Environmental Quality

North Carolina Department of Environmental Quality

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Rachel Locklear
2161 Evergreen Church Road
Pembroke, NC 28372

is hereby permitted to operate Septage Land Application Site with permit # **SLAS-78-19** located on Leonard Road in Robeson County at approximate position 34.68604° N latitude and -78.83669° E longitude. This site is permitted only for operations that are conducted in accordance with the representations made in the approved application, with all conditions attached to this permit, and with all of the provisions of 15A NCAC 13B.0800 -- Septage Management. Failure to operate as permitted may result in the Department suspending or revoking this permit, initiating action to enjoin the unpermitted operation, imposing administrative penalties, or invoking any other remedy as provided in Chapter 130A, Article 1, Part 2 of the North Carolina General Statutes.

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 3/31/2016

Martin A. Gallagher, Supervisor
Composting & Land Application Branch,
Solid Waste Section
Division of Waste Management, NCDEQ

CONDITIONS OF OPERATING PERMIT

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 This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of both surface and ground waters.

2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Rachel Locklear and approved by the Division of Waste Management. **The 14.7-acre site shall be divided into three fields known as Field A (7.4 acres), Field B (4.0 acres) and Field C (3.3 acres).** The mandatory 30-day waiting period between the last application of septage and the harvest of a crop shall be met by alternating septage applications, the waiting period and harvests among the three permitted 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 Rachel Locklear in such a manner as to prevent the migration of wastes off of the designated waste receiving site. Any site improvements noted in the plan must be installed within 30 days of plan approval. The installation of groundwater monitoring wells shall be required as deemed necessary by the Division.

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 local, state, and federal government agencies which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the Federal Regulations listed in the Code of Federal Regulations, 40 CFR Part 503.

5. This permit may be modified or reissued at any time to incorporate any conditions, limitations, and/or monitoring requirements the Division deems necessary to adequately protect the environment and public health.

6. **This site is only permitted for the land application of domestic septage (including portable toilet waste) and grease septage.** 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. Grease septage when applied over perennial vegetation shall be diluted per 15A NCAC 13B .0838(a)(15).

7. **This site contains approximately 14.7 acres that are available for land application of septage.** The maximum annual application rate shall be 50,000 gallons per acre per year. At this application rate, a maximum annual volume of **735,000 gallons** may be applied to this site. The maximum annual application rate assumes equal septage distribution, on an annual basis, over the entire permitted area. Application rates to each of the disposal fields shall not exceed the maximum annual application rate or the monthly application rates listed in the approved nutrient management plan.

8. An approved septage detention system with a minimum design capacity of 14,134 gallons, as per 15A NCAC 13B .0841(a) shall be available prior to operation of this site unless an approved disposal option is available for use during periods when land application is prohibited. 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 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.

10. Septage shall not be applied during any precipitation event, or if there is standing water on the soil surface, if the soil surface is frozen, or if the soil surface is snow covered. The Permittee shall consider pending weather conditions when making the decision to land apply in order to prevent any discharge of septage outside of the permitted boundary.

11. Septage shall not be applied during periods of high soil moisture. Septage applications that will result in ruts greater than three inches in the soil surface are prohibited.

12. Any discharge of septage outside of the permitted boundaries via runoff, aerial drift, etc. is prohibited.

13. 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 or an employee of the firm named in this permit shall discharge septage at this site without prior appropriate notification and written approval from the Division.

14. 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. This permit is non-transferable.

15. **This permit shall expire on March 31, 2021.** 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 15A NCAC 13B .0838(e)(1) of the NC Septage Management Rules and the Code of Federal Regulations, 40 CFR Part 503.17(b).

16. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division upon request.

17. Any duly authorized officer, employee, or representative of the Division 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.

18. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site. Boundaries of the permitted septage land application fields shall be clearly marked on the ground.

19. The areas that can be used for land application of septage shall be maintained to meet the minimum setback distances as described in 15A NCAC 13B .0837(d) such as 500 feet from any existing wells, residences, places of business, or places of public assembly. Also, septage shall not be disposed of within 50 feet of any property line, within 100 feet of any ditch or within 200 feet of any surface water unless specified otherwise.

Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

MICHAEL SCOTT
Director

March 31, 2016

Ms. Rachel Locklear
2161 Evergreen Church Road
Pembroke, NC 28372

RE: SDTF permit renewal
Rachel Locklear
SDTF-78-19
Leonard Road in Robeson County

Dear Ms. Locklear:

Enclosed is your permit to operate a Septage Detention and Treatment Facility with permit **# SDTF-78-19,** issued in accordance with the NC Septage Management Rules. To answer questions you may have about this permit, we'll need the number to assist you. **This facility consists of one 4,000 gallon and two 8,000 gallon metal tanks for the storage of domestic septage (including portable toilet waste) and grease septage per Permit Condition 7.** This is a separate permit from the Septage Land Application Site Permit.

Please read the permit conditions carefully and if you have any questions, contact me at (910) 433-3352 or Martin Gallagher at (919) 707-8280.

Sincerely,

Connie S. Wylie, Soil Scientist
Division of Waste Management, NCDEQ

cc: files
Robeson County Health Department

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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
1646 Mail Service Center, Raleigh, NC 27699-1646

RECEIVED
NOV 23 2015
DIVISION OF WASTE MANAGEMENT
FAYETTEVILLE REGIONAL OFFICE

I. Site and Operator Information

1. Applicant Rachel Locklear
   Address 2161 Evergreen Church Rd.
   Pembroke NC 28372
   Phone 910-734-7758 or 910-671-0563

2. Contact person for site operation (if different from applicant): _____
   Title or position _____ Phone _____
   Address _____

3. Landowner Rachel Locklear
   Address 2161 Evergreen Church Rd.
   Pembroke, NC 28372

4. Site Location: County Robeson State Road Number off 1963 Smith Mill Rd-Leonard Rd.
   Directions to site: East Robeson County near Bladen County Line
   North of Highway 41 off Smith Mill Rd. SR 1963

5. Indicate whether request is: new _____ renewal ✓ modification _____

   For a permit renewal or modification, provide the following information:
   Existing site permit number SLAS-78-19 permit expiration date: Feb. 22, 2016

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 15 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): authorizations attached

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): Septage lime stabalize to pH 12 for 30 minutes, pH of 12 for grease septage for 2 hours. All waste shall be pH of 12 for land application to occur

6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): A splash plate from a moving pumper truck to evenly spread across field at a steady speed to prevent puddles.

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): Site is agriculture RC

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.

Rachel Locklear — Signature***

11-18-15 — Date

Rachel Locklear — Print name

Owner — Title

Note: This application will not be reviewed until all parts of the application are complete.
*** Refer to Section .0837(e) of the N.C. Septage Management Rules.**
**** Refer to Section .0837(g) of the N.C. Septage Management Rules.**
*****Signature of company official required.**

Nutrient Management Plan For Septage Applications to Coastal Bermudagrass and Small Grains

RECEIVED
DEC - 2 2015
DENR -FAYETTEVILLE REGIONAL OFFICE

Prepared for:
Don Locklear Septic Tank Cleaning
2161 Evergreen Church Rd.
Pembroke, NC 28372
(910) 671-0563
(910) 521-9304
(910) 521-0905 home
(910) 734-7758 mobile

A. General Information:

1. This Nutrient Management Plan has been developed for SLAS-78-19 off of Leonard Road in Roberson County.

2. Soil sampling of the septage land application site shall be done annually for nutrients and heavy metals. Samples shall be sent to the NCDA & CS Agronomic Lab.

3. This site contains 14.7 acres divided into three fields as follows: Field A (7.4 acres), Field B (4.0 acres), and Field C (3.3 acres). Fields B and C will be managed together in regards to land application, 30 day waiting period, and harvest.

4. The dominant soil series at this site is Pocalla (PoB).

5. Septage will not be applied where the site is untrafficable or a loaded truck leaves a depression 3 inches or greater and/or the soil moisture is too great to adequately absorb the septage.

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. Septage Detention Facility, SDTF-78-19, is available for storage and treatment of septage prior to land application.

B. Crops to be grown and approximate planting and harvest times:

1. All three fields (14.7 acres) have been established in Coastal Bermudagrass. If the bermudagrass stands falls below 80% ground coverage, then the field or bare areas shall be resprigged within February - April at 30 - 40 bushels of sprigs per acre.

2. Small grains will be overseeded into the bermudagrass in October or November at a rate of approximately 120 lbs/ac if broadcasted or 100 lbs/ac if drilled.

3. Harvesting of the Coastal Bermudagrass will be as needed, depending on weather conditions. Two to four cuttings per year are typically done when the bermudagrass reaches a height of approximately 12 inches. Harvesting of the small grains will be from March - May.

4. Weed control is best achieved through a well-managed bermudagrass stand that is competitive. Mismanagement of the bermudagrass such as failure to harvest the crop at recommended intervals and crop damage from improper septage applications, can lead to increase weed pressure. If weeds become a problem, a herbicide may be needed. Contact your technical specialist, local cooperative extension agent, or regional agronomist for assistance.

C. Nitrogen needs for crops grown:

R.Y.E. = Realistic Yield Expectations
N Application Rate = Suggested N application rate based on R.Y.E. for soil type.

Crop (cut for hay)	R.Y.E.		N App. Rate	lbs N/ac
Coastal Bermudagrass	5.0 tons/ac	X	49 lbs N/dry ton	= 245
Small Grains (wheat or rye)	2.0 tons/ac	X	50 lbs N/dry ton	= 50
			Total	= 295

So 295 / 0.0026 = 113,461 gallons septage/acre. However, the annual application rate is not to exceed 50,000 gallons per acre. Thus, additional nitrogen would be needed to meet suggested N application rate.

D. Relative application rate for all three fields

Month	Application Rate
January	Low
February	Low
March	Medium
April	High
May	Medium
June	High
July	High
August	Medium
September	Medium
October	Low
November	Low
December	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 annual application rate of 50,000 gallons per acre.

E. Application Method

The preceding information is based on septage being evenly applied over the entire permitted site by spraying uniformly from moving pump truck.

F. Additional Fertility Requirements

Additional commercial nitrogen can be added to the crop. However, the total applied nitrogen from septage and the commercial source shall not exceed the nitrogen requirement of that crop.
Phosphorous and potassium shall be added in accordance with the soils test results for the crops grown.

G. Harvest of Crops:

1. The bermudagrass 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 unless under drought conditions.

2. The small grains will be cut and baled as hay in March – May of each year.

3. A 30-day waiting period must be observed between last application of septage and harvest. Beginning about the first of March each year, septage will be applied strictly to Fields B and C while the rye on Field A is undisturbed for 30 days. After 30 days, the rye in Field A will be harvested and septage application switched to Field A while Fields B and C are idle. After an additional 30 days, in late April to early May, the rye will be harvested from Fields B and C. By early May, a rotation will be established which can cycle every 30 to 45 days between bermudagrass harvests. By the end of October, the rye will have been planted and the entire site will be available for septage application until the end of February the following year.

4. The septage applied forage will be harvested by contracting a third party to cut and harvest the hay for animal feed.

SOIL EROSION AND RUNOFF CONTROL PLAN

Given that slopes on this site do not exceed five percent, a 5 feet buffer, planted in bermudagrass and overseeded in small grains, should suffice to prevent septage waste from migrating off of the fields. (More severe site conditions could require that soil erosion structures be installed before septage can be applied). Site is also surrounded by a forest canopy of at least 50 feet.

Submitted by: Don Locklear Septic Tank Cleaning

Sumitted by: Rachel Locklear Date: 8-22-12
Site Operator

Rachel Locklear 2-10-16

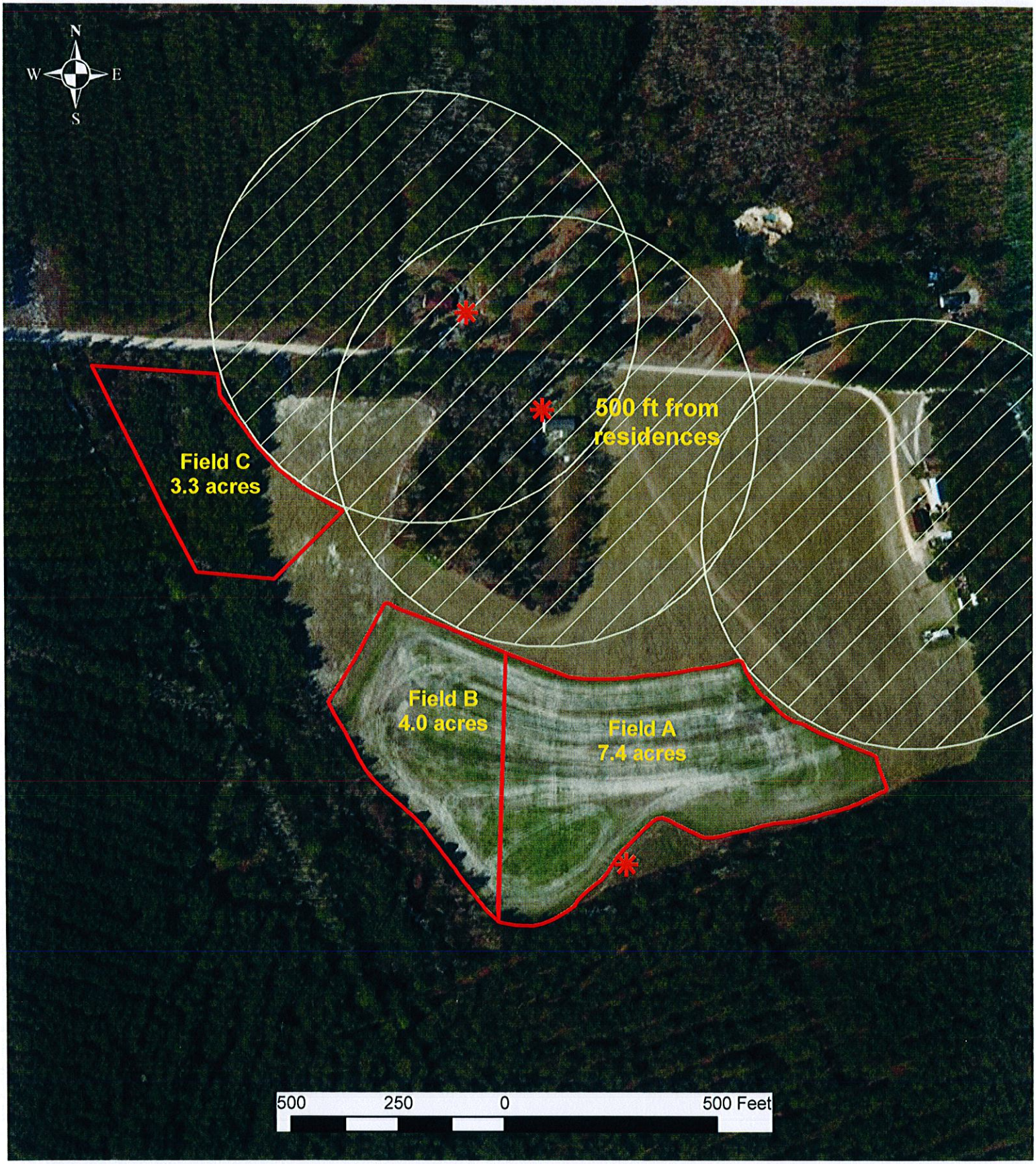
Minor modifications were made to the nutrient management plan prepared by Becky Spearman on 3-26-10. Modifications made by Connie Wylie.

Plan prepared by: Becky Spearman Date: 3/26/2010

Address: Livestock Extension Agent
P.O. Box 249, Elizabethtown, NC 28337
Phone: (910) 862-4591 email:becky spearman@ncsu.edu

SLAS-78-19

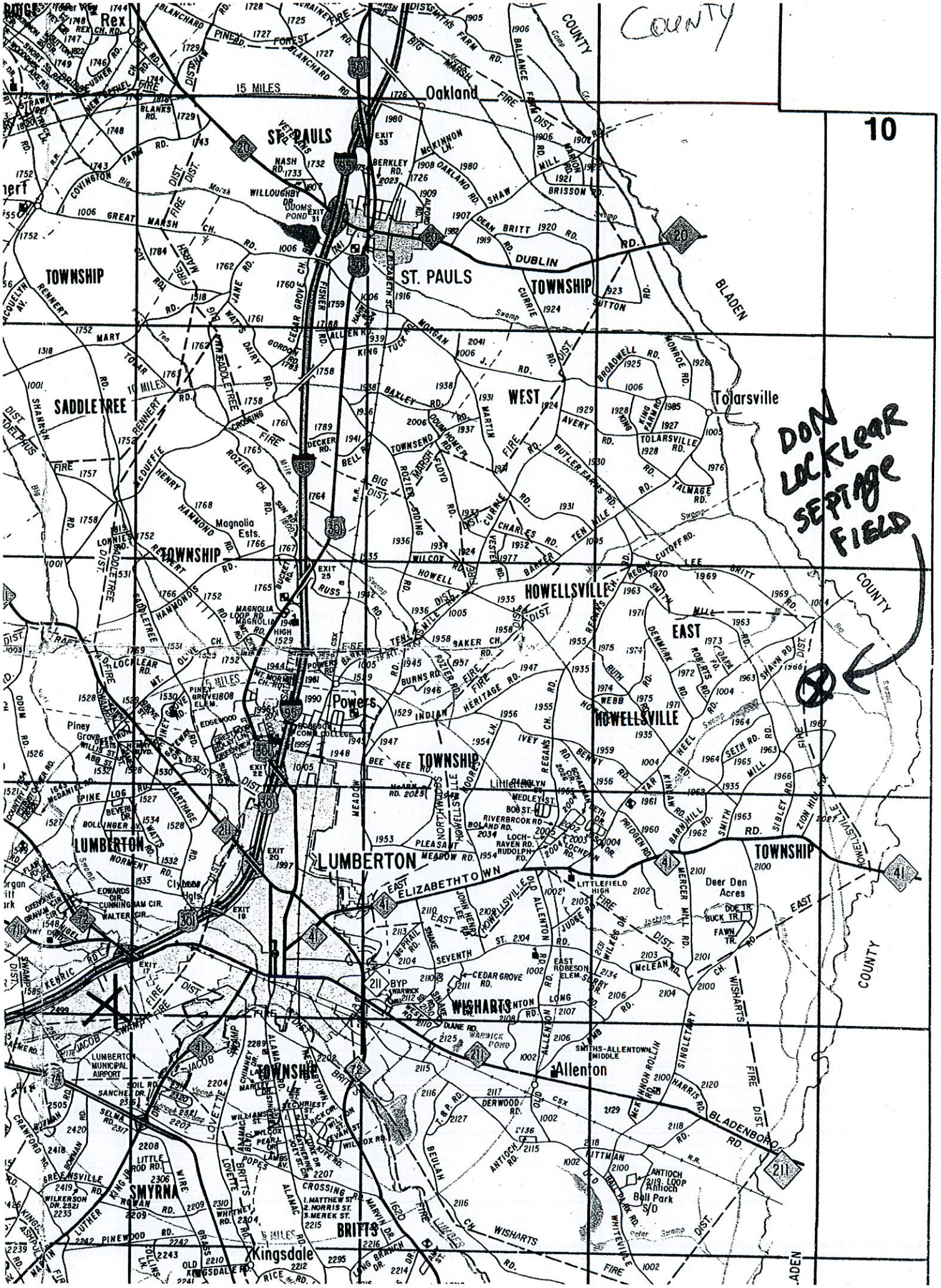
34.68604° N latitude
-78.83669° W longitude



Source: Bing Maps aerial imagery, ESRI, (c) 2010 Microsoft Corporation and its data suppliers; site boundary, NC DENR Division of Waste Management.

Map created by NC DENR Division of Waste Management, Compost and Land Application Branch for permitting purposes only.

crc, July 2012


COUNTY
10
Rex
Oakland
ST. PAULS
ST. PAULS TOWNSHIP
TOWNSHIP
SADDLETREE
WEST
Tolarsville
DON LOCKLEAR SEPTAGE FIELD
Magnolia Ests.
TOWNSHIP
HOWELLSVILLE
EAST
Powers
HOWELLSVILLE
TOWNSHIP
LUMBERTON
LUMBERTON
TOWNSHIP
Deer Den Acres
WISHARTS
Allenton
TOWNSHIP
SMYRNA
BRITTS
Kingsdale
BLADEN
COUNTY