

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

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

Register's Septic Tank Pumping
Kenneth W. Register, Jr.
630 Penny Branch Rd
Warsaw NC 28398

is hereby issued a permit to operate a Septage Land Application Site with permit # **SLAS-31-13** on SR 1115 in Duplin County at approximate position 34.91386° N latitude and -78.06337° 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 2/9/2012



Martin A. Gallagher, Supervisor
Solid Waste Section

Operator: Kenneth Register
SLAS #: SLAS 31-13
County: Duplin

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 This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of both surface and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Kenneth Register and approved by the Division. The site contains approximately 12 acres which is divided into Fields #1 and #2. Both fields shall remain established in Coastal Bermudagrass and be overseeded with small grain in September or October of each year at a seeding rate of 2 bushels per acre. Areas where the bermudagrass coverage falls below 80% shall be re-sprigged at 40 bushels per acre in March or April. Phosphorous and potassium shall be applied to each field each year in accordance with soil test recommendations for the crops grown. Herbicides and/or mowing shall be used to manage weeds in the bermudagrass. The bermudagrass shall be cut and baled for hay whenever it reaches between 12 and 15 inches in height. At least three cuttings of the bermudagrass shall be made each year. The winter crop shall be cut and baled for hay or straw in March and April of each year. The mandatory 30-day waiting period between the last application of septage and the harvest of each crop shall be met by alternating septage applications between Fields 1 and 2. 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 Kenneth Register. 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 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, grease trap pumpings, and portable toilet waste.** 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 pH 12 or higher for 2 hours prior to land application.
7. **This site contains approximately 12 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 rate of 600,000 gallons. This application rate assumes equal septage distribution, on an annual basis, over the permitted area. Monthly septage applications shall not exceed the monthly relative application rates given in the approved nutrient management plan for this site.

Operator: Kenneth Register
SLAS #: 31-13
County: Duplin

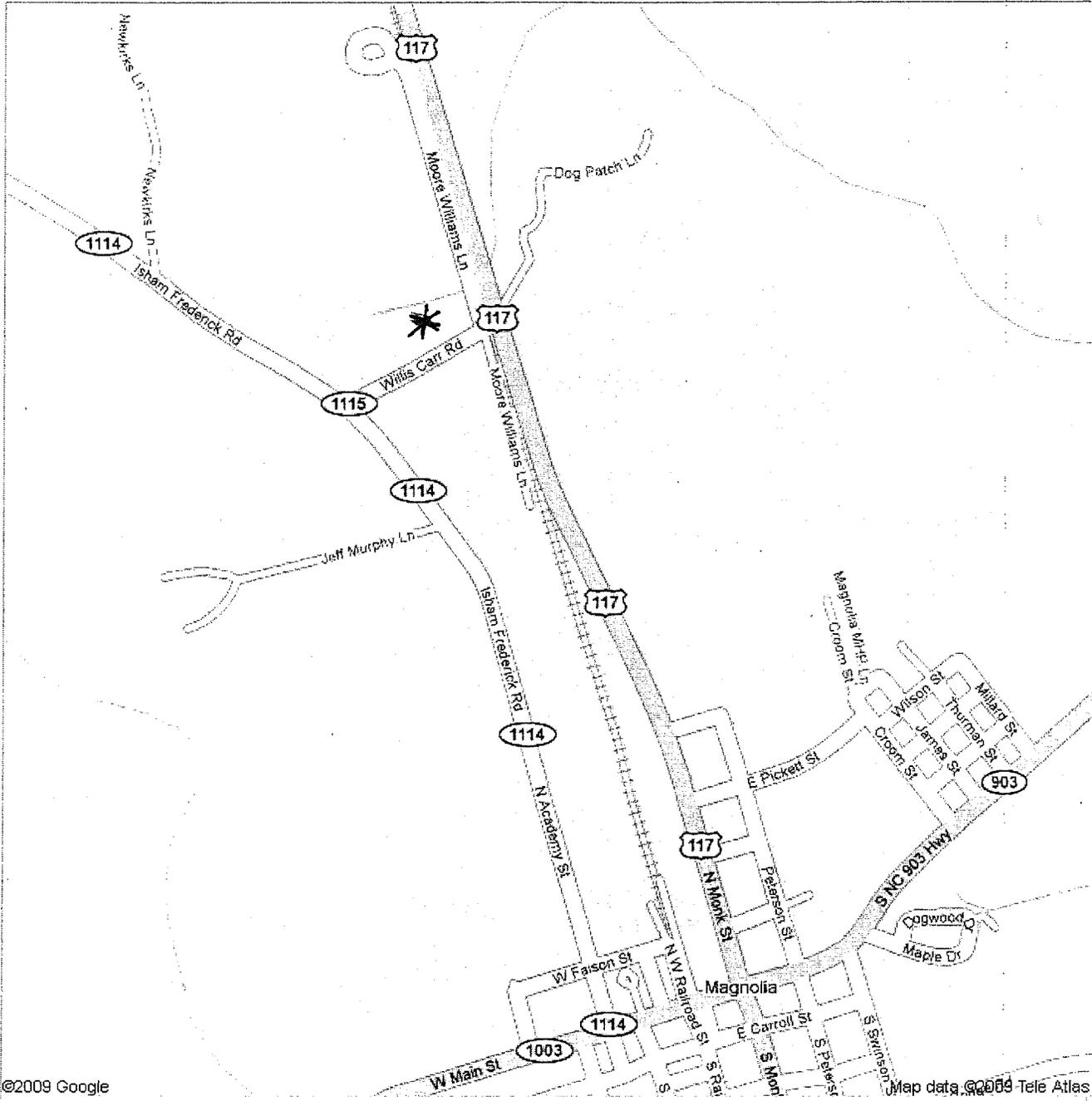
Page 3 of 3

8. An approved above ground septage detention system with a minimum design capacity of 8,000 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.
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 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 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 30, 2016.** 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 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 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.



Get Google Maps on your phone

Text the word "GMAPS" to 466453



©2009 Google

Map data ©2009 Tele Atlas

SLAS-31-13



Source: 2010 NAIP Color Imagery, NCDA; 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.



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

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

February 20, 2012

Mr. Kenneth W. Register, Jr.
Register's Septic Tank Pumping
630 Penny Branch Rd.
Warsaw, NC 28398

**RE: SLAS-31-13 Permit Renewal
Register's Septic Tank Pumping
SR 1115 in Duplin County**

Dear Mr. Register:

The NC Division of Waste Management has reviewed your application to renew septage land application site permit, **SLAS-31-13**, in Duplin County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SLAS-31-13**, is enclosed. Please read all permit conditions carefully. Your nutrient management and soil erosion and runoff control plans you submitted have been incorporated into your permit. In particular, pay close attention to **Permit Conditions 2, 6, 7, 10, 11, 12, and 15**. The following is a summation of those Conditions.

- **Condition 2.** This condition lists the acres of the site and incorporates crop management details listed in the submitted nutrient management plan.
- **Condition 6.** States that this site is only permitted to receive domestic septage, grease trap pumpings, and portable toilet waste. Disposal of any other type of septage or waste at this site is prohibited.
- **Condition 7.** States that there are approximately 12 acres available at this site for land application of septage at a rate of 50,000 gal/ac/yr. The **annual maximum application amount for this site is 600,000 gallons**. These rates along with the monthly rates listed in the nutrient management plan are not to be exceeded.
- **Condition 10.** Septage shall only be applied when soil and weather conditions are favorable for application.
- **Condition 11.** Soil conditions must be monitored such that any septage application will not result in ruts greater than three inches in the soil surface.
- **Condition 12.** Any discharge, including aerial drift, of septage outside of the permitted boundaries is prohibited.
- **Condition 15.** **This permit is set to expire on March 30, 2016.** Ninety (90) days prior to the expiration of your permit, you must submit an application for permit renewal along with your septage land application logs for the entire time your current permit was valid.

Mr. Register
February 20, 2012
Page 2 of 2

Again, please pay close attention to all of the conditions within the enclosed permit. Remember that violations to the NC Septage Management Rules or this permit 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) 707-8283. When communicating to the Division about this permit, please refer to it as "**SLAS-31-13**".

Sincerely,



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

Enclosures

cc: Central Office
Regenia Kenan, landowner
Duplin County Health Department

S:\Solid_Waste\cia\septage\slasper\31-Duplin\Register\SLAS-31-13c12.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, N.C. 27605



I. Site and Operator Information

1. Applicant Kenneth W. Register Jr.
Address 630 Penny Branch Rd.
Warsaw, NC 28398
Phone 910-293-4022

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

3. Landowner Regenia W. Kenan 910-289-3382
Address 316 W. South St.
Rose Hill, NC

4. Site Location: County Duplin State Road Number SR115
Directions to site: I40 East Exit 369 turn left into Magnolia
Make Rt onto Willis Carr Rd. Cross RR 1st path on Rt.

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

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

Existing site permit number: SLAS 31-13 permit expiration date: 3-30-2011

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 12
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): SDTF 31-07
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): Lime application to a PH of 12 for 30 min for domestic and ph of 12 for 2 hours with grease.
6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): Spray on field by truck inside boundaries.
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): The site is agricultural land.

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.

Kenneth W. Register Jr.
Signature***

1-1-11
Date

Kenneth W. Register Jr.
Print name

1-1-11
Title

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

* Refer to Section .0821(e) of the N.C. Septage Management Rules.

** Refer to Section .0821(g) of the N.C. Septage Management Rules.

***Signature of company official required.

Landowner's Authorization 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, N.C. 27605



I, Regina W. Zenar (name of site owner) hereby certify that I am the owner of 20.87 acres of land located off 117 in Magnolia Township and identified by Book 589, page 283 (book and page of recorded deed or tax map parcel) and that I agree to allow Kenneth W. Register Jr. (name of site operator) to use said land for septage land application for a period of 5 years (length of time), beginning 3-30-2011 (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 _____ (names of all co-owners, or state none).

Signature of landowner Regina W. Zenar Date 01-04-11

Signature of landowner _____ Date _____

Sworn to and subscribed before me this 4th day of January, 2011.

[Signature]
(Notary Public)

(OFFICIAL SEAL)

My Commission expires July 22, 2011

* 15A N.C. Admin. Code 13B Section .0800
** As required by Rule .0826

Nutrient Management Plan for Septage Application to Bermuda Grass and Rye Grass

A. Information General

1. Periodic Sampling (at least 1 per year) of septage will be conducted for waste analysis.
2. Field #1 contains approximately 6.0 acres and Field #2 contains approximately 6.0 acres.
3. The dominant soil series for Field #1 are Kenansville and Autryville. Field # 2 is mapped as Kenansville with inclusions of Foreston.
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 three inches in depth.
5. Septage storage shall be provided to account for the average volume pumped per week. Storage Volume is on site and has been previously approved.
6. All Nitrogen recommendations for forages will be 75% of the RYE nitrogen rate should the forages be grazed.

B. Crops to be grown and approx. planting times

1. Fields 1 and 2 including buffer zones for each field is Coastal Bermuda Grass. If the land application area develops into less than 80% Bermuda, it will be re-sprigged at 40 bushels per acre in March or April. Over seeding with small grain should be at 2 bushels per acre. Over seeding with rye grass should be at 30 to 40 lbs. if broadcast and 20 to 30 lbs. if Drilled. All over seeding should occur either in September or October.

Kenneth Wayne Register Jr.
630 Penny Branch Rd.
Warsaw, NC 28398



Nutrient Management Plan for Septage Application to Bermuda Grass and Rye Grass

C. Nitrogen needs for Crops Grown.

RYE = Realistic yields

N App. Rate = Suggested Application Rate

Crop	Field #	Acres	R.Y.E.	N app. Rate	# N Per field	
Coastal	1	6	5.5 tons	50#/ton	1,650	
Coastal	2	6	5.5	50#/ton	1,650	
Small Grain	1	6	2 tons	25#/ton	300	
Small Grain	2	6	2 tons	25#/ton	300	

Total = 3900

Kenneth Wayne Register Jr.
630 Penny Branch Rd.
Warsaw, NC 28398

**Nutrient Management Plan for
Septage Application to Bermuda Grass and Rye Grass**



D. Relative Application Rates for Field 1 and 2

Month	Field 1	Field 2
January	low	low
February	low	low
March	Med.	Med.
April	High	High
May	Med.	Med.
June	High	High
July	High	High
August	Med.	Med.
September	Med.	Med.
October	low	low
November	low	low
December	low	low

None = 0 gallons, Low = 5,000 gallons, Med. = 10,000 gallons
High = 15,000 gallons

Note: Annual Application rate is not to exceed 50,000 gal per acre per year.



Nutrient Management Plan for Septage Application to Bermuda Grass and Rye Grass

E. Application Method

1. The preceding information is based on Septage being evenly broadcast over the entire permitted site from a spreader truck to ensure even application rates and volume over the entire application area

F. Additional Fertility Requirements

1. Phosphorus and potassium must be added accordingly to the soil test results for the crops to be grown. Note the phosphorus requirements can be reduced by taking into consideration the phosphorus from the septage analysis if and analysis is available.
2. The buffer areas should be fertilized with 400 to 800 lbs of 10-10-10 fertilizer per year to maintain production based on soil test results.

G. Harvesting the Crops and their use

1. The Bermuda grass will be cut and baled as hay when it reaches approximately 12 inches in height, or roughly every 4 to 6 weeks beginning in June. Approximately 3 of 4 harvests can be expected.
2. The small grain / rye grass will be cut as hay and baled in March and April from fields 1 and 2.
3. A thirty day waiting period must be observed between the last application of septage and harvest.
4. The bales will be sold to local farmers as feed for beef cows.

Submitted By: Kenneth W. Register Jr. Date: 1-1-11

Graham Environmental Consulting, Inc.
Soils Report and Erosion Control Plan-Daniel Kenion Farm Site
Register's Septic Tank Pumping
Page Two of Two
November 3, 2002



Field 2 was found to have a more flat to slight, convex landscape and drainage classes of moderately-well drained to well-drained. The dominant Soil series equivalent for this field would be the Kenansville Series with Foreston inclusion. The Foreston inclusions were found at the wet area interface and on more flat landscape positions. These soils were found to have a 18 to 24 inch loamy sand underlain by a sandy loam to 30-36 inches with a loamy sand texture to 48 inches. The estimated depth to soil wetness was generally 24 to greater than 30 inches and deeper. These soils would be suitable for septage disposal.

A soil sample, representative of each field, has been collected and forwarded to the State Soil Testing Lab for analysis of general nutrient constituents and as well as for heavy metals analysis. These sample results have been requested for copies to be forwarded to both Register's Septic Tank Pumping and Mr. Ted Lyon with The Division of Waste Management.

SOIL EROSION AND RUNOFF CONTROL PLAN

Given that slopes on this site do not exceed five percent, a 50 foot buffer, in this case the property line buffer, planted in bermuda and rye grasses or left as woods in some areas, 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).

Submitted by: Mr. Donnie Ray Register(Site Operator) Date: 11/03/02

Donnie Ray Register Signed

Report prepared by: Dwayne A. Graham, RS, LSS
N. C. Licensed Soil Scientists # 1022
Graham Environmental Consulting, Inc.
542 Abner Phillips Road
Warsaw, North Carolina 28398(Phone/Fax: 910-296-6175)

Dwayne A. Graham Signed Date: 11/03/02

Resubmitted by: Kenneth W. Register Jr.

Signed: Kenneth W. Register Jr. Date: 1-26-12



Septage Land Application Log Cover Sheet

Site Operator: Kenneth W. Register Jr.
SLAS Permit #: 31-13
Site Location: lat 34.54.49.95 N long 78.03.48.13 W
(street address for the site or latitude and longitude)
Number of acres permitted: 12 acres
Permitted application rate: 50,000 gallons per acre per year
(gallons septage per acre per year)
Crop(s): Bermuda & Rye grass
Crop nitrogen requirement(s): 325 lbs. Nitrogen per acre
(pounds nitrogen per acre)

CERTIFICATION:

"I certify, under penalty of law, that the pathogen requirements in (insert either 503.32 (c)(1) or 503.32 (c)(2)) and the vector attraction reduction requirements in (insert 503.33 (b)(9), 503.33 (b)(10) or 503.33 (b)(12)) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Kenneth W. Register Jr.
(signature)

1-1-11
(date)