

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT

**PERMIT TO OPERATE A SEPTAGE LAND  
APPLICATION SITE**

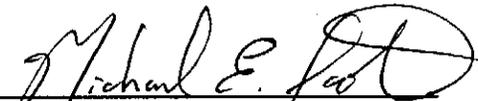
Albemarle Septic Services  
Joseph M. Russell  
134 Belcross Rd  
Camden, NC 27921

is hereby issued a permit to operate a Septage Land Application Site with permit # SLAS-15-02 on SR 1145 in Camden County at approximate position 36.3711° N latitude and -76.1732° W longitude. The site is to be operated in accordance with 15A NCAC 13B .0800 Septage Management, the information stated in the approved application, and the conditions of this permit. The unauthorized disposal of any liquid or solid wastes other than those specified in the conditions of this permit will be considered a violation of the conditions of this permit. Failure to comply with the conditions of this permit may result in permit suspension, permit revocation, action for injunctive relief, administrative penalties, or other remedies as provided in G.S. 130A, Article 1., Part 2.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in effect at the time of review.

Date Issued

2/11/10

  
Michael E. Scott, Branch Head  
Solid Waste Section

Operator: Joseph M. Russell  
SLAS #: 15-02  
County: Camden

Page 2 of 3

**Permit Conditions:**

1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Joseph M. Russell and approved by the Division. The 10.1-acre site shall be split into two fields labeled as Field A, 4.6 acres, and Field B, 5.5 acres. The fields have been established in Cheyenne bermudagrass. Areas where the bermudagrass stand drops below 80% in coverage will be re-seeded in bermudagrass next Spring at 15 lbs/acre. In October of each year, all fields will be interseeded with wheat or oats at a rate of approximately 150 lbs/acre. The bermudagrass in fields A and B shall be cut and baled as hay every four to six weeks, or whenever it reaches 12 to 15 inches in height. At least three bermudagrass harvests shall be made each year. The wheat or oats will be cut as hay and baled in April and May of each year. The 30-day waiting period between the last application of septage and the harvest of a crop shall be met by alternating septage applications between fields. All discharges shall be at locations on the site consistent with the crop rotation in the approved plan.
3. This site shall be operated and maintained in accordance with the erosion and runoff control plan submitted by Joseph M. Russell. Any site improvements noted in the plan must be installed within 30 days of plan approval. The site shall be operated and erosion and runoff control measures maintained in such a manner as to prevent migration of wastes off of the designated waste receiving site. The installation of groundwater monitoring wells may be required.
4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (local, state and federal) which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the requirements of 40 CFR 503.
5. This permit may be modified or reissued to incorporate any conditions, limitations and monitoring requirements the Division of Waste Management deems necessary to adequately protect the environment and public health.
6. **This site is only permitted for the land application of domestic septage, portable toilet waste, grease septage, and commercial/industrial septage. Commercial/industrial septage shall only be land applied after the waste from each source is tested and the results approved by the Solid Waste Section. Domestic septage pH shall be raised to 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 30 minutes prior to land application. Grease septage or grease septage mixed with domestic septage shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application.**
7. **This site contains approximately 10.1 acres that are available for the land application of septage. The maximum annual application rate shall be 50,000 gallons per acre per year, for a total, maximum annual application of 505,000 gallons. This application rate assumes equal septage distribution, on an annual basis, over the permitted area.**

Operator: Joseph M. Russell  
SLAS #: 15-02  
County: Camden

Page 3 of 3

8. An approved above ground septage detention system with a minimum design capacity of 12,000 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated during the operation of the site that this volume of storage is inappropriate.
9. Only the area designated on the attached site map(s) shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner that there is no standing water when the discharge is complete. Septage shall not be applied during periods of high soil moisture.
10. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee shall discharge septage at this site without prior appropriate notification and written approval of the Division of Waste Management.
11. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure.
12. **This permit shall expire on July 16, 2014.** Modifications, when necessary, shall be made in accordance with the rules in effect at the time of renewal. An application for permit renewal shall be submitted at least ninety (90) days prior to the permit renewal date. A septage application log for the period of time this permit was valid shall be submitted along with an application for permit renewal or modification. The information required in the log is described in Rule 15A NCAC 13B .0838 (e) (1) of the NC Septage Management Rules and 40 CFR Part 503.17(b) of the Federal Register. This permit is non-transferable.
13. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division of Waste Management upon request.
14. Any duly authorized officer, employee, or representative of the Division of Waste Management may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.
15. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site.
16. The areas that can be used for land application of septage shall be maintained at least 500 feet from any existing wells, residences, places of business, or places of public assembly. Septage shall not be disposed of within 50 feet of any property line or within 100 feet of any ditch.



North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

February 11, 2010

Mr. Joseph M. Russell  
Albemarle Septic Service  
134 Belcross Rd.  
Camden, NC 27921

**RE: SLAS-15-02 Permit Renewal  
Albemarle Septic Service  
SR 1145 Camden County**

Dear Mr. Russell:

The NC Division of Waste Management has reviewed your application to renew Septage Land Application Site Permit **SLAS-15-02** in Camden County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SLAS-15-02**, is enclosed. When communicating to the Division about this permit, please refer to it as "**SLAS-15-02**."

Please read all permit conditions carefully. Your nutrient management and soil erosion and runoff control plans you submitted have been included in your Permit. In particular, pay close attention to **Permit Conditions 2, 6, 7, and 12**. Condition 2 covers specific details from your nutrient management plan and lists the acres of the two fields. The site was recently mapped with a GPS unit. **As a result, the application area marked came out to be approximately 10.1 acres with Field A containing 4.55 acres and Field B containing 5.54 acres.** This reflects a decrease in the previous permitted acres of 12.

Condition 6 states that in order for commercial/industrial septage to be land applied, a waste analysis of the septage must be done and approval granted by the Division. Condition 7 states the maximum annual application amount for the site. **With the decrease in acres, the maximum annual application amount is now 505,000 gallons.** Condition 12 states that this permit will expire on **July 16, 2014**. Remember that an application for permit renewal and your septage application logs should be submitted at least ninety (90) days prior to the expiration of your permit.

Again, please pay close attention to the enclosed permit. Remember that violations to the NC Septage Management Rules or these permits could subject you to administrative penalties of up to **\$15,000 per violation per day**. If you have any questions concerning your permits or septage in general, please do not hesitate to contact me at (919) 508-8515.

Sincerely,

Chester R. Cobb, Soil Scientist  
Composting & Land Application Branch

Enclosures

cc: Central Files  
Martha Meiggs and Susan Jennings, landowners  
Camden County Health Department

h:\cl\septage\slasper\15-camd\russell\15-02cl09p.docx



# APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resources  
 Division of Waste Management – Solid Waste Section  
 401 Oberlin Rd., Ste. 150, Raleigh, NC 27605

**I. Site and Operator Information**

1. Applicant

Address

Phone

Albemarle Septic Service  
134 Belcross Rd  
Camden NC 27927  
252-202-9969

2. Contact person for site operation (if different from applicant):

Title or position

Address

Phone

N/A

3. Landowner

Address

4. Site Location:

Directions to site:

County Camden State Road Number 1145  
US 17 N. 158 E to Left Lamb's Rd

5. Indicate whether request is: new \_\_\_\_\_ renewal  modification \_\_\_\_\_

For a permit renewal or modification, provide the following information:

Existing site permit number: 15-02 permit expiration date: 7-16-09

6. Number of acres meeting the requirements of the NC Septage Management Rules: 11.5 acres:

7. Substances other than septage or grease trap pumpings previously disposed of on the site:  
 (a) None  or (b) Attach a list indicating other substances, the amounts discharged, and the dates of discharge.

8. Attach written, notarized landowner authorization to operate a septage disposal site signed by the landowner (if the permit applicant does not own the property). **If a corporation owns the land use a corporate landowner authorization form. If limited liability company owns the land, use a limited liability company landowner authorization form.**

9. Attach site evaluation report, including aerial photograph and soil analysis with metals results, unless the Division prepared the report.

10. Attach a vicinity map (county road map showing site location).

(over)





II. Site Management Information:

The following information shall be included with the application form:

1. Nutrient Management Plan
2. Soil Erosion and Runoff Control Plan
3. Alternative plan for disposal (detention facility permit number or wastewater treatment plant authorization): STOE 15-02
4. Types of septage proposed to be discharged at the site (check all that apply):
  - (a) Domestic septage pumped from septic tanks
  - (b) Grease trap pumpings
  - (c) Portable toilet waste
  - (d) Commercial / Industrial septage
5. Proposed treatment method of each type of septage to be land applied (use additional paper to explain if necessary):
  - a. LIME STABILIZING FOR 2 HOUR HOLDING
  - A PH level of 12 and for Greases held
  - a PH level of 12 for 2 hours
- b. Proposed method of applying septage to land, including septage distribution plan if required (use additional paper to explain if necessary): Surface Broadcasting in  
March with Pump Truck
7. Demonstration from the appropriate state or federal government agency that the land application site complies with the Endangered Species Law \*\* or if any part of the site specified is not agricultural land (use additional paper to explain if necessary): Agricultural Use

III. Certification

I hereby certify that:

1. The information provided on this application is true, complete, and correct to the best of my knowledge.
2. I have read and understand the N.C. Septage Management Rules, and
3. I am aware of the potential consequences, including penalties and permit revocation, for failing to follow all applicable rules and the conditions of a Septage Land Application Site permit.

Joseph M Russell 5-10-09  
 Signature Date

Joseph M Russell Owner  
 Print name Title

Note: This application will not be reviewed until all parts of the application are complete.

\* Refer to Section .0821(e) of the NC Septage Management Rules.

\*\* Refer to Section .0821(g) of the NC Septage Management Rules.

\*\*\*Signature of company official required.

h:\cfs\septage\forms\appcaform-04\stas per-2004

Landowner's Authorization to Operate a Septage Land Application Site



Division of Waste Management - Solid Waste Section  
101 Summit Rd, Ste. 150, Raleigh, NC 27605

*Martha Ferebee Meiggs*  
I, Susan Ferebee-Jennings (name of landowner) hereby certify that I am the owner of

16 acres of land located on Lamb's Rd, Camden, NC in  
Camden County

and identified by Book 119 Page 985 SR 1145 (book and page of  
recorded deed or tax map parcel) and that I agree to allow Albawake Septic

(name of site operator) to use said land for septage land application for a period of 5 yr  
7-16-09 (length of time), beginning 7-16-14 (month, day and year)

and that I have read the North Carolina Septage Management Rules \*, and I understand and agree to  
maintain the restrictions on land use after septage land application ends \*\*. I further understand that no  
septage may be land applied until the Division of Waste Management has issued a permit for a Septage  
Land Application site. The above described property is owned solely by me or jointly with \_\_\_\_\_

Martha Ferebee Meiggs & Susan Ferebee-Jennings (names of all  
co-owners, or state none)

Signature of landowner Martha Ferebee Meiggs Date 5-10-09

Signature of landowner Susan Ferebee-Jennings Date 5-10-09

Sworn to and subscribed before me this 13<sup>th</sup> day of May, 2009

Laura M. Rollinson  
(Notary Public)

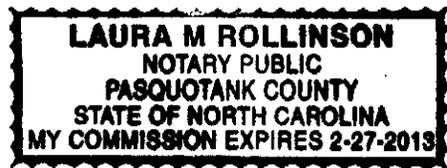
(OFFICIAL SEAL)

My Commission expires: 2/27/2013

\* 15A N.C. Admin. Code 13B Section .0800

\*\* As required by Rule .0826

h:\cis\septage\forms\authoriz\land auth sias-2004





**Landowner's Authorization to Operate a Septage Detention or Treatment Facility**

North Carolina Department of Environment and Natural Resources  
Division of Waste Management - Solid Waste Section  
401 Oberlin Rd, Ste. 150, Raleigh, N.C. 27605

Martha Ferebee Meiggs  
I, Susan Ferebee-Jennings (name of site owner) hereby certify that I am the owner of  
16 acres of land located on Lambs Rd, Camden, NC and  
identified by Book 119 Page 785 <sup>SR1145</sup> (book and page of recorded deed or tax map parcel) and  
that I agree to allow Joseph M. Russell <sup>Albemarle Septic Service LLC</sup> (name of site operator) to use  
said land for a septage detention or treatment facility for a period of 5yrs (length  
of time), beginning 7/16/09 (month, day and year) and that I have read the North  
Carolina Septage Management Rules \*. I further understand that no septage may be stored or treated on  
the land until the Division of Waste Management has issued a permit for a detention or treatment facility.

The above described property is owned solely by me or jointly with Martha Ferebee Meiggs  
& Susan Ferebee-Jennings (names of all co-owners, or state none).

Signature of landowner Martha Ferebee Meiggs Date 7-29-09

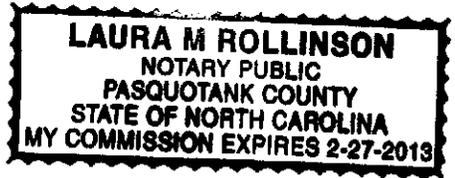
Signature of landowner Susan Ferebee-Jennings Date 7-29-09

Sworn to and subscribed before me this 7<sup>th</sup> day of January, 20 10.

Laura M Rollinson  
(Notary Public) (OFFICIAL SEAL)

My Commission expires: 2/27/2013

\* 15A N.C. Admin. Code 13B Section .0800



# ALBEMARLE SEPTIC SERVICES

## NUTRIENT MANAGEMENT PLAN FOR SEPTAGE APPLICATIONS TO BBERMUDA GRASS AND SMALL GRAIN

### **A. General Information:**

1. Periodic sampling (at least) 1/year of the septage will be conducted for waste Analysis. (optional) Standard Nitrogen content in septage is 2.6 lbs N/1000 gallons. Samples shall be collected by Albemarle Septic and given to Tidewater Ag. For submission to NCDA Agronomic Division.
2. Field A contains approximately 6 acres and field B contains approximately 5.12 Acres. The attached copy of the aerial photograph for the site shows field boundaries and identifications.
3. There are two soil series on the site, Bajac Loamy Sand (BoA) covers 80% of the area and Munden Loamy Sand (MuA) covers the other 40%. See attached soil survey map.
4. Septage will not be applied where the site is untrafficable (untrafficable is Defined as soil that will allow a loaded truck to leave a depression in sod greater than 3 inches in depth)
5. All nitrogen recommendation for forages will be 75% of the realistic yield Expectation nitrogen rate should the forage be grazed.
6. Septage storage shall be provided to account for the average volume of septage Pumped per week, or an alternative plan, such as disposal at a waste treatment plant, should be in place.
7. The site will have soil samples taken on an annual basis to track P, K, and heavy Metals. Samples taken 11/22/02 will establish the baseline.

### **B. Crops to be grown and approximate planting times:**

1. Field A&B including buffer zones will be seeded in Cheyenne Bermuda grass at a rate of 15lb/acre in April (month) of 2003 in order to establish a permanent stand. To promote stand establishment, the following steps will be harvests/reduced vehicular traffic, etc): Refer to attached discussions Areas that develop with less than 80% groundcover of Bermuda will be seeded with Bermuda at a rate of 15lb/acre in April (month).

Each year thereafter all fields will be interseeded with wheat or oats at a Rate of approximately 150 lb/acre no till drilled. (seeding method) in early October (month)

**A. Nitrogen needs for crops grown:**

RYE=Realistic Yield Expectations

N App. Rate +Suggested N application rate based on RYE for soil type

Crop (hay)	RYE	N App. Rate	lbs N/acre
<b>Field A</b>			
Cheyenne Bermuda Grass	5.9 tons/acre x 40lbs	N/dry ton = 236	
Wheat or Oats	3.0 tons/acre x 25lbs	N/dry ton = 75	

**Field B**

Cheyenne Bermuda grass	5.9 tons/acre 40lbs	N/dry ton=236
Wheat or Oats	3.0 tons/acre 25lbs	N/dry ton= 75

**B. Relative application rates for ARTM ALFT, and B**

MONTH	FIELD		
	ART	ALFT	B
January	Low	Low	Low
February	Low	Low	Low
March	Medium	Medium	Medium
April	High	High	High
May	Medium	Medium	Medium
June	High	High	High
July	High	High	High
August	Medium	Medium	Medium
September	Medium	Medium	Medium
October	Low	Low	Low
November	Low	Low	Low
December	Low	Low	Low

None=0 gallons Low=5,000 gallons Medium=10,000 gallons High=15,000 gallons

Note: Cumulative application rate is not to exceed the permitted application rate

Annual application rate is not to exceed 50,000 gallons per acre.

At 2.6 lbs N/1000 gal 50,000 gal/A would supply only 130 lbs/A N.

#### E. Application Method

The preceding information is based on septage being evenly applied over the entire permitted site by surface broadcasting w/a Pump Truck (method, equipment, special application patterns).

#### F. Additional Fertility Requirements

Phosphorus and potassium will be added in accordance with the soil test results for the crops grown. NOTE: If a septage analysis is available, the phosphorus fertilizer requirement can be reduced by accounting for the amount of phosphorus in the septage.

N.C. Agronomic Division Soil Test results are attached. Since this is a new site which has had only small amounts of septage actually applied, these index levels will become the baseline for monitoring build up of P, K and metals.

Approximately 400 lbs/acre of 10-0-15 N-P-K fertilizer will need to be added to the land application area in May month(s) to maintain fertility levels.

The buffer areas will be fertilized with 400 lbs/acre of 10-0-15 N-P-K fertilizer to maintain production based on soil test results.

#### G. Harvest of the crops and their use:

1. The bermuda grass will be cut as hay and baled whenever it reaches approximately 12 inches in height, or roughly every 4 to 6 weeks beginning in June. At least three harvests will be made from each field each year.
2. The wheat or oats will be cut as hay and baled in April and May of each year from Fields A and B, respectively.
3. A 30-day waiting period must be observed between the last application of septage and harvest. Beginning about the first of April each year, septage will be applied strictly to Field B while the small grain on Field A is undisturbed for 30 days. After 30 days the small grain in Field A will be harvested and septage application switched to Field A. After an additional 30 days, in late April to early May, the small grains will be harvested from Field B. By early May, a rotation will be established which can cycle every 30 to 45 days between bermuda grass harvests. By early October small grain will have been planted and the entire site will be available for septage application until mid March the following year.
4. The hay will be given to a local farmer, in return for his baling the hay, to feed his beef cows.

## SOIL EROSION AND RUNOFF CONTROL PLAN

Given that slopes on the site do not exceed five percent, buffer areas\*, planted in Bermuda and small grains should suffice to prevent septage waste from migrating off of fields.

\*Buffers: 60 feet wide beside drainage ditches  
50 feet wide beside swamp  
100 feet wide beside pond

Submitted by: Mike Russell  
Site operator

Date: June 24, 2009

Plan prepared by: Mike Russell

Date: June 24, 2009

*Mike Russell*

*6-24-09*