

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

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

Boswell & Son Septic Tank Service Inc.
Blake Boswell
PO Box 236
Sharpsburg, NC 27878

is hereby issued a permit to operate a Septage Land Application Site with permit # **SLAS-33-06** located on SR 1224 in Edgecombe County at approximate position 35.89958° N latitude and -77.73565° 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 6/27/2012

Martin A. Gallagher
Martin A. Gallagher, Branch Head
Solid Waste Section

Operator: Blake Boswell
SLAS #: 33-06
County: Edgecombe

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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 This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards both surface and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Blake Boswell and approved by the Division of Waste Management. The 7-acre site shall be split into two fields labeled as fields 1 and 2. Fields 1 and 2 were sprigged with Coastal Bermudagrass in the Spring of 2005. Areas that develop in less than 80% cover in bermudagrass will be re-sprigged at 30-40 bushels/acre. In October of each year, all fields will be overseeded with ryegrass at a seeding rate of approximately 35 lbs/acre. The bermudagrass in fields 1 and 2 shall be cut and baled as hay every four to six weeks, or whenever it reaches 12 to 15 inches in height beginning in June. At least three bermudagrass harvests shall be made each year. The ryegrass will be cut as hay and baled in March and April 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 the 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 Blake Boswell 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, 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 12 or higher for 2 hours prior to land application.
7. **This site contains approximately 7 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 350,000 gallons. This application rate assumes equal septage distribution, on an annual basis, over the entire permitted area. Application amounts to the fields shall not exceed the maximum annual application rate or the monthly rates as listed in the approved nutrient management plan.
8. An approved above ground septage detention system with a minimum design capacity of 10,000 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.

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SLAS #: 33-06
County: Edgecombe

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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. 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 October 11, 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.
20. **All land application events shall be completed in a timely manner that do not coincide with school sporting events or other outdoor school sponsored activities.**

SLAS-33-06



Source: 2010 NAIP Aerial Imagery, NCDA, 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. Blake Boswell
Boswell & Son Septic Tank Service Inc.
PO Box 236
Sharpsburg, NC 27878

**RE: SLAS-33-06 and SDTF-33-06 Permit Renewals
Boswell & Son Septic Tank Service Inc.
SR 1224 in Edgecombe County**

Dear Mr. Boswell:

The NC Division of Waste Management has reviewed your application for renewal of septage land application site permit, **SLAS-33-06**, in Edgecombe County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SLAS-33-06**, is enclosed. Please read all permit conditions carefully. The 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, 15, and 20**. 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 7 acres available at this site for land application of septage. **The maximum annual application rate for this site is 50,000 gallons per acre per year for a maximum annual application amount of 350,000 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 October 11, 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.

- **Condition 20. States that land application events shall be completed in a timely manner as to not coincide with school sporting events or other outdoor school sponsored activities.**

Also, the Division has reviewed your application for renewal of septage detention facility permit, **SDTF-33-06**, in Edgecombe County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SDTF-33-06**, is enclosed. Please read all permit conditions carefully. In particular, pay close attention to Conditions 7, 8 and 9. **Permit Condition 7** states that this facility consists of two (2) steel tanks for a site capacity of approximately 38,000 gallons for the storage of domestic septage, grease trap pumpings, and portable toilet waste. The storage or treatment of any other liquid or solid waste is prohibited. **Condition 8** states that only the Permittee or an employee of the firm named in the permit may discharge septage at this facility unless the Division is notified and approval granted by the Division. **Condition 9 states that this permit shall expire on October 11, 2016** and that an application for permit renewal shall be submitted at least ninety (90) days prior to the permit expiration date.

Again, please pay close attention to all of the conditions within the enclosed permits. Each permit is different from the other and contains specific conditions in relation to the operation of a septage land application site or a septage detention facility. Permit, **SLAS-33-06**, covers the operation of the septage land application site and permit, **SDTF-33-06**, covers the operation of the septage detention facility. 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) 707-8283. When communicating to the Division about these permits, please refer to them as "**SLAS-33-06**" or "**SDTF-33-06**".

Sincerely,



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

Enclosures

cc: Central Office
Blake and Kelly Boswell, landowners
Edgecombe County Health Department

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 Boswell & Son Septic Tank Service Inc.
Address P.O. Box 236 Sharpsburg, NC 27878
Phone 252.977.9384

2. Contact person for site operation (if different from applicant): Blake Boswell
Title or position Pres. Phone 252.813.5715
Address 6101 Nobles Mill Pond Rd
Rocky Mount, NC 27801

3. Landowner Blake and Kelly Boswell
Address 6101 Nobles Mill Pond Rd
Rocky Mount NC 27801

4. Site Location: County Edgec. State Road Number 1224
Directions to site: Hwy 43 to Nobles Mill Pond Rd.
 1/4 mile on Rt.

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

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

Existing site permit number: 33-06 permit expiration date: 10-11-11

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 7
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 33-06
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) Raise septage to a PH of 12 For 30 minutes before discharge. Grease raise PH to a 12 For 2 hours before discharge.
6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): Use of vacuum truck through spreader spoon, by driving across 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): 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.

Boswell's Son Septic Tank Service Inc.

Blake Boswell
Signature***

9-5-11
Date

Blake Boswell
Print name

Pres./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, Blake and Kelly Boswell (name of site owner) hereby certify that I am the owner of 33 acres of land located SR. 1224 6101 Nobles Mill Pond Rd. Rocky Mount Nc., 27801 and identified by _____ (book and page of recorded deed or tax map parcel) and that I agree to allow Blake Boswell (Boswell's Septic Tank Service Inc.) (name of site operator) to use said land for septage land application for a period of 5 years (length of time), beginning 10-11-11 (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 Kelly Boswell _____ (names of all co-owners, or state none).

Signature of landowner Blake Boswell Date 9-12-11

Signature of landowner Kelly Boswell Date 9-12-11

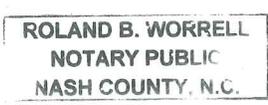
Sworn to and subscribed before me this 12th day of September, 2011

[Signature]
(Notary Public)

(OFFICIAL SEAL)

My Commission expires: 01-05-16

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



NUTRIENT MANAGEMENT PLAN FOR SEPTAGE APPLICATION
October 6, 2004

BOSWELL FARM, EDGECOMBE COUNTY, NC

COASTAL BERMUDA / ANNUAL RYE GRASS ON NORFOLK SOILS



A. General Information.

1. The septage application site is located south of West Edgecombe High School in Edgecombe County, NC.
2. Field #1 contains approximately 4.85 acres suitable for septage application. There is one drainage way that drain this field. The dominant soil series for this field is **Norfolk**. *See attached soil description.*
3. Field #2 contains approximately 4.2 acres. The dominant soil series for this field is **Norfolk** also.
4. Septage will not be applied when the soil will allow a loaded truck to leave a depression in sod greater than 3 inches in depth.
5. Periodic sampling at least once per year of the septage will be conducted for waste analysis by the operator.
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.

B. Crops To Be Grown and Approximate Planting Times:

1. Field #1 and 2, including buffer zones, will be sprigged in coastal Bermuda grass at a rate of 12 bu/acre from March 1 up until May 1 or up until July of 2005 if irrigated in order to establish a permanent stand. In order to promote stand establishment the following steps should be taken the first year. In May apply postemergence herbicides as needed to control summer broadleaf weeds. Make sure the herbicide is labeled for use on Bermuda grass.
2. Each year thereafter, the field will be over-seeded with annual rye grass at a rate of approximately 35 lbs/acre from Labor Day up through October.

C. Nitrogen Needs For Crops Grown:

RYE. = Realistic Yield Expectations

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

<u>Crop (cut for hay)</u>	<u>R.Y.E.</u>		<u>N App. Rate</u>	<u>lbsN/acre</u>
Coastal Bermuda	5.0 tons/acre	x	40 lbs N/dry ton	= 200 (150)
Annual Rye grass	3.0 tons/acre	x	25 lbs N/dry ton	= 75(56)
			Total	311 (233)

If fields are grazed reduce the nitrogen rate by 25 percent as shown in parenthesis.

D. Relative Application Rate For Both Fields:

<u>Month</u>	<u>Rate</u>
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 application rate. Annual application rate is not too exceed 50,000 gallons per acre.

E. Application Method

The preceding information is based on septage being evenly applied over the entire permitted site by a spreader truck with a 8 to 10-foot coverage area.

F. Additional Fertility Requirements

Lime, phosphorous and potassium must be added in accordance with the soil test results for the crops grown if not already done.

Soil test recommendations are as follows:

Lime: Field 1 - 1800 lbs to the acre. Recommend dolomitic lime.

Field 2 - 1400 lbs to the acre. Recommend dolomitic lime.

Phosphorous: None needed for either field.

Potassium: None needed the first year.

Field 1 – 20-40 lbs/acre the following year.

Field 2 – 10-30 lbs per acre.

50-70 lbs/acre the following year.

The buffer areas should also be limed and fertilized to maintain production based on soil test results if not already done. The phosphorus requirement can be reduced by taking into consideration the phosphorus from the septage analysis, if an analysis is available.

The buffer areas should be limed and fertilized 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. Approximately three or four harvests can be expected.
2. The rye grass will be cut as hay and baled in March and April from Fields #1 and #2, respectively.
3. A 30-day waiting period must be observed between the last application of septage and harvest.
4. Beginning about the first of March each year, septage will be applied strictly to Field #2 while the rye on Field #1 is undisturbed for 30 days. After 30 days the rye in field #1 will be harvested and septage application switched to field #1.

After an additional 30 days, late April/early May, the rye will be harvested from Field #2. By early May, a rotation is established which can cycle every 30 to 45 days between the Bermuda grass harvests. By the end of October, rye will have been planted and the entire site will be available for septage application until the end of February the following year.

5. The bales will be sold to local farmers to feed their beef cows and horses.



SOIL EROSION AND RUNOFF CONTROL PLAN

In areas where the slopes do not exceed 6 percent, a 50 foot buffer adjacent to the property line, planted in bermuda/rye grasses, should suffice to prevent septage waste from migrating off of the fields onto adjacent property.

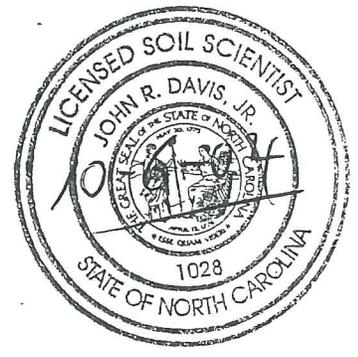
Submitted by: Blake Boswell 9-10-04
Date: 11-1-05
Site Operator Blake Boswell 9-5-11

Plan prepared by: John R. Davis, Jr. LSS Date: October 6, 2004

Address: Soil Horizons PO Box 1063 Youngsville, NC 2759
Phone: 919-554-2363

Signature John R. Davis, Jr. LSS

Seal



Soilhorizons/Nutrientmgmtplans/BoswellBermuda

Septage Land Application Log Cover Sheet



Site Operator: Blake Boswell
SLAS Permit #: 33-04
Site Location: 6101 Nobles Mill Pond Rd. Rocky Mount, NC 27801
(street address for the site or latitude and longitude)
Number of acres permitted: 7
Permitted application rate: 50 000
(gallons septage per acre per year)
Crop(s): Coastal Bermuda Annual RYE Grass
Crop nitrogen requirement(s): 40 lbs N/dry ton = 200 (150)
(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."


(signature)

9-5-11
(date)