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

PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Robinson's Septic Tank Cleaning
Jimmy C. Robinson
904 Sabbath Home Road Southwest
Supply, NC 28462

is hereby issued a permit to operate a Septage Land Application Site with permit # **SLAS-10-13** on SR 1504 in Brunswick County at approximate position 34.00519° N latitude and -78.21545° 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 10/19/11

Michael E. Scott, Section Chief
Solid Waste Section

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 This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of both surface and ground waters.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 Jimmy C. Robinson and approved by the Division of Waste Management. The 18.9-acre site shall be divided into six fields known as Field 1 (4.8 acres), Field 2 (4.3 acres), Field 3 (0.9 acres), Field 4 (2.4 acres), Field 5 (2.1 acres), and Field 6 (4.4 acres). Fields 1 and 2 shall remain established in Coastal bermudagrass. Fields 3, 4, 5, and 6 are to be established in bermudagrass during 2011. All fields are to be overseeded with cereal rye at a rate of 75 to 100 pounds per acre (drilled) or ryegrass at a rate of 20 to 30 pounds per acre (drilled) in October of each year. The bermudagrass shall be cut and baled as hay whenever it reaches between 12 and 16 inches in height, or every 4 to 6 weeks throughout the growing season. At least three cuttings of bermudagrass shall be made from each field each year. The rye shall be cut as hay and removed from the fields by no later than early 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, the waiting period and harvest among the six 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 Jimmy C. Robinson. A 50-feet perennial vegetative buffer shall be maintained around the perimeter of each field. 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 or exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other local, state, or 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 condition, limitation, and / or monitoring requirement 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.** 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.

7. **This site contains approximately 18.9 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 945,000 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 the site.

8. An approved above ground septage detention system with a minimum design capacity of 18,000 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 void 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 November 1, 2015.** 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.

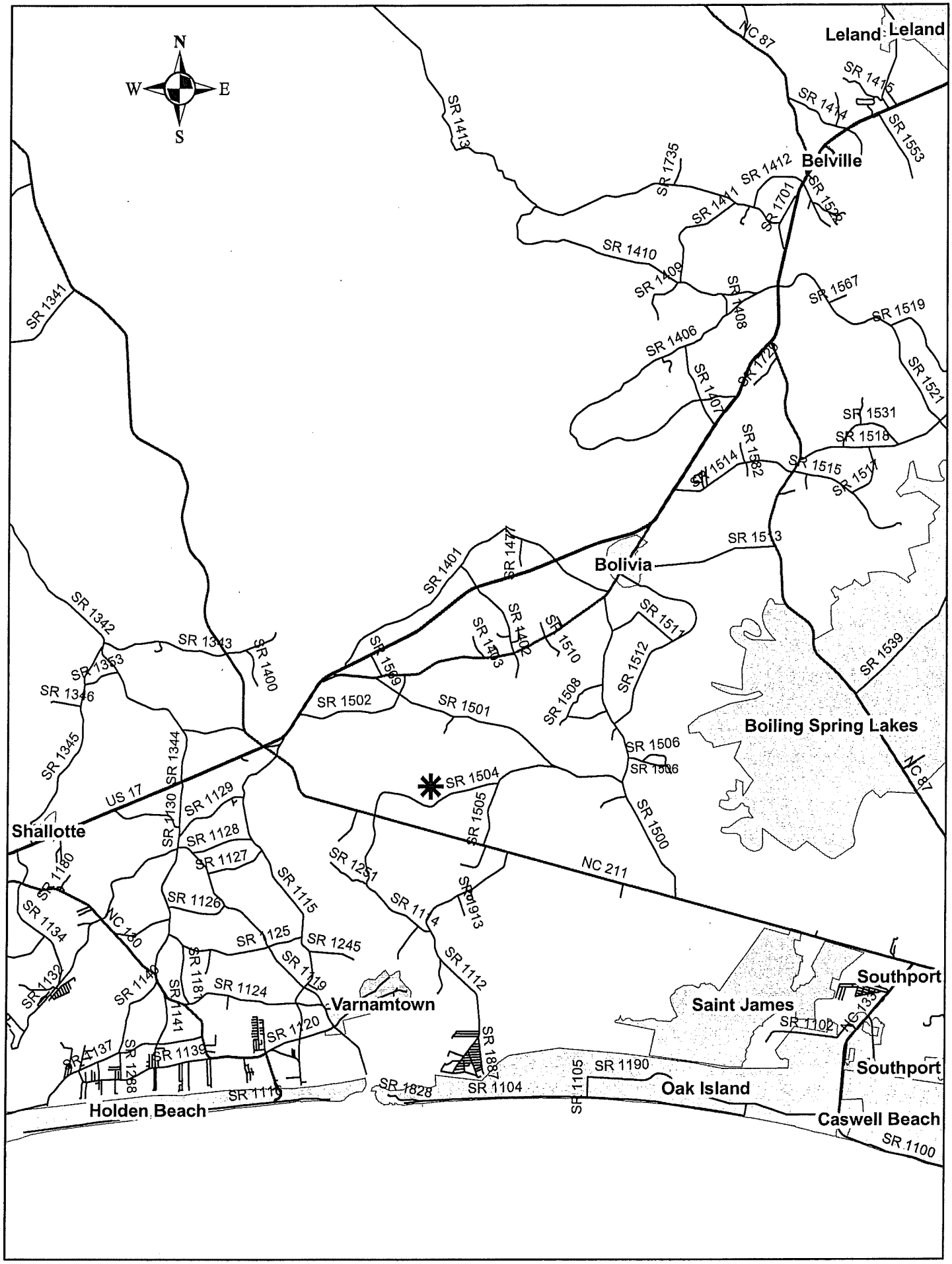
17. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may 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.

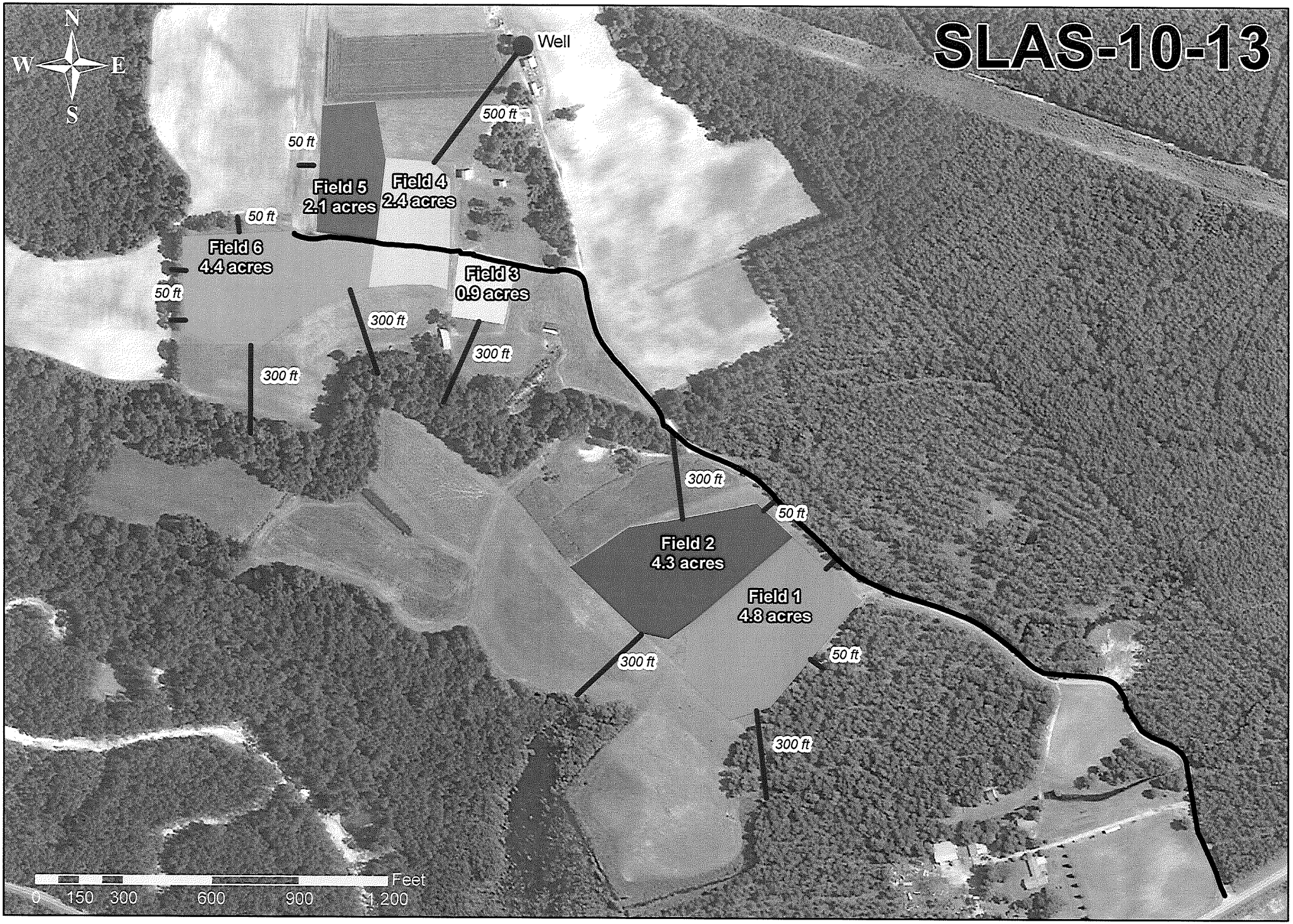
19. The areas that can be used for land application of septage shall be maintained at least 500 feet from any existing wells, residences, places of business, or places of public assembly. Septage shall not be disposed of within 50 feet of any property line, 300 feet from any stream or within 100 feet of any ditch.

20. **During the initial green-up of the bermudagrass in 2012, Fields 3, 4, 5, and 6 shall be inspected for coverage of the bermudagrass. Approval must be granted by the Division prior to septage applications to the bermudagrass in Fields 3, 4, 5, and 6.**

SDTF-10-13



crc, Oct. 2011



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.

crc, Oct. 2011

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

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

November 9, 2011

Mr. Jimmy C. Robinson
Robinson's Septic Tank Cleaning
904 Sabbath Home Road Southwest
Supply, NC 28462

RE: SLAS 10-13 Permit Renewal
Robinson's Septic Tank Cleaning
SR 1504 in Brunswick County

Dear Mr. Robinson:

The NC Division of Waste Management has reviewed your application to renew septage land application site permit, **SLAS-10-13**, in Brunswick County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SLAS-10-13**, is enclosed. 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, 10, 11, 12, 13, 15, and 20**. The following is a summation of those Conditions.

- **Condition 2.** States the acreages of the six fields permitted at this site. This condition also incorporates crop management details listed in the submitted nutrient management plan.
- **Condition 6.** States that this site is only permitted to receive domestic septage. Disposal of any other type of septage or waste at this site is prohibited.
- **Condition 7.** States that there are 18.9 acres available at this site for land application of septage at a rate of 50,000 gal/ac/yr. This allows for an annual maximum application amount of 945,000 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 13.** For any other permitted septage management firm to discharge septage at this site, written approval must be granted from the Division.

- **Condition 15.** This permit is set to expire on November 1, 2015. 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.
- **Condition 20.** The bermudagrass stand in Fields 3, 4, 5, and 6 must be inspected by the Division during the initial green-up of the bermudagrass in 2012. The Division must grant approval prior to septage applications to the bermudagrass in Fields 3, 4, 5, and 6.

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-10-13"**.

Sincerely,

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

Enclosures
cc: Central Office
Lester Dean Hewett
Brunswick 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
401 Oberlin Rd., Ste. 150, Raleigh, N.C. 27605

RECEIVED
SEP - 1 2010
SOLID WASTE SECTION

I. Site and Operator Information

1. Applicant Jimmy C. Robinson
   Address 904 Sabbath Home Rd. S.W.
   Supply, N. C. 28462
   Phone 9108426606

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

3. Landowner Lester Dean Hewett
   Address P. O. Box 192
   Supply, N. C. 28462

4. Site Location: County Brunswick State Road Number 1504 in Supply
   Directions to site: At the intersection of Hwy. 17 & Hwy 211, at the traffic light, take Hwy. 211 East about 3½ miles turn left on Old Lennon Rd. to Lester Dean Hewett's property

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

   For a permit renewal or modification, provide the following information:
   Existing site permit number: SLAS 10-13 permit expiration date: 11-1-2010

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 20.5 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): SDTF-10-13 . Copy of Brunswick Co. WWTP authorization is enclosed

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 stabilization of septage at Pt #12 for 30 minutes

6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): Pump truck with spreader Septage will be spread evenly over field.

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.

Jimmy C Robinson — Signature*** — 8-30-10 — Date

Jimmy C. Robinson — Print name — Owner — 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, Lester Dean Hewett (name of site owner) hereby certify that I am the owner of 20.5 acres of land located on State Road # 1504 - Bolivia, N.C. and identified by parcel # 1690000105 (book and page of recorded deed or tax map parcel) and that I agree to allow Jimmy C. Robinson (name of site operator) to use said land for septage land application for a period of 5 years (length of time), beginning Nov. 1, 2010 (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

NONE (names of all co-owners, or state none).

Signature of landowner [signature] Date 7-27-10

Signature of landowner _____ Date _____

Sworn to and subscribed before me this 27th day of July, 2010.

Pamela A. Stowe
(Notary Public)

(OFFICIAL SEAL)

My Commission expires: 9/15/10

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

** As required by Rule .0826

NUTRIEMNT MANAGEMENT PLAN
FOR
ROBINSON'S SEPTIC TANK CLEANING
904 Sabbath Home Road
Supply, NC 28462
910-842-6606

A. GENERAL INFORMATION:

1. Periodic sampling of the septage will be performed at least twice per year for laboratory waste analysis results.

2. Field #1 contains approximately 4.77 acres.
Field #2 contains approximately 4.35 acres.
Field #3 contains approximately 2.39 acres.
Field #4 contains approximately 2.52 acres.
Field #5 contains approximately 2.23 acres.
Field #6 contains approximately 4.24 acres.

The total usable application acreage is approximately 20.5 acres.

3. The dominate soil series at this site is NORFOLK, BAYMEADE, and MARVYN.

4. Septage will not be applied when the site is Untrafficable. Untrafficable is defined as soil that will allow a loaded truck to leave a depression in the soil greater than 3 inches in depth.

5. All nitrogen recommendation for the forages to be grazed will be a 75% of the realistic yield expectations (RYE) and at 100% if the hay is harvested and removed for the site.

6. Septage storage shall be provided on site 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.

B. CROPS to be GROWN and APPROPIRATE PLANTING DATES:

1. On all established Bermuda grass fields where septage is applied, the following practices will be performed. Cereal Rye or Rye Grass will be established in the fall (September – November) and will be harvested periodically throughout the winter. Harvesting the rye in the spring (April- May) will prevent the rye/ryegrass from re-growing thus allowing the Bermuda grass to grow. The Bermuda grass will be

periodically harvested throughout the summer (May – September). The summer and winter forage will be removed from the fields. This is a continuous year round cycle.

2. Rye Grass will be planted in the fall (September – November) at the rate of 25 pounds of seed per acre. If Cereal Rye is planted, seed at the rate of 75 pounds per acre.

3. The Bermuda grass in Fields 1, 2, & 3 is well established. In areas where the Bermuda grass stands falls below 80% coverage, the area will be re-estabished in the January – March time period applying sprigs at the rate of 30 – 40 bushels of sprigs per acre to the site to be repaired. Sprigs are to be applied evenly over the area and disked lightly. A cultipacker would greatly enhance the success of the sprig plants. Alternatively, the site to be re-established may be seeded with one of the seed type Bermuda grasses in the June – August time period. Seed at the rate of 2 pounds of seed per 1000 square feet of space to be re-established or seed at the rate specified on the seed bag. Cover the seed lightly and apply water. The seed should germinate in 4 - 6 weeks.

4. Field Fields 4, 5, and 6 will be established in Bermudagrass in the spring of 2011. All recommended soil fertilizer amendments from a recent soil test lavatory analysis (soil test results should be dated within the past 12 month) should be applied prior to any seed bed preparation. During the late February to mid April time frame, Bermudagrass spring at the rate of 30 – 40 bushes per acre will be applied to these fields. The soil should be appropriately prepared either by moldboard plowing or chisel plowing and disking to ensure the very best seed bed possible. The fresh bermudagrass springs should be lightly disked into the soil. The use of a cultipacker after disking should enhance and speed the establishment of the newly planted sprigs. Alternately, the site maybe seeded with one of the seed type Bermuda grasses. If the seed type Bermuda grass is to be used, follow the seeding rate and seeding date recommendation from the vendor. For newly established bermudagrass, mowing frequently throughout the entire growing season is very satisfactory weed control. Many herbicides can be detrimental to newly established bermudagrass especially on sandy soils.

5. The proper application of the combination of septage, commercial fertilizer, and lime based on an annual soil test report should allow for the forage to be productive for 10 – 15 years growth.

C. NITROGEN NEEDS of the CROPS:

(NOTE: A MAXIMUN OF 50,000 GALLON OF SEPTAGE IS PERMITTED PER ACRE PER YEAR.)

Crops (cut for hay)	RYE	Nitrogen Rate	Total Nitrogen
Bermuda grass	5.9 tons/acre	40 lbs/dry ton	236
Annual Cereal rye	3.0 tons/acre	40 lbs/dry ton	120
Rye Grass	2.5 tons/acre	46 lbs/dry ton	113
		Total Nitrogen	469

RYE = Realistic Yield Expectations
Nitrogen application rate is based upon the RYE of the crop for the dominate soil series in this application area.

D. RELATIVE APPLICATION RATES OF SEPTAGE:

Month	All Application Fields
January	Low
February	Low
March	Medium
April	Medium
May	High
June	High
July	High
August	High
September	Medium
October	Medium
November	Low
December	Low

Note: Low = 5,000 gallons, Medium = 10,000 gallons, High = 15,000 gallons

E. APPLICATION METHOD:

1. The septage will be applied evenly over the entire permitted application area using a tank truck with a rear spray boom.

F. ADDITIONAL FERTILITY REQUIREMENTS:

1. All fertilizer applications must be based on an annual soil test report. The septage probably will not supply all the nutrient requirements for the forages. Some commercial fertilized will probably be needed to be applied. The application of the commercial fertilizer should be modified based upon the nutrients applied via the septage. If potassium (K) is required, apply it in the fall (September – October) at the rate of 100 pounds of 0-0-60 per acre. Commercial nitrogen can be applied to the Bermuda grass during the growing season to ensure proper growth. All fertilizer application should be based upon an annual soil test report. **Prior approval from the Division must be received before applying commercial fertilizer.**

2. Buffer areas where no septage is applied should receive commercial fertilizer based on an annual soil test report taken from the buffer area to ensure proper vegetative growth.

G. HARVESTING of the CROPS and their USE:

1. The established Bermuda grass will be cut as hay and bailed whenever the grass reaches approximately 16 – 24 inches in height or roughly every 4 – 6 weeks during the growing season. Approximately 3 – 4 harvests can be expected per growing season.

2. The rye (grass/cereal) will be cut as hay and bailed in Feb-Mar and Apr-May and removed from all fields.

3. As required by regulation, a 30 day waiting period must be observed between the application of septage and the harvesting of the forage from the field. (s). On the first day of a month select a field that does not receive septage for the next 30 days. At the end of the 30 days the forage from this field can be harvested. Upon the removal of the forage from this field, septage application can be resumed on this field. On the first day of the second month, select a different field that does not receive septage for 30 days. At the end of the 30 days, then the forage on this field can be harvested. Upon the removal of the forage from this field then septage application can be resumed. Continue this process until you have harvested all your fields. This is a year round activity. This process must continue throughout the year, summer and winter, to ensure compliance with the 30 day harvest regulation. This 30 day non-application period before harvest is for all summer and winter forage crops.

4. All forages will be bailed and removed from the production fields. Forage may also be removed via grazing.

5. If the forage is to be removed via grazing, the above 30 day waiting period prior to harvesting must be observed before the grazing event. Cattle must be removed prior to resumption of septage application. All fields are visually and physically defined so the cattle can be constrained to the appropriate field.

H. SOIL ERROSION and RUNOFF CONTROL:

1. Given that the slopes on this site do not exceed five per cent, the required buffers, planted in Bermuda grass should suffice to prevent the septage from migrating off the approved application site.

I. ENDANGERED SPECIES:

1. As these fields are maintained as regularly harvested hay production fields, there have been no endangered plants or animals identified.

J. SEPTAGE PERMIT:

1. This plan prepared for Septage Application Site Number SLAS 1013.

SUBMITTED BY: Jeffrey C Robinson Date 8-30-10
Permit Site Holder

Plan prepared by: Phillip Ricks
P.O. Box 729
Oak Island, NC 28465
910-278-4685
North Carolina Certified Crop Advisor # 19575
USDA-Technical Service Provider # 031531