purpose of documenting times of compliance or noncompliance at septage management facilities or to require the permit holder to make such photos for the Division.

(h) Washings from the interior of septage handling containers such as pump trucks shall be managed as septage. ~~Failure of a person to follow a requirement in any rule set forth in this Section or the taking of any action prohibited by any rule in this Section shall constitute a violation of that rule.~~

History Note: *Authority G.S. 130A-291.1, 130A-291.2, 130A-295.3(c), 130A-335;*
Eff. October 1, 2009;
Amended Eff. January 1, ~~2014.~~2014;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0833 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0833 SEPTAGE MANAGEMENT FIRM PERMITS

(a) Septage management firm names ~~must~~ shall be distinguishable upon the records of the Division from the name of other septage management firms, limited liability companies, non-profit corporations, business corporations, limited partnerships, sole proprietors, general ~~partners~~ partners, and limited liability partnerships operating in North Carolina. Naming preference shall be given to companies that are listed as incorporated with the NC Secretary of State's office.

(b) A person who has not operated a septage management firm during the previous calendar year shall obtain four hours of new operator training from the Division prior to receiving a permit to operate a septage management firm.

(c) To apply for a permit, a person proposing to operate a septage management firm shall submit the following information to the Division by January 1 of each year:

(1) ~~Owner's~~ owner's name, ~~address~~ address, and phone number;

(2) ~~Business~~ business name, ~~address~~ address, and phone number;

(3) ~~Operator~~ operator name, ~~address~~ address, and phone number, if different from owner;

(4) ~~Permit~~ permit number, if existing firm;

(5) ~~Type(s)~~ type(s) of septage handled, and the quantity pumped the previous 12 months, if in operation;

(6) ~~Number~~ number of pumper trucks;

(7) ~~Capacity~~ capacity and type of septage handled by each pumper truck;

(8) ~~Vehicle~~ vehicle license and serial numbers of each pumper truck;

(9) ~~Counties~~ counties in which the firm operates;

(10) ~~Disposal~~ disposal method(s) for septage;

(11) ~~Permit~~ permit number for each septage land application site to be used;

(12) ~~Permit~~ permit number for each septage detention and treatment facility to be used;

(13) ~~Technical~~ any other information that the Division may request that is pertinent to the operation of a septage management firm;

(14) ~~Written~~ written authorization on official letterhead or a notarized wastewater treatment plant authorization form shall be submitted from an individual responsible for the operation of each wastewater treatment plant used for disposal indicating:

(A) ~~Type(s)~~ type(s) of septage ~~which can~~ that may be discharged at the plant;

(B) ~~Where~~ where septage, including grease septage, ~~can~~ may be discharged at the plant or in the collection system;

(C) ~~Geographic~~ geographic area from which septage will be accepted; and

(D) ~~Duration~~ duration of ~~authorization.~~authorization;

(15) ~~The~~ the appropriate annual permit fee in accordance with G.S. 130A-291.1(e); and

(16) ~~The~~ the date, location, number of hours, and provider of annual septage management firm training required in accordance with G.S. 130A-291.3(a).

(d) Persons that operate a septage land application site or a septage treatment and detention facility, but do not pump septage, shall submit the following information to the Division by January 1 of each year to apply for a permit:

(1) ~~Facility~~ facility name, address, phone number, and county;

(2) ~~Owner's~~ owner's name, ~~address~~ address, and phone number;

(3) ~~Operator~~ operator name, ~~address~~ address, and phone number, if different from owner;

(4) ~~Permit~~ permit number, if existing firm;

(5) ~~Type(s)~~ type(s) of septage managed;

(6) ~~Facility~~ facility types and their permit numbers;

(7) ~~The~~ the name and permit number of all permitted septage management firms using the facility;

(8) ~~The~~ the date, location, number of hours, and provider of annual training in accordance with G.S. 130A-291.3(b); and

(9) ~~The~~ the appropriate annual permit fee in accordance with G.S. 130A-291.1(e1).

(e) A septage management firm permit shall not be issued unless the applicant has submitted to the Division written documentation of authorized access to dispose or otherwise manage septage, or any part of septage, at a wastewater treatment plant, a permitted septage land application site, a permitted septage treatment facility, or other ~~appropriately~~ permitted solid waste management facility. Documentation from each plant, site, or other facility shall include the types and amount of septage ~~which~~ that may be discharged.

(f) Septage management firm permits shall not be issued until all parts of the application have been completed.

(g) A septage management firm permit shall not be issued to firms that pump septage until its pumper truck(s) have been inspected and approved.

(h) Permits ~~are non-transferable.~~ shall not be non-transferable.

(i) Septage management firm permits are issued for up to one calendar year. Permits issued on or after January 1 shall be effective until December 31 of that calendar year.

History Note: *Authority G.S. 130A-291.1;*
Eff. November 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0834 is proposed for readoption as follows:

15A NCAC 13B .0834 PERMIT FEES

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

(b) Annual fees are not pro-rated and shall not be refunded or credited to a subsequent year.

(c) Failure to apply for permit renewal or failure to pay the permit fee by January 1 shall result in assessment of a late fee in accordance with G.S. 130A-291.1(e2). Failure to pay the appropriate fees within 45 days after January 1 shall result in an additional administrative penalty pursuant to G.S. 130A-22(a) of ten dollars ($10.00) per day for each day thereafter that the fees are not paid.

(d) Annual permit renewal, including fee payment, shall be the responsibility of the operator of the septage management firm. If the operator did not receive annual permit renewal forms, it shall not be a defense to assessment of late fees.

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

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0835 is proposed for readoption with substantive changes as follows:

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

(a) No person shall establish, or allow to be established upon any real property owned, operated, leased, or controlled by that person, ~~established on his land,~~ a septage management facility ~~to,~~ to treat, manage, store, or dispose of septage, or any component of septage, unless a permit has been obtained from the Division. Disposal of septage by trenching or burial is prohibited under the rules of this Section.

(b) Any person that has not operated as a septage land application site during the previous calendar year shall receive at least three hours of new land application site operator training from the Division prior to receiving a permit to operate a septage land application site.

(c) To apply for a permit for a septage land application site, the following information shall be submitted to the Division:

~~(1) Location of the site;~~

~~(2)~~(1) ~~Name,~~ name, address, and phone number of:

(A) the applicant;

(B) the land owner or the owner's legal representative in control of the site; and

(C) the proposed operator;

(2) location of the site;

(3) ~~Written~~ written authorization to operate a septage land application site signed by each landowner (if other than the permit holder) or ~~his~~ the landowner's legal representative;

(4) ~~Types~~ types of septage ~~(as~~ defined in G.S. 130A-290 ~~130A-290)~~ and the proposed annual volume of each type of septage proposed for land application per acre, based on the nutrient management plan submitted in accordance with Paragraph (c)(12) of this Rule; ~~submitted.~~

(5) ~~Substances~~ substances other than septage previously disposed of at this location, and the amounts of those substances;

(6) ~~Aerial~~ aerial photography extending for a distance of at least 2500 feet in all directions from the site, with site property boundaries depicted; ~~accurately depicted. Photograph scale shall be 1" = 400 feet or less;~~

(7) ~~Alternative~~ alternative plan for the detention or disposal of septage, during ~~adverse weather conditions;~~ conditions that cause the site to be unavailable for use;

(8) ~~Treatment~~ treatment method for each type of septage to be discharged and the permit number of any treatment facilities;

(9) ~~Vicinity~~ vicinity map (county road map) showing the site location;

(10) ~~A~~ a written report that documents compliance with Rule .0837 of this Section including: ~~Section, including, but not limited to the following:~~ If required by G.S. 89F, G.S. ~~89C~~ 89C, and G.S. 89E, a licensed soil scientist, professional engineer, or licensed geologist shall prepare these documents. [Note: The North Carolina Board of Licensing of Soil Scientists, Board of Examiners for Engineers

and ~~Surveyors~~ Surveyors, and the Board of Licensing of Geologists has determined, via letters dated November 16, 2009, March 11, ~~2010~~ 2010, and January 7, 2010, that preparation of documents pursuant to this Paragraph constitutes soil science, practicing engineering, or geology under G.S. 89F, G.S. ~~89C~~ 89C, and G.S. 89E.]

(A) ~~A~~ a representative soils analysis ~~(i.e.,~~ such as the Standard Soil Fertility Analysis, ~~Analysis),~~ conducted within the last six months, on each proposed field of each proposed land application site. The ~~Standard Soil Fertility Analysis~~ representative soils analysis shall include: ~~shall include, but is not necessarily limited to:~~ acidity, base saturation (by calculation), calcium, cation exchange capacity, exchangeable sodium percentage (by calculation), magnesium, manganese, percent humic matter, pH, phosphorus, potassium, and sodium; and may include additional analyses;

(B) ~~A~~ a total metal analysis for each proposed field shall be conducted for arsenic, cadmium, copper, lead, nickel, selenium, and zinc. A North Carolina Department of Agriculture & Consumer Services (NCDA & CS)~~(NCSA&CS)~~ mehlich-3 extraction ~~is~~ shall be an acceptable substitute for a total metal analysis. Mercury shall be sampled if the applicant proposes to land apply domestic or industrial or commercial treatment plant septage, or if warranted by previous site use;

(C) ~~Field~~ field description of soil profile(s), based on examinations of excavation pits and auger borings, within four feet of the 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(s); and presence or absence and depth of evidence of any seasonal high water table. Applicants may be required to dig pits when necessary for proper evaluation of the soils at the site;

(D) ~~A~~ a soil ~~map, scale 1" = 400 feet or less,~~ map delineating major soil mapping units within each proposed land application site and showing all physical features, location of pits and auger borings, applicable setbacks, legends, scale, and a north arrow;

(E) ~~If~~ if the annual application rate is proposed to exceed 125,000 gallons per acre per year, ~~year~~ field descriptions to a depth of six feet ~~feet,~~ shall be required; and

(F) Global Positioning System (GPS) data compatible with the Division's ~~Department's~~ datalogger shall be provided for proposed sites 30 acres or more in size.

(11) ~~Applicants~~ applicants proposing to land apply 200,000 gallons per acre per year or more shall provide a plan for monitoring soil moisture levels and the depth to seasonal wetness to determine when land application ~~can~~ may occur without impacting ~~ground water~~ groundwater or hydraulic overloading. The plan shall include recommendations concerning annual and instantaneous loading rates of liquids, solids, other wastewater ~~constituents~~constituents, and amendments based on in-situ measurement of saturated hydraulic conductivity in the most restrictive horizon. If required by G.S.

89C, G.S. ~~89F~~ 89F, and G.S. 89E, a professional engineer, licensed soil ~~scientist~~scientist, or licensed geologist shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, Board of Licensing of Soil ~~Scientists~~ Scientists, and the Board of Licensing of Geologists has determined, via letters dated March 11, 2010, November 16, ~~2009~~ 2009, and January 7, 2010, that preparation of documents pursuant to this Paragraph constitutes practicing engineering, soil ~~science~~ science, or ~~geology,~~ geology under G.S. 89C, G.S. ~~89F~~ 89F, and G.S. 89E.]

(12) ~~Nutrient management plan, prepared by a Technical Specialist, including at least~~ a nutrient management plan prepared by an environmental professional that shall include the following: ~~the following:~~

(A) ~~Crops~~ crops that will be planted on the site, including cover crops, and where each crop will be planted. Crop planting locations shall be depicted on an aerial photograph or on a plat map; ~~map (scale 1" = 400 feet or less);~~

(B) ~~Nitrogen~~ nitrogen needs of the crops based on the realistic yield expectations for the soils on the site, and crop management practices proposed;

(C) ~~Crop~~ crop stand density required to meet the realistic yield expectations for the proposed crop;

(D) ~~Approximate~~ approximate crop planting times and the seeding or sprigging rates for crops to be established;

(E) ~~Crop~~ crop harvest frequency appropriate for the proposed realistic yield expectations and nitrogen needs, and approximate crop harvest times;

(F) ~~Approximate~~ approximate monthly discharge rate to match the nitrogen needs and potential uptake of the crop;

(G) ~~Sites~~ sites proposed to receive more than 50,000 gallons per acre per year of ~~domestic septage, or~~ domestic or industrial or commercial treatment plant ~~septage~~ septage, or domestic or grease septage that has been treated to remove solids, fats, oils, and grease shall include nitrogen carry over when determining annual application rates;

(H) ~~Weed~~ weed control recommendations;

(I) ~~Crop~~ crop use or removal;

(J) ~~Results~~ results from at least four samples of treated septage if the application is proposing an increased application rate for the land application of septage treated to reduce nutrients; and

(K) the signature of the site operator. ~~A Technical Specialist is not required for nutrient management plans for subsequent applications that do not contain changes that would affect nutrient uptake; and~~

~~(L) All nutrient management plans shall bear the signature of the site operator.~~

For the purposes of this Rule, an environmental professional means a person who has received a baccalaureate or post-graduate degree from a university and has training and experience in or related

to agronomic principles utilized to manage wastewater. Preparation by an environmental professional shall not be required for nutrient management plans for renewal applications that do not contain changes that would affect nutrient uptake.

(13) ~~Application~~ application rates for sites proposed to receive treated septage shall be determined based on the most limiting nutrient;

(14) ~~Erosion~~ erosion and runoff management plan showing:

(A) ~~Buffer~~ buffer locations and widths based on the direction and amount of slope adjacent to the land application site;

(B) ~~Vegetation~~ vegetation type and stand density in the buffer areas; and

(C) ~~Buffer~~ buffer maintenance fertility requirements.

(15) ~~Proposed~~ proposed land application ~~method,~~ method;

(16) ~~Proposed~~ proposed distribution plan if required in Paragraph (e) of Rule .0837 of this Section;

(17) ~~Sites~~ sites proposing to use spray irrigation as a land application method shall include:

(A) ~~The~~ the location of all fixed irrigation heads or the location of traveling gun irrigation lanes;

(B) ~~Irrigation~~ irrigation head spacing and traveling gun lane spacing shall be determined based on standards in NC Cooperative Extension Documents AG-553-6 and AG-553-7 which are hereby incorporated by reference including subsequent amendments and additions, or other similar publications;

(C) ~~The~~ the size of all spray nozzles;

(D) ~~System~~ system operating pressure at the irrigation head;

(E) ~~Calculation~~ calculation of the wettable acres vs. permitted acreage;

(F) ~~Calibration~~ calibration methods and frequency; and

(G) ~~Irrigation~~ irrigation system operation and maintenance plan.

(18) ~~Demonstration~~ demonstration from the appropriate State or Federal Government agency that the land application site complies with Paragraph (g) of Rule .0837 of this Section if any part of the site specified for land application is not agricultural land;

(19) ~~The~~ the date, location, number of hours, and provider of annual septage land application site operator training required in accordance with G.S. 130A-291.3(b);

(20) ~~Technical~~ any other information that the Division may request that is pertinent to the suitability of the proposed site;

(21) ~~An~~ an applicant who proposes to land apply septage ~~septage, as defined in G.S. 130A-290,~~ on a public contact site, shall provide the Division evidence of adequate public notice and the applicant shall have ~~successfully~~ completed the Land Application of Residuals ~~and Biosolids~~ Course and maintain a Land Application of Residuals Certificate ~~given~~ issued by the Department of Environmental Quality; ~~Environment and Natural Resources; and~~

(22) ~~An~~ an applicant who proposes to land apply ~~commercial/industrial~~ industrial or commercial treatment plant septage or domestic treatment plant septage ~~septage, as defined in G.S. 130A-290,~~

shall have ~~successfully~~ completed the Land Application of Residuals ~~and Biosolids~~ Course and maintain a Land Application of Residuals Certificate ~~given~~ issued by the Department of Environmental Quality; ~~Environment and Natural Resources;~~ and

(23) ~~An~~ an applicant who proposes to land apply septage ~~septage, as defined in G.S. 130A-290,~~ in excess of 50,000 gallons per acre per year shall provide the Division with evidence of adequate public notice which shall at a minimum be publication with a local news organization, ~~in a local newspaper,~~ shall have ~~successfully~~ completed the Land Application of Residuals ~~and Biosolids~~ Course and maintain a Land Application of Residuals Certificate issued by the Department of Environmental Quality.~~Environment and Natural Resources.~~

(24) an approval letter from the unit of local government having zoning authority over the area where the facility is to be located stating that the proposed facility meets all of the requirements of the local zoning ordinance, or that the site is not zoned.

(d) Application rates for septage in excess of 50,000 gallons per acre per year and permits to land apply domestic, or industrial or commercial treatment plant septage shall not be granted to persons who have not demonstrated that they can ~~properly~~ operate a septage land application site in accordance with this Section for at least a 12 month period.

(e) Applications for permits issued in accordance with this Rule shall be submitted to the Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh NC 27699-1646. Applications for permits will not be reviewed until all parts of the application have been completed and submitted to the Division.

(f) Applications for permits ~~for sites or treatment methods which~~ that do not meet the standards in accordance with this Section shall be denied.

(g) Applications for renewal permits issued in accordance with this Rule shall be submitted to the Division at least 90 days prior to the expiration date of the permit. The Division shall notify permit holders of facility permit expiration dates 120 days prior to permit expiration.

(h) Applications for permit modification shall be required for the following changes:

(1) ~~Permitted~~ permitted area or field boundaries;

(2) ~~Property~~ property ownership;

(3) ~~Annual~~ annual application rates;

(4) ~~Receiver~~ receiver crop; or

(5) ~~Types~~ types of septage discharged.

(i) Applications for renewal permits submitted in accordance with Paragraph (g) of this Rule and applications for permit modifications shall not be required to resubmit the information required in Subparagraphs (c)(6), (8), (9), (10), (16), (17), and (18) unless changes are made in those plans.

(j) Septage land application site permits ~~are~~ shall not be transferable.

(k) Maximum permit duration including renewals ~~is~~ shall be five years.

~~(l) Issuance of a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning approvals prior to operation of the site.~~

History Note: *Authority G.S. 130A-291.1;*
Eff. April 1, ~~2010.~~2010;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0836 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0836 SEPTAGE DETENTION AND TREATMENT FACILITY PERMITS

(a) ~~No person, shall establish on his land,~~ No person shall establish, or allow to be established upon any real property owned, operated, leased, or controlled by that person, ~~on his land,~~ a septage detention and treatment facility, unless a permit ~~for the facility~~ has been obtained from the Division or the facility is operating in accordance with a NPDES permit issued by the NC Division of Water Resources.~~Quality.~~

(b) Septage detention and treatment facilities shall be designed, located, constructed, and operated in accordance with the standards specified in Rule .0841 of this Section.

(c) To apply for a permit for a septage detention ~~or~~and treatment facility the applicant shall submit the following information to the Division:

(1) ~~Name,~~ name, address, and phone number of

(A) the applicant;

(B) the landowner ~~land owner~~ or the ~~owner's~~ landowner's legal representative in control of the site; and

(C) the proposed operator;

(2) ~~Location~~ location of the facility;

(3) ~~Vicinity~~ vicinity map or county road map showing the site location;

(4) ~~Types~~ types of septage to be stored or treated;

(5) ~~A~~ a description of the facility including the size, number, and type of structures to be used at the site and construction materials to be used;

(6) ~~An~~ an explanation of the methods for discharge into and removal from the detention or treatment facility, the methods for treating leaks or spills at the site, and methods for odor control;

(7) ~~Septage~~ septage land application site permit number and the name of any wastewater treatment plant(s) where the septage will be disposed;

(8) ~~Written~~ written documentation of ~~acceptable~~ approved locations to manage any solid or liquid wastes generated at a treatment facility;

(9) ~~An~~ an aerial photograph, extending for a distance of at least 1,000 feet in all directions from the site property lines; ~~lines, scale 1" = 400 feet or less;~~

(10) ~~Written~~ written authorization to operate a septage detention or treatment facility signed by each landowner (if other than the permit holder) or ~~his~~ the landowner's legal representative; and

(11) ~~Technical~~ any other information that the Division may request that is pertinent to the suitability of the proposed facility.

(12) an approval letter from the unit of local government having zoning authority over the area where the facility is to be located, stating that the proposed facility meets all of the requirements of the local zoning ordinance, or that the site is not zoned.

(d) To apply for a permit to construct a septage treatment facility and obtain an interim permit to operate the facility ~~facility,~~ for a period not to exceed 12 months, plans and specifications shall be submitted. If required by G.S. 89C, a professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

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

(1) ~~Site~~ site plan at a scale appropriate to show the detail of the facility, but in no case greater than 100 feet per inch;

(2) ~~Engineering~~ engineering plans for the entire system, including treatment, storage, and disposal equipment, and containment structures;

(3) ~~Detail~~ detailed drawings shall be at a scale appropriate to show pumps, tanks, valves, controls, meters, pipes, and other items critical to the operation of the facility;

(4) ~~An~~ an operation and maintenance manual outlining information and instruction on how the facility is to be operated, equipment maintenance, minimization of odors, required safety and personnel training, and an outline of reports to be submitted to the Division. Contingency plans shall be included to address at least equipment failure, human error, inclement weather, and spill and leak cleanup; and

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

(f) A permit to operate a septage treatment facility shall be issued pending receipt of the following:

(1) ~~Certification~~ certification that the construction of the treatment facility is complete and consistent with the plans approved as part of the permit to construct;

(2) ~~An~~ an updated operation and maintenance manual, including all the information required in Subparagraph (e)(4) of this Rule;

(3) ~~As built~~ as-built drawings if facility construction is not consistent with the approved plans;

(4) ~~Operation~~ operation and maintenance manuals and quality assurance plans signed by the applicant; and

(5) ~~Acceptable~~ compliance history for the ~~facility.~~ facility showing no unresolved violations of Federal, State, or local laws, rules, regulations, or ordinances.

(g) A permit for a new septage detention ~~or a septage~~ and treatment facility shall not be issued until the proposed site has been approved by the Division.

(h) Operation of a new septage detention or a new septage treatment facility shall not commence until the facility has been inspected by the Division and found to be consistent with the permit application.

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

(j) Application packages for permit renewals shall include:

(1) ~~Updated drawings~~ updated drawings, if there are changes to the facility; ~~facility,~~

(2) ~~Updated site plans~~ updated site plans, ~~(if required as part of original submittal)~~ if there are changes to the initial site plan; ~~plan,~~

(3) ~~A revised~~ updated operation and maintenance manual, if there are changes to the operation and maintenance manual; and

(4) ~~A revised~~ updated quality assurance plan, if there are changes to the quality assurance plan.~~plan for the process and final product if treatment involves meeting pathogen reduction or vector attraction reduction standards.~~

(k) Engineering plans and specifications for marina detention tanks that do not meet the minimum setbacks in ~~.0841(m)~~ Rule .0841(m) of this Section or are located below grade shall be submitted. If required by G.S. 89C, a professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.] The facilities shall be certified to be constructed in substantial compliance with the plans and specifications.

(l) Parts of detention and treatment facilities located below grade and lagoons shall be certified to be constructed in substantial compliance with the plans and specifications. If required by G.S. 89C, a professional engineer shall certify the construction. [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter and resolution dated March 11, 2010, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

(m) Applications shall be submitted to the Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh NC 27699-1646. Applications for permits will not be reviewed until all parts of the application have been completed and submitted to the Division.

(n) Applications for renewal permits shall be ~~made~~ submitted to the Division at least 90 days prior to the expiration of the permit. The Division ~~will~~ shall notify permit holders of facility permit expiration dates 120 days prior to permit expiration.

(o) Applications for renewal permits submitted in accordance with Paragraph (j) and (n) of this Rule and applications for permit modifications shall not be required to resubmit the information required in Subparagraphs (c)(3) and (9), and Paragraph (d) unless changes are made in those plans.

(p) Septage detention and treatment facility permits ~~are~~ shall not be transferable.

(q) Maximum permit duration including renewals ~~is~~ shall be five years.

(r) Applications for permit modifications shall be required for the following changes: ~~changes in:~~

(1) ~~Property~~ property ownership;

(2) ~~Treatment~~ treatment methods;

(3) ~~Types~~ types of septage to be stored or treated; or

(4) ~~Size~~ size and number of treatment or storage structures.

(s) Applications for facilities which do not meet the standards set forth in this Section shall be denied.

(t) An application requesting reduced setbacks in accordance with Rule .0841(m)(7) of this Section shall include a letter from the appropriate local zoning ~~office,~~ office approving proposed reduced setbacks.

~~(u) Issuance of a permit does not relieve the permit holder of the responsibility of obtaining applicable zoning approvals prior to operation of the facility.~~

History Note: *Authority G.S. 130A-291.1;*
Eff. April 1, ~~2010.~~2010;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0837 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0837 LOCATION OF SEPTAGE LAND APPLICATION SITES

(a) Soil characteristics (Morphology) ~~which~~ that shall be evaluated are as follows:

(1) Texture – The relative proportions of the sand, silt, and clay sized mineral particles in the fine-earth fraction of the soil are referred to as soil texture. The texture of the different horizons of soils shall be classified into three general groups and 12 soil textural classes based upon the relative proportions of sand, silt, and clay sized mineral particles.

(A) Soil Group I – Sandy Texture Soils: The sandy group includes the sand and loamy sand textural classes.

(B) Soil Group II – Coarse Loamy and Fine Loamy Texture Soils: The coarse loamy and fine loamy group includes sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, and silty clay loam textural classes.

(C) Soil Group III – Clayey Texture Soils: The clayey group includes sandy clay, silty clay, and clay textural classes.

(2) The soil textural class shall be determined in the field by hand texturing samples of each soil horizon in the soil profile using the following criteria:

(A) Sand: Sand has a gritty feel, does not stain the fingers, and does not form a ribbon or ball when wet or moist;

(B) Loamy Sand: Loamy sand has a gritty feel, stains the fingers, forms a weak ball, and cannot be handled without breaking;

(C) Sandy Loam: Sandy loam has a gritty feel and forms a ball that can be picked up with the fingers and handled with care without breaking;

(D) Loam: Loam may have a slightly gritty feel but does not show a fingerprint and forms only short ribbons of from 0.25 inch to 0.50 inch in length. Loam will form a ball that can be handled without breaking;

(E) Silt Loam: Silt loam has a floury feel when moist and will show a fingerprint but will not ribbon and forms only a weak ball;

(F) Silt: Silt has a floury feel when moist and sticky when wet but will not ribbon and forms a ball that will tolerate some handling;

(G) Sandy Clay Loam: Sandy clay loam has a gritty feel but contains enough clay to form a firm ball and may form ribbons from ~~ribbon to form~~ 0.75 inch to one-inch long pieces;

(H) Silty Clay Loam: Silty clay loam is sticky when moist and will ribbon from one to two inches. Rubbing silty clay loam with the thumbnail produces a moderate sheen. Silty clay loam produces a distinct fingerprint;

(I) Clay Loam: Clay loam is sticky when moist. Clay loam forms a thin ribbon of one to two inches in length and produces a slight sheen when rubbed with the thumbnail. Clay loam produces a nondistinct fingerprint;

(J) Sandy Clay: Sandy clay is plastic, ~~gritty~~ gritty, and sticky when moist and forms a firm ball and produces a thin ribbon ~~to~~ over two inches in length;

(K) Silty Clay: Silty clay is both plastic and sticky when moist and lacks gritty feeling. Silty clay forms a ball and ~~readily~~ ribbons to over two inches in length;

(L) Clay: Clay is both sticky and plastic when moist, produces a thin ribbon over two inches in length, produces a high sheen when rubbed with the thumbnail, and forms a strong ball resistant to breaking;

(M) The Division may ~~substitute~~ allow laboratory determination of the soil textural class as defined in this Section by particle-size analysis of the fine-earth fraction (less than 2.0 mm in size) using the sand, ~~silt~~silt, and clay particle sizes as defined in this Section for field testing when conducted in accordance with ASTM ~~(American Society for Testing and Materials)~~ ~~D-422 procedures~~ methods for sieve and hydrometer analysis. ~~For fine loam and clayey soils (Group II and III) the dispersion time shall be increased to 12 hours.~~

(3) Wetness Condition:

(A) Soil wetness conditions caused by a seasonal high water~~high water~~ table, perched water table, tidal water, or seasonally saturated soils shall be determined by observation of common soil mottles of colors of chroma 2 or less, using the Munsell color chart, in mottle or a solid mass. If drainage modifications have been made, the soil wetness conditions may be determined by direct observation of the water surface in monitoring wells during periods of typically high water elevations. However, colors of chroma 2 or less ~~which~~ that are relic from minerals of the parent material shall not be considered indicative of a soil wetness condition.

(B) Soils ~~which~~ that do not meet the required depths to a soil wetness condition shall be considered unsuitable and septage shall not be applied, unless the required separation distances ~~can~~ may be maintained. Water table monitoring wells may be utilized to determine the actual depth to a soil wetness condition. The Division may limit discharges to certain months where soil wetness conditions are marginal for use.

(C) The required depth to a soil wetness condition is determined by the Soil Group Textural Classification.

(4) Soil Group I soil shall be considered suitable where soil wetness conditions are deeper than 36 inches below the point of septage application or incorporation.

(5) Soil Group II soils shall be considered suitable where soil wetness conditions are deeper than 24 inches below the point of septage application or incorporation.

(6) Soil Group III soils shall be considered suitable where soil wetness conditions are deeper than 18 inches below the point of septage application or incorporation.

(7) Depth to rock: soil depth shall be considered suitable where depth to rock is deeper than 24 inches below the point of septage application or incorporation or deeper than 18 inches if the septage is pretreated to accomplish pathogen reduction and surface applied over vegetation.

(8) Mine reclamation sites ~~will~~shall be considered on a ~~case by case~~ case-by-case basis.

(b) Septage land application sites shall not be located in the watershed of a Class WS-I stream. New septage land application sites shall not be located in the water quality critical area of Class WS-II, WS-III, or WS-IV streams or reservoirs. This prohibition ~~does~~ shall not apply to those portions of a water supply watershed that ~~which~~ are drained by Class B or Class C streams.

(c) ~~Setbacks.~~ At the time of initial permitting, septage land application sites shall observe the minimum setback distances specified in this Rule. Minimum setbacks shall be maintained throughout the life of the site only on land owned, ~~operated~~ operated, or controlled by the permittee or by the landowner(s) at the time of initial permitting. Any sale, ~~lease~~ lease, or other conveyance of land by the permittee, or by the landowner(s) if different from the permittee, subsequent to the initial permitting of the site shall include restrictions to ensure continued maintenance of the setbacks. ~~Failure to maintain required setbacks shall result in immediate permit revocation.~~

(d) All septage disposal sites shall be located at least the minimum distance specified for the following:

(1) ~~Residence~~ residence:

(A) not occupied by the applicant – 500 feet;~~feet,~~

(B) ~~residence~~ occupied by the applicant – 100 feet;

(2) ~~Place~~ place of business, other than the septage management firm's office or related buildings, ~~firm office,~~ or place of public assembly – 500 feet;

(3) ~~Well~~ well or water supply spring – 500 feet;

(4) ~~Surface waters. Stream~~ surface waters – stream classification shall be determined in accordance with 15A NCAC 02B .0301 through .0317 Assignment of Stream Classifications;

(5) ~~Fresh~~ fresh waters:

(A) Class WS-I, Class WS-II, or Class WS-III streams – 300 feet;

(B) Class B stream – 300 feet;

(C) Class C stream – 200 feet; ~~and~~

(D) ~~Other~~ other streams and bodies of water – 200 feet;

(6) ~~Tidal~~ tidal salt waters:

(A) Class SA or Class SB – 300 feet from mean high water mark; ~~and~~

(B) Class SC and other coastal waters – 200 feet from mean high water mark;~~mark.~~

(7) ~~Supplemental~~ supplemental classifications:

(A) ~~Trout~~ trout waters and swim waters – 200 feet; ~~and~~

(B) ~~Nutrient~~ nutrient sensitive waters and outstanding resource waters – 300 feet;~~feet.~~

(8) ~~Groundwater~~ groundwater lowering ditches and devices – 100 feet;

(9) ~~Adjoining~~ adjoining property under separate ownership or control – 50 feet;

(10) ~~Public~~ public road right of ways – 100 feet;

(11) ~~Food~~ food crops – 50 feet;

(12) ~~Wetlands~~ wetlands – 50 feet;

(13) ~~Woods~~ woods line – five feet, unless greater distance is required as part of an erosion and runoff control plan;

(14) ~~Land~~ land application site on the same tract of land, permitted to a different operator – 100 feet; and

(15) ~~Setbacks~~ setbacks in Subparagraphs (d)(3), (4), (5), (6), (7), and (8) of this Rule may be reduced 50 percent when septage is pretreated to accomplish pathogen reduction and when the land within the setback area is in permanent, established grass with at least 95 percent cover or when the setback area is in forest with a continuous canopy and a 95 percent forest litter cover. Accurate property line locations ~~are~~ shall be the responsibility of the site operator.

(e) Septage land application sites less than five acres in size, individual fields of a site less than two acres in size, and sites with complex soil patterns or unusual shapes shall be permitted only if the applicant demonstrates to the Division that the site ~~can~~will be ~~properly~~ managed for crop production and that septage will be applied with uniform distribution over the entire permitted application area.~~can be evenly distributed over the site.~~

(f) Septage land application sites shall not be located where the slope of the land is greater than 12 percent unless all of the conditions of this Paragraph are met:

(1) ~~The~~ the site is in permanent, established grass with at least 95 percent cover or is in forest with a continuous canopy and a 95 percent forest litter cover;

(2) ~~Plans~~ plans submitted to the Division are prepared in accordance with ~~accepted~~ approved erosion and runoff control practices and indicate the following:

(A) ~~Management~~ management practices and discharge methods ~~which~~ that will be used to reduce the potential for run-off from the site and ~~assure even septage distribution over the site~~ allow for the uniform distribution of septage over the entire permitted application area; and

(B) ~~Location~~ location of potential surface water monitoring devices upslope and downslope from the area proposed to be permitted and identification of sampling methods. Monitoring may be ~~required.~~ if there is an indication that septage is entering surface waters.

(3) The Division may increase setbacks or decrease application rates for the protection of surface waters; ~~Setbacks will be increased and application rates decreased as appropriate to protect any nearby surface waters which are to be approved by the Division;~~ and

(4) ~~No~~ no site shall include slopes in excess of 25 percent.

(g) A new septage land application site shall not jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of a critical ~~habitat,~~ habitat protected under the Federal Endangered Species Act of 1973. Agricultural land shall not be considered potential habitat.

(h) Septage, or any part of septage, as defined in G.S. 130A-290, treated to meet the standard for Class A sewage sludge in accordance with the federal regulations for pathogen reduction and vector attraction reduction in 40 CFR Part 503, Subpart D, may be permitted by the Division for application to a public contact site, home lawns and gardens, or to be sold or given away in a bag or other container, provided it can be demonstrated that pollutant limits in 40 CFR 503.13(b)(3) ~~503.13(b)(1)~~ Table 3 Pollutant Concentrations are not exceeded. Persons who prepare the septage, and persons who derive material from the septage, shall comply with the applicable record keeping requirements in 40 CFR 503.17(a) (1), (2) or (6). Treatment verification, acceptable to the Division, shall be available. All treatment methods and facilities shall obtain a permit from the Division in accordance with Rule .0836 of this Section.~~.0836.~~

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0838 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0838 MANAGEMENT OF SEPTAGE LAND APPLICATION SITES

(a) General requirements for septage land application ~~sites.~~sites shall include the following:

(1) ~~Only~~ only domestic septage, as defined in G.S. 130A-290, shall be land applied or otherwise placed on a septage land application site, unless specified in the permit;

(2) ~~Each~~ each site shall be posted with visible and legible "NO TRESPASSING" signs. ~~Access~~ All access roads or paths crossing or leading to the disposal area shall be posted "NO TRESPASSING" and a visible and legible sign ~~of at least two feet by two feet~~ stating "SEPTAGE LAND APPLICATION SITE" shall be maintained at each entrance to the land application area;

(3) ~~Each~~ each site shall have an all weather access road;

(4) ~~No~~ no hazardous wastes shall be permitted on the site;

(5) ~~No~~ no site shall be permitted for land application of industrial or commercial septage unless the applicant demonstrates to the Division that the strength of the organic and inorganic components of the septage is within the normal range for domestic septage;

(6) ~~Treatment Plant Septage~~ treatment plant septage generated by the operation of a wastewater system permitted under Article 11 of Chapter 130A may be land applied at a septage land application site permitted under this Section;

(7) ~~Septage~~ septage shall be applied to the surface of the land from a moving vehicle ~~in such a manner as~~ to have no standing liquid or soil disturbance resulting from the waste flow after the discharge is complete;

(8) ~~Septage~~ septage shall not be applied to a site if any liquid is ponded on the site or if the site is flooded, frozen, or snow covered;

(9) ~~Septage~~ septage shall not be applied to a site if the application method will result in ruts greater than three inches in the soil surface;

(10) ~~Disposal~~ disposal area boundaries shall be ~~clearly~~ marked on the ground while a site or any portion of a site is in ~~use;~~ use. Markers shall be of adequate height and spacing such that they are clearly visible for determining the disposal boundaries when the site is in use;

(11) ~~All~~ all septage discharges shall be made at a location on the site consistent with the nutrient management plan;

(12) ~~All~~ all septage discharges, including aerial drift from discharges, shall be made within the permitted boundaries of the land application site;

(13) ~~Land~~ land application of septage shall be limited to a maximum daily hydraulic application rate of one acre inch;

~~(14) Grease septage from a grease trap, interceptor, separator, or other appurtenance used for the purpose of removing cooking oils, fats, grease, and food debris from the waste flow generated from food handling, preparation, and cleanup shall not be land applied unless the trap has been pumped within~~

~~the last 90 days or the grease septage adequately screened or dewatered to prevent damage to land application site vegetation;~~

(14)~~(15)~~ ~~Grease~~ grease septage shall be diluted at least 1:1 from its concentration when pumped with domestic septage or water if land applied over perennial vegetation. This dilution shall be increased if crop damage occurs. This dilution requirement shall not apply to the liquid portion of grease septage that has been adequately treated to remove solids, fats, ~~oils~~oils, and grease as long as crop damage does not occur;

(15)~~(16)~~ ~~Solids~~ solids resulting from septage treatment shall not be land applied unless the solids are treated to meet pathogen reduction and vector attraction reduction requirements in 40 CFR 503, and the permittee has ~~satisfactorily~~ demonstrated to the Division that the solids ~~can be evenly land applied~~ will be land applied with uniform distribution over the entire permitted application area at agronomic rates with standard agricultural spreading equipment;

(16)~~(17)~~ ~~The~~ the site shall be managed ~~in such a manner as~~ to minimize soil erosion and surface water runoff. Appropriate soil and water management practices shall be implemented and maintained in accordance with the ~~Division approved~~ erosion and run-off ~~control plan.~~management plan submitted in accordance with Rule .0835(c)(14). All water control structures shall be designed, installed, and maintained to control the run-off resulting from a 10-year storm;

(17)~~(18)~~ ~~Approved~~ approved nutrient management plans shall be followed;

(18)~~(19)~~ ~~Land~~ land application sites or portions of land application sites that do not follow the approved nutrient management plan shall not be used for land application until brought into compliance with the nutrient management plan;

~~(20) alternate plan for the storage or disposal of septage during periods when the permitted land application site is not available;~~

(19)~~(21)~~ ~~Land~~ land application sites permitted for the management of grease septage, or commercial or industrial septage, shall have a septage detention facility available, of adequate size to meet the requirement of Subparagraph (a)(15) of this Rule; and

(20)~~(22)~~ ~~A~~ a septage land application site permit holder or operator is responsible for the actions of any septage management firm that the permit holder or operator allows to use their~~his~~ land application site.

(b) Maximum land application rates for septage shall be determined based upon the following:

(1) ~~Domestic~~ domestic septage land application rates shall be in accordance with 40 CFR ~~Part~~ 503.12(c);

(2) ~~Land~~ land application of domestic treatment plant septage shall not exceed the rate in 40 CFR 503.14(d);

(3) ~~Pollutant~~ pollutant limits for regulated metals in 40 CFR ~~part~~ 503.13 shall not be exceeded for any type of septage;

(4) ~~Grease~~ grease septage shall be land applied at a rate that is equal to or less than the agronomic rate, but in no case shall the application of untreated grease septage exceed 25,000 gallons per acre per year;

(5) ~~Sites~~ sites permitted for the land application of grease septage shall meet the requirements of 40 CFR ~~Part~~ 257.3-5;

(6) ~~Land~~ land application rates for septage treated to reduce solids, nutrients, or pollutants shall be determined based on the analysis of the treated material;

(7) ~~At~~ at least four analyses of treated liquid shall be required prior to receiving an adjusted land application rate. Additional samples shall be required for highly variable material;

(8) ~~Each~~ each analysis shall include nitrogen panel, phosphorus, potassium, soluble salts, pH, and regulated metals except mercury, calcium, manganese, magnesium, iron, sulfur, boron and chlorine;

(9) ~~After~~ after an adjusted rate is approved, sampling shall be required every 60 days for the initial~~first~~ 12 months of operation;

(10) ~~After~~ after the initial 12 months, wastes with consistent sample results shall be sampled quarterly; and

(11) ~~Land~~ land application rates for industrial or commercial septage, or commercial or industrial treatment plant septage shall be determined as specified in Subparagraphs (b)(1) and (b)(2) of this Rule unless testing determines that a lower rate is necessary due to other non-domestic pollutants.

(c) Septage treatment standards:

(1) ~~Domestic~~ domestic septage shall be treated in accordance with the requirements in 40 CFR ~~Part~~ 503 ~~Subpart~~ D (including Appendix A and B) except that 503.33(b)(11) is not incorporated;

(2) ~~Grease~~ grease septage, treated grease septage, ~~commercial or~~ industrial or commercial treatment plant septage, and ~~commercial/industrial~~ industrial or commercial septage shall be treated in accordance with 40 CFR 257.3-6 or treated by an equivalent or more stringent process in 40 CFR 503 ~~Subpart~~ D;

(3) ~~Grease~~ grease septage, or any part of grease septage, mixed with domestic septage shall be treated as grease septage; and

(4) ~~Domestic~~ domestic treatment plant septage shall be treated to meet the pathogen reduction and the vector attraction reduction requirements in 40 CFR ~~503, Subpart~~ 503 D.

(d) No one other than the permit holder shall land apply septage at a permitted site unless approved in writing by the Division. The permit holder shall submit a written request and written authorization from the landowner(s), if different from the permit holder. The request shall include the name of the firm requesting approval and the type and amount of septage proposed to be discharged.

(e) Permit holders of septage land application sites shall develop and maintain records and reports to demonstrate compliance with this Section and the permit requirements of each site.

(1) ~~Permit~~ permit holders of sites receiving septage shall maintain a log which meets the requirements of 40 CFR ~~Part~~ 503.17(b);

(2) ~~Permit~~ permit holders of all septage land application sites shall have all records and certifications and test results required in accordance with this Section ~~to be kept~~ available for review during ~~any announced site~~ inspections by the Division or upon the Division's request; ~~Division;~~ and

(3) ~~The~~ the permit holder of a site where more than one septage management firm has been authorized by the Division to discharge septage shall submit a monthly report to the Division that~~which~~ shall include the following information for each discharge: the date and quantity of each discharge, the type of septage discharged, and the name of the septage management firm discharging.

~~(4) All test results for nutrients, metals, contaminants, and pathogens required in this Section shall be maintained by the site operator or the preparer.~~

(f) Septage shall not be land applied at a new septage land application site until a representative of the Division has inspected the site to determine compliance with these rules and consistency with the permit application and all permit conditions.

~~(g) Methods of land application for which there are no standards in these rules shall be permitted only if it can be demonstrated that the proposed method manages septage in a manner at least equivalent to these Rules and to protect public health and the environment. Plans shall be submitted and prepared in accordance with professional engineering principles.~~

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0839 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0839 RECORD KEEPING FOR SEPTAGE MANAGEMENT FIRMS

(a) Each permit holder shall maintain a log ~~which~~that includes ~~at least~~ the following information for each septage pumping event:

(1) ~~The~~ the date, type, quantity, and location of septage ~~pumped;~~ pumped; the location for tanks shall be a street address and the location for portable toilets shall be a route; and

(2) ~~Location~~ location of the discharge of the septage.

(b) A septage management firm shall make all ~~records~~ records, documents, or logs required in accordance with this Section or conditions of the permit-available for ~~inspection by a representative of~~ review by the Division at the time and place of an inspection of the firm's septage pumper truck(s) or upon the Division's request.

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0840 is proposed for readoption as follows:

15A NCAC 13B .0840 SAMPLING AND ANALYSIS

(a) Monitoring or sample collection, handling,~~handling~~ and analysis required by this ~~Section,~~ Section and all costs ~~involved, are~~ involved shall be the responsibility of the septage management firm permit holder.

(b) The permit holder of a septage land application site shall obtain representative soil samples once every two years from each field, as designated in permit, during the last quarter of the calendar year.

(c) Soil samples shall be analyzed for cation exchange capacity, pH, phosphorus, potassium, calcium, manganese, magnesium, zinc, and copper. If the results for zinc analysis are equal to or above 30 pounds per acre or the results for copper analysis are equal to or above 35 pounds per acre, analysis for the metals listed in Rule .0835(c)(10)(B) of this Section shall be required. Sites permitted to receive septage other than domestic septage shall be analyzed for cadmium to determine compliance with 40 CFR 257.3-5.

(d) Domestic septage and grease septage shall be monitored in accordance with 40 CFR ~~Part~~ 503.16(b).

(e) Domestic treatment plant septage proposed to be land applied at a permitted septage land application site shall be sampled before the initial application, and annually thereafter, prior to being removed from a treatment facility. Samples shall be analyzed for:

(1) Metals listed in 40 CFR 503.13; and

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

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

(1) Metals listed in 40 CFR 503.13;

(2) Total solids, pH, ammonia, nitrates, TKN, BOD, COD, total phosphorus, potassium, sodium, and magnesium; and

(3) Organic chemicals, using a complete EPA Test Method 1311 Toxicity Characteristic Leaching Procedure or other appropriate analysis, such as EPA Test Method 8260 Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry or 8270 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry, unless an examination of the industrial process and the material used indicates less extensive analysis is acceptable.

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

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

Amended Eff. May 1, ~~2017.~~2017;

Readopted Eff. January 1, 2019.

15A NCAC 13B .0841 is proposed for readoption with substantive changes as follows:

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

(a) Septage detention ~~facilities,~~ facilities used to meet the requirements of Rule .0838(a)(19) ~~.0838(a)(20) or (21)~~ of this ~~Section,~~ Section shall have a minimum size equal to two percent of the maximum annual application rate. The Division shall increase the minimum size requirement for any increase in the maximum annual application rate or if it is demonstrated during site operation that this volume is inadequate or if specific site considerations would warrant such increases; and shall notify the owner or operator of the facility of the increase. ~~the average volume of septage pumped per week.~~ This Paragraph does not limit the maximum capacity of a septage detention facility. ~~Capacity shall be increased if it is demonstrated during site operation that this volume is inadequate or if specific site considerations would warrant such increases.~~

(b) Each site shall have an all weather access road.~~Septage detention facilities for sites permitted to land apply in excess of 50,000 gallons per acre per year shall have a minimum size equal to two percent of the maximum annual application rate. Facilities permitted as of the effective date of this rule shall have 12 months to meet this requirement.~~

(c) Septage treatment and detention facility containers shall be structurally sound and constructed of steel, concrete, plastic, or fiberglass. If required by G.S. 89C, plans and specifications for proposed containers constructed of materials not specifically addressed in this Rule shall be prepared by a professional engineer. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, has determined, via letter and resolution dated March ~~7,~~ 11, 2010, that certification of documents pursuant to this Paragraph constitutes practicing engineering, under G.S. 89C.]

(d) A septage treatment and detention facility~~Treatment and Detention Facility~~ permit holder and operator ~~are~~ shall be responsible for the actions of any septage management firm that uses the detention or treatment facility.

(e) Each detention and treatment facility shall be designed, constructed, and maintained ~~in such a manner as~~ to:

(1) ~~Prevent~~prevent leaks or the flow of septage out of the facility into the seasonally high water table, onto the ground surface, or into any surface waters;

(2) ~~Minimize~~minimize the attraction or admittance of vectors; and

(3) ~~Prevent~~prevent unauthorized entry into septage containers or lagoons.

(f) Septage detention and treatment facilities located below grade shall:

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

(2) ~~Be~~ be constructed to a traffic rated standard or protected from vehicular traffic; and

(3) ~~Not~~ not be constructed of used metal tanks. Used metal tanks are allowed to be located beside a wall or embankment for gravity access as long as the entirety of the tank is visible.

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

(h) ~~Ground water~~ The Division may require that groundwater monitoring wells or a leak detection system ~~may be required~~ be installed around treatment or detention systems ~~if necessary to assure~~ for protection of public health and the ~~environment.~~ if there is evidence of a leaking tank.

(i) The area around tanks shall be free of debris and vegetation to allow for access and inspection for a distance of ~~at least~~ 5 feet.

(j) Septage shall be transferred to and from a detention system in a safe and sanitary manner that prevents leaks or spills of septage, including septage in pipes used for transferring waste to and from vehicles.

(k) Access roads or paths crossing or leading to the facility shall be posted with "NO TRESPASSING" signs.

(l) Requirements for lined lagoons:

(1) Lined lagoons shall be permitted only at sites where the construction and use of a lagoon shall not jeopardize the public health or environment.

(2) Portions of lined lagoons may be located below grade in accordance with Subparagraph (f)(1) of this Rule.

(3) Only lagoons designed, constructed and inspected in accordance with accepted engineering principles providing for the protection of the underlying groundwater will be considered for use in a septage treatment or detention system. If required by G.S. 89C, a professional engineer shall certify that the construction was completed in substantial compliance with the plans and specifications prior to any waste being introduced into the system. [Note: The North Carolina Board of Examiners for Engineers and Surveyors, has determined, via letter and resolution dated March 11, 2010, that certification of documents pursuant to this Paragraph constitutes practicing engineering under G.S. 89C.]

(4) Liners shall be a minimum of 12 inches of clay compacted to a maximum permeability of 10^{-7} cm/sec or equivalent synthetic liner.

(5) Synthetic liners shall have a minimum thickness of 30 mils. A synthetic liner shall have a demonstrated water vapor transmission rate of not more than 0.03 $gm/m^2/day$. Liner material and any seaming materials shall have chemical and physical resistance not adversely affected by environmental exposure or waste placement.

(6) Clay liners with a permeability more than 10^{-7} cm/sec may be used in conjunction with a synthetic liner to meet the maximum permeability of 10^{-7} cm/sec or equivalent.

(7) The surface of the supporting soil on which the liner will be installed shall be ~~reasonably~~ free of stones, organic matter, protrusions, loose soil, and any abrupt changes in grade that could affect the integrity of the liner.

(8) Lagoons shall be designed and maintained to have adequate storage to handle the additional water from a 25-year storm.

(9) Lagoons shall be protected from entry by unauthorized individuals by fencing or other appropriate means.

(m) Septage detention and treatment facilities shall adhere to the following minimum setback requirements:

(1) ~~Residence,~~ residence, place of business, except septage firm business, or place of public assembly – 100 feet;

(2) ~~Well~~ well or water supply spring – 100 feet;

(3) ~~Surface~~ surface waters – 100 feet;

(4) ~~Property~~ property lines – 50 feet;

(5) ~~Facilities~~ facilities permitted after April 1, 2010 ~~the effective date of this Rule~~ shall not be located in the 100-year flood plain hazard ~~area.~~area;

(6) ~~Soil~~ soil wetness, as determined in Part (a)(3)(A) of Rule .0837 – 12 inches;

(7) ~~Setbacks~~ setbacks in Subparagraphs (1) and (4) of this Paragraph may be in accordance with local zoning ordinances if located in areas zoned for industrial ~~use.~~use;

(8) ~~Setbacks~~ setbacks in Subparagraphs (1) through (4) of this Paragraph shall be increased 100% for lagoons; and

(9) ~~Accurate~~ accurate property line location ~~is~~ shall be the responsibility of the site operator.

(n) ~~All setbacks shall be maintained.~~ At the time of initial permitting, septage detention and treatment facilities shall observe the minimum setback distances specified in this Rule. Minimum setbacks shall be maintained throughout the life of the facility only on land owned, operated, or controlled by the permittee or by the landowner(s) at the time of initial permitting. Any sale, lease, or other conveyance of land by the permittee, or by the landowner(s) if different from the permittee, subsequent to the initial permitting of the facility shall include restrictions to ensure continued maintenance of the setbacks.

(o) The setbacks in Subparagraph (m)(1) through (4) of this Rule shall be increased for storage facilities with a capacity in excess of 25,000 gallons permitted after April 1, 2010 ~~the effective date of this Rule~~ to prevent offsite contamination from major spills, or 100% containment shall be provided. Increased setbacks shall be ~~up to~~ twice the minimum distance as indicated in Subparagraph (m)(1) through (4) of this ~~Rule.~~Rule, unless the permitted ~~Permitted~~ volume and the proximity to residences, wells or water supply springs, surface waters, ~~and~~or property lines dictate a reduced setback determined by the Division on a case-by-case basis.~~will determine the setback.~~

(p) Storage containers for individual restaurants shall be:

(1) ~~Located~~ located above grade and protected from vehicular traffic;

(2) ~~Maintained~~ maintained to be impervious to flies ~~fly tight~~ and in a sanitary condition;

(3) ~~Placed~~ placed at a location and acceptable to ~~standards~~ and determined by the local health department and the NC Department of Health and Human Services; ~~NC Division of Environmental Health;~~ and

(4) ~~No~~ no greater than 200 gallons in size.

(q) Setbacks for detention tanks at marinas may be reduced for storage capacity of 2000 gallons or less when the facility is designed to prevent leaks or spills or has containment equaling 100% of the storage volume plus rainfall

from a 25-year storm event. Setbacks shall in no case be less than what is approved by applicable local government, ~~state~~ State, or federal laws or rules.

(r) Permit holders of all septage detention and treatment facilities shall have all records required in accordance with this Section available for review during inspections by the Division or upon the Division's request.~~Septage shall not be stored in a detention or treatment facility for more than six months.~~

(s) Septage shall not be stored or treated at a new septage treatment or detention facility until a representative of the Division has inspected the facility to determine compliance with these Rules and consistency with the permit application and all permit conditions.

(t) Septage detention and treatment facility closure shall include:

(1) a written notification of cease of operations submitted to the Division that shall include the permit number, the date of cease of operations, and the signature of the operator; ~~A completed ceased operation form submitted to the Division;~~

(2) ~~All~~ all liquids and solids, resulting from septage detention or treatment, removed from all portions of the facility and ~~properly~~ managed or disposed at an ~~appropriate,~~ approved facility; and

(3) ~~All~~ all parts of the facility removed from property under separate ownership, unless all landowners provide the Division with written documentation that the facility may remain at the site.

(u) Record keeping for detention facilities that receive septage from more than one septage management firm shall include:

(1) ~~The~~ the date that the septage is received at and removed from the facility;

(2) ~~Name~~ name of the septage management firm that delivered the septage;

(3) ~~Type~~ type and amount, in gallons, of septage received; and

(4) ~~Where~~ where septage is discharged.

(v) Record keeping for treatment facilities shall include:

(1) ~~Date~~ date septage is received at the facility;

(2) ~~Name~~ name of the septage management firm that delivered the septage;

(3) ~~Type~~ type and amount, in gallons, of septage received;

(4) ~~Date~~ date processed material(s) is removed from the facility;

(5) ~~Type~~ type and amount, in tons or gallons, of material removed from the facility; and

(6) ~~Management~~ management methods for each type of material removed by the facility.~~facility~~

(w) Alarms shall be required to detect high liquid levels, leaks and spills, or system operation parameters at detention or treatment facilities when the location, design, capacity, or operational complexities of the facility warrant the additional safety precautions.

History Note: *Authority G.S. 130A-291.1;*
Eff. April 1, ~~2010.~~2010;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0842 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0842 INNOVATIVE OR ALTERNATIVE TREATMENT OR STORAGE METHODS

(a) Applications for permits for innovative or alternative ~~treatment~~ treatment, storage, or land application methods that do not fit the criteria outlined in this ~~section will~~ Section shall be reviewed in accordance with ~~N.C.G.S.~~ G.S. 130A-291.1(i).

(b) Applications shall include: ~~If required by G.S. 89C, a professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated March 11, 2010, that preparation of engineering design documents for alternative treatment methods that do not fit the criteria outlined in this Section constitutes practicing engineering under G.S. 89C.]~~

(1) ~~The~~ the information required in Rule .0836(c) of this Section;

(2) ~~An~~ an operation and maintenance manual consistent with the requirements of Rule .0836(e)(4);

(3) ~~Means~~ means of demonstrating that the proposed method of treatment or storage will meet the appropriate standards for vector attraction reduction and pathogen reduction in this Section; and

(4) ~~Testing~~ testing methods and schedule to document Subparagraph (3) of this Paragraph.

If required by G.S. 89C, a professional engineer shall prepare these documents. [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated March 11, 2010, that preparation of engineering design documents for alternative treatment methods that do not fit the criteria outlined in this Section constitutes practicing engineering under G.S. 89C.]

(c) Innovative or alternative design criteria shall be approved in cases where the applicant can demonstrate that the alternative design criteria will provide the following:

(1) ~~Equal~~ equal or better treatment of the waste;

(2) ~~Equal~~ equal or better protection of the waters of the state; and

(3) ~~No~~ no increased potential for nuisance conditions from noise, ~~odor~~odor, or vermin.

History Note: *Authority G.S. 130A-291.1;*
Eff. April 1, ~~2010.~~2010;
Readopted Eff. January 1, 2019.

15A NCAC 13B .0843 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0843 LAND APPLICATION SITE LAND USE AND SITE CLOSURE

(a) ~~Adherence~~ Upon closure of a land application site permitted in accordance with this Section, adherence to the site restrictions in 40 CFR 503.32 ~~503.32(c) of Subpart D~~ shall be required.

(b) Nursery and horticultural products, trees and other forest products, ~~including but not limited to~~ such as pine straw and pine bark, shall not be harvested or gathered for 30 days after septage application.

(c) Public access is to be controlled in accordance with 40 CFR 503.32.~~40 CFR 503.32(c) of Subpart D.~~

(d) The permit holder or operator of the site shall submit a written notification to ~~notify~~ the Division at least 30 days prior to final closure of a septage land application site in order to schedule a site inspection for determination of compliance with this Section. The notification shall include the permit number, the date of cease of operations, and the signature of the operator.

(e) Prior to final closure, the soil pH of the site shall be raised to 6.5, unless the fertility requirements for crops to be grown in the following year dictate less.

History Note: *Authority G.S. 130A-291.1;*
Eff. October 1, ~~2009.~~2009;
Readopted January 1, 2019.

15A NCAC 13B .0844 is proposed for readoption with substantive changes as follows:

15A NCAC 13B .0844 TRANSPORTATION OF SEPTAGE

(a) Vehicles used for the transportation of septage shall be operated and maintained to prevent ~~All septage shall be transported in a safe, sanitary manner that prevents~~ leaks and spills of septage and shall comply with the following:

(1) ~~All~~ all tanks shall be constructed of metal and ~~permanently attached~~ affixed to the truck bed with permanent fixtures such as bolts;~~bed, unless otherwise approved by the Division;~~

(2) ~~All~~ all valves shall be in ~~proper~~ working order and be ~~completely~~ closed during transportation;

(3) ~~All~~ all access ports shall have ~~proper fitting~~ lids in good repair and ~~be completely closed~~ sealed during transportation;

(4) ~~Portable~~ portable toilet pump units that slide into pickup truck beds shall be bolted to the trucks in accordance with manufacturer specifications;

(5) ~~Boats~~ boats used to pump or transport septage shall be United States Coast Guard approved or ~~engineered~~ construction plans shall be available indicating that the specific craft is stable in the water when fully ~~loaded;~~ loaded with septage, and if required by G.S. 89C, a professional engineer shall prepare these documents; and

(6) ~~Tanks~~ tanks that are mounted on trailers for the pumping or transportation of septage shall meet all applicable ~~state~~ State and federal requirements for highway use.

(b) All permitted septage management firms shall display ~~decals or~~ lettering on each side of every pumper vehicle operated by the firm. The ~~decals or~~ lettering shall include the firm name, ~~address (town name),~~ town name, phone number, and septage management firm permit ~~number.~~number as shown on the firm application. All ~~decals or~~ lettering required by this Rule on the pumper vehicle shall be no less than three inches in height and ~~plainly~~ clearly legible and ~~visible.~~ not obstructed from view. Identification shall not be removable (i.e. no magnetic signs).~~be permanently attached (i.e., no removable signs).~~

(c) Applicants for septage management firm permits ~~which~~ that were not permitted in the previous calendar year shall have each pump truck inspected prior to the Division's issuance of a permit.

(d) Septage to be discharged at a wastewater treatment plant or any part of the collection system for that plant shall be handled in accordance with the plant rules and policies.

(e) All vehicles used in the transportation of septage, including spare vehicles and tankers, shall meet the requirements of this Section~~section~~ and be included in the permit application.

(f) Vehicles used in the transportation of septage, that are listed on an approved septage management firm permit application, may remain loaded or partially loaded on land owned by the septage management firm for up to seven days without obtaining a permit for a detention or treatment facility. Such vehicles shall comply with ~~all parts of~~ this Rule.

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

Readopted January 1, 2019.

15A NCAC 13B .0845 is proposed for readoption as a repeal as follows:

15A NCAC 13B .0845 REVOCATION OF PERMITS

~~The Division shall suspend or revoke permits in accordance with G.S. 130A-23.~~

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

15A NCAC 13B .0846 is proposed for readoption as follows:

15A NCAC 13B .0846 APPEALS

Appeals shall be made in accordance with Article 3 G.S. 150B.

History Note: Authority G.S. 130A-291.1;
Eff. October 1, ~~2009.~~2009;
Readopted Eff. January 1, 2019.

APPENDIX 2
Comments Received Prior to Rule Making for
15A NCAC 13B Section .0800 Septage Management

15A NCAC 13B .0831 DEFINITIONS (pertaining to Septage Management)

Comment received electronically:
Commenter Name: Jonathan Pfohl
Company/Organization: Municipal Engineering Services
Email: jpfohl@mesco.com
Zip: 27529
Do I agree with the Agency's determination? Yes
I would determine this rule's classification as: undefined
Do I want to submit a written comment on this rule? Yes
My comment type on this rule is: An objection to the rule
Do I want to enter a comment, or submit a file? Enter a comment
My Comment Text: Definition 14 defines SHWT as in "soil". What if the groundwater is in rock beneath the proposed landfill? Would this geological condition preclude the requirement to determine the SHWT?

Agency Response:
The agency's selected determination for this rule is "necessary with substantive public interest". Comments will be considered during the re-adoption process.

From: Young, Jeff
To: Montie, Jessica
Cc: Cox, Vernon N; Shepherd, Michael D
Subject: Readoption and Amendments to 15A NCAC 13B Section .0800
Date: Tuesday, January 02, 2018 4:02:55 PM

Ms. Montie-

Our division has a concern with language in the proposed rules for septage management being considered for readoption. Specifically, the inclusion of technical specialist in development of nutrient management plans for sites receiving more than 50,000 gallons of septage per acre per year. My predecessor, Natalie Woolard, may have had some discussions with your organization about this in the past. However, I am not aware of what was discussed or any decisions.

A technical specialist, as defined in the proposed rules (15A NCAC 13B .0831), is "an individual designated by the Soil and Water Conservation Commission, pursuant to rules adopted by that Commission, to certify animal waste management plans." The Soil and Water Conservation Commission (SWCC) categorizes technical specialists into seven different designations, several of which are not specifically development of animal waste management plans.

We do not have any training available nor expertise in residential, commercial, and industrial waste byproducts and their incorporation into an acceptable waste management plan. Technical specialists, as currently designated by the SWCC, are not equipped for developing plans of this nature. I ask the Groundwater and Waste Management Committee reconsider inclusion of SWCC-designated technical specialist in septage management rule 15A NCAC 13B .0835 (c)(12)(L). That role is better served by a licensed soil scientist, professional engineer, or professional geologist.

Please contact me so we can discuss further. It is in our collective interest to address this concern before adoption by the EMC. Thank you for your consideration.

-Jeff Young, PE

Technical Services Section Chief
NCDA&CS - Division of Soil and Water Conservation
1301 Fanning Bridge Road
Fletcher, NC 28732
Phone: 828-687-6987
Cell: 828-606-3480

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From: Hollis, Carrie
To: Montie, Jessica; Everett, Jennifer; Mussler, Ed; Ulishney, Adam; Cobb, Chester
Cc: Masich, Molly; McGhee, Dana; Grozav, Anca
Subject: Review - 15A NCAC 13B .0830-.0846, Septage Management
Date: Friday, May 18, 2018 8:26:01 AM
Attachments: DEQ_2018-05-18.pdf
image001.png

OSBM has reviewed the Division of Waste Management's proposed amendments to rules 15A NCAC 13B .0830-.0846, regarding septage management, in accordance with G.S. 150B-21.4 and with E.O. 70 from 10/21/2010 as amended by E.O. 48 from 4/9/2014. OSBM has determined the amendments have little to no impact on state or local governments and no substantial economic impact.

Please let me know if you have any questions.
-Carrie

Carrie Hollis
Economic Analyst
NC Office of State Budget and Management

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