

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

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

Roberson Septic Service
Allen Roberson
6049 US 301 N.
Elm City, NC 27822

are hereby issued a permit to operate Septage Land Application Site with permit # **SLAS-98-11** located on SR 1549 in Wilson County at approximate position 35.69186° N latitude and -77.79693° 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: Allen Roberson
SLAS #: 98-11
County: Wilson

Page 2 of 3

Permit Conditions:

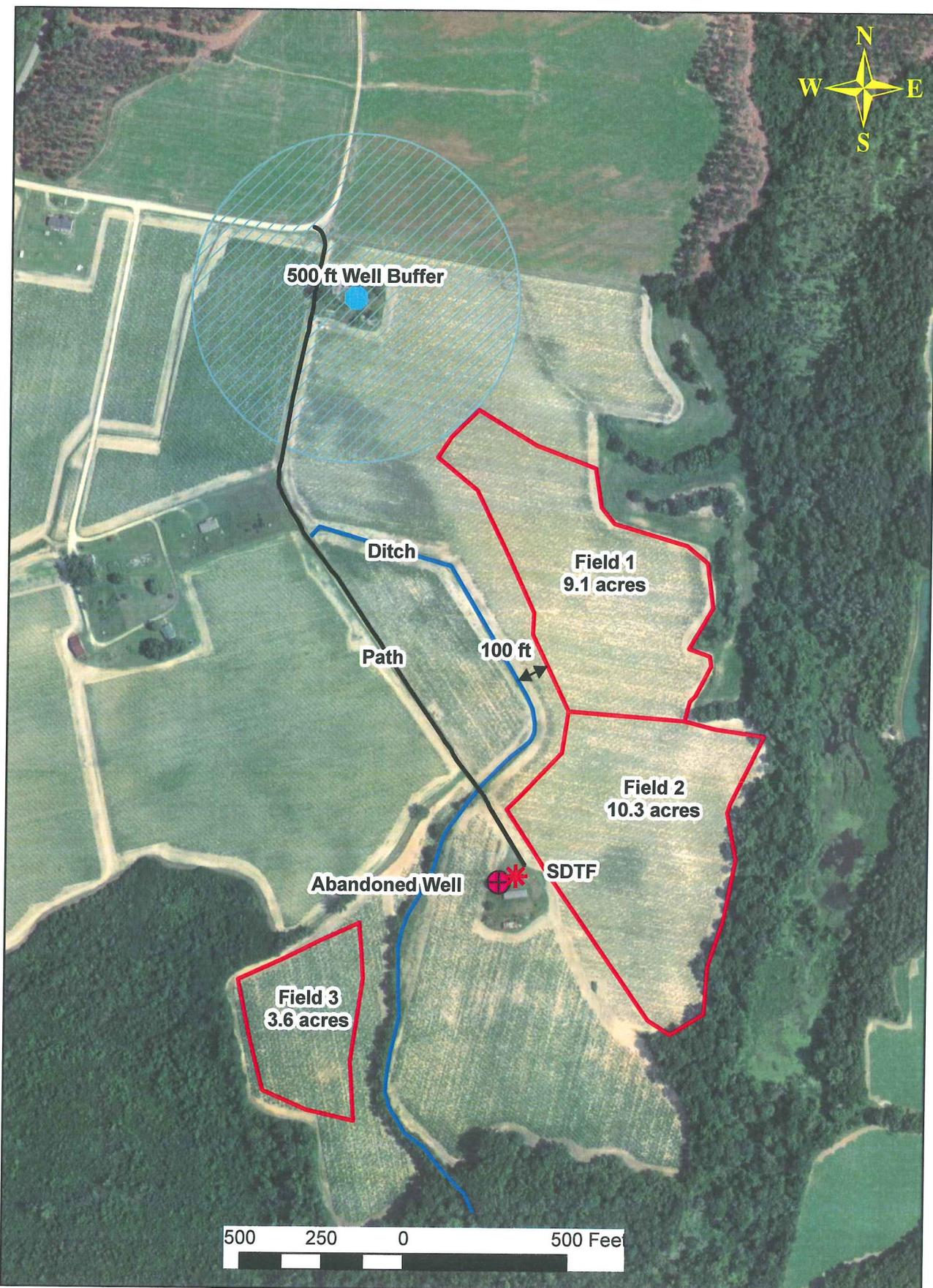
1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards both surface and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Allen Roberson and approved by the Division of Waste Management. The 23-acre site is divided into three fields, Field 1 (9.1 acres), Field 2 (10.3 acres), and Field 3 (3.6 acres). The fields shall be planted using a crop rotation of grain sorghum and wheat. The sorghum shall be planted in July, after the wheat harvest, at a rate of 40 lbs/ac. The wheat shall be planted in November, after the sorghum harvest, at a rate of 100 lbs/ac. Areas where crop establishment is less than 80% shall be re-planted. The sorghum shall be harvested in late October and the wheat shall be harvested in June. Septage shall be stored in the permitted septage detention facility in order to meet the 30-day waiting period between the last application of septage and crop harvest. 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 Allen Roberson in such a manner as to prevent the migration of wastes off of the designated waste receiving site. Buffer areas around the perimeter of the fields that are established in trees or grass stand shall be maintained as such. Other buffer areas shall be planted in sorghum or wheat to match the crop planted in the permitted area. 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 23 acres that are available for septage disposal.** The maximum annual application rate shall be 50,000 gallons per acre per year, for a total, maximum annual application of 1,150,000 gallons. This application rate assumes equal septage distribution, on an annual basis, over all 3 fields as detailed in the nutrient management plan. 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 22,000 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.

Operator: Allen Roberson
SLAS #: 98-11
County: Wilson

Page 3 of 3

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 June 25, 2013.** 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.

SLAS-98-11



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, June 2012



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

July 5, 2012

Mr. Allen Roberson
Roberson Septic Service
6049 US 301 N.
Elm City, NC 27822

**RE: Issuance of Permit SLAS-98-11
Roberson Septic Service
SR 1549 in Wilson County**

Dear Mr. Roberson:

The NC Division of Waste Management has reviewed your application for a permit to operate a septage land application site off of SR 1549 in Wilson County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SLAS-98-11**, is enclosed. Please read all permit conditions carefully. Your submitted nutrient management and soil erosion and runoff control plans 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 fields 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 waste at this site is prohibited.
- **Condition 7.** States that there are approximately 23 acres available at this site for the 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 1,150,000 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.

CONTINUE ON BACK

- **Condition 15. This permit is set to expire on June 25, 2013.** 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.

Again, please pay close attention to all of the conditions within the enclosed permit. 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-98-11**"

Sincerely,



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

Enclosures

cc: Central Office
Joseph & Edna Gardner, Landowner
Wilson County Health Department

S:\Solid_Waste\cla\septage\slasper\98-Wilson\Roberson\9811cl12p.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 Allen Roberson
Address 6049 US Hwy 301 N.,
Elm City, NC 27822
Phone 252-236-5725

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

3. Landowner Joseph & Edna Gardner
Address 6519 Gardner School Road
Stantonsburg, NC 27883

4. Site Location: County Wilson State Road Number SR1549
Directions to site: Traveling on Hwy 264, take Exit 51 (Hwy 264 Alt/Hwy91) and turn north on Hwy
264 Alt. Go approx. 3/4 mile and turn right on Etheridge Rd. Go approx. 1/2 mile and turn right on
Janice Ct. Go approx. 1/4 mile. Site is on the right.

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

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

Existing site permit number: _____ permit expiration date: _____

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 28.0 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): Existing NCS #01202. An application for an on-site detention facility is being submitted with this application
4. Types of septage proposed to be discharged at the site (check all that apply):
 - (a) Domestic septage pumped from septic tanks X
 - (b) Grease trap pumping X
 - (c) Portable toilet waste X
 - (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 will be limed to pH12 for a period of at least 30 minutes prior to land application and septage will be held at pH12 until land applied. (See attached sheet for additional comments)
6. Proposed method of applying septage to land, including septage distribution plan if required (use additional paper to explain if necessary): Septage will be sprayed from a moving pump truck. OR Septage shall not be sprayed if truck is not moving
EVENLY ACROSS FIELDS
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): All land proposed for septage application is agricultural land.

*A.R
4-4-
12
IRRIGATION SYSTEM.*

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.


Signature***

7-26-11
Date

Allen Ray Roberson
Print name

7-26-11 Owner
Title

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

***Signature of company official required.

Site Management Information

#5 (continued) – When grease is applied, prior to land application, the pH will be raised to pH 12 for a period of at least 2 hours and will be held at pH 12 until land applied. Grease septage shall be diluted with domestic septage or water to a ratio of at least 1:1 when land applied over perennial plants. The dilution shall be increased if crop damage occurs.

A handwritten signature in cursive script, appearing to read "Allen By".

7-26-11

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, Joseph Gardner (name of site owner) hereby certify that I am the owner of +/- 112 acres of land located on Janice Court (SR 1549) in Wilson County and identified by Parcel ID # 3750784209.000 (book and page of recorded deed or tax map parcel) and that I agree to allow Allen Roberson (name of site operator) to use said land for septage land application for a period of 5 years (length of time), beginning August 1, 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 Edna Gardner (wife) (names of all co-owners, or state none).

Signature of landowner Joseph Gardner Date 7-27-11
Signature of landowner Edna Gardner Date 7-27-11

Sworn to and subscribed before me this 27th day of July, 2011.

Aubrey S. Jones
(Notary Public)

My Commission expires: June 10, 2013

(OFFICIAL SEAL)

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

** As required by Rule .0826

1-10-12

- WELSON Co. SLAS (NEW)
- ALLAN ROBERSON CALLED AND SAID

- HE HAD CALLED THE WELSON Co. HEALTH DEPARTMENT AND TALKED TO JIM MARTIN (ENVIRONMENTAL HEALTH)

- MARTIN TOLD HIM THAT THE HEALTH DEPARTMENT DOES NOT SIGN OFF ON THE ABANDONMENT OF A WELL. THEY WOULD REFER THAT PERSON TO THE DWQ FORM, GW-30.

- THE HEALTH DEPARTMENT WILL MAKE A NOTE OF THE COORDINATES OF THE WELL FOR ANY PROPOSED SEPTIC SYSTEM IN THAT AREA.

- JIM MARTIN 252-291-0468

- WOULD PLEASE
COPY OF FORM
ON FILE.

1/11/2012

Spoke to Jim Martin

Application (Health Department)

CHRISTEN COBB

2013

ABANDONED Well

GPS POINT 35.689400067°N
-77.797824674°W

ROBERSON COORDINATES
FOR ABANDONED Well

35.689383°N
-77.797783°W

Pumper Cleaner  Installer  PRO  GPO  W/O  CLASSIFIED BY THE U.S. GOVERNMENT

FEBRUARY 25th - 28th, 2013
INDIANA CONVENTION CENTER

 COMPLIANT WITH  INTERNATIONAL

Compliments of  COLEpublishing



WELL ABANDONMENT RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality



WELL CONTRACTOR CERTIFICATION # _____

1. WELL CONTRACTOR:

Well Contractor (Individual) Name N/A

Well Contractor Company Name _____

STREET ADDRESS _____

City or Town _____ State _____ Zip Code _____

() - _____
Area code - Phone number

2. WELL INFORMATION:

SITE WELL ID # (if applicable) _____

STATE WELL PERMIT # (if applicable) N/A

COUNTY WELL PERMIT # (if applicable) _____

DWQ or OTHER PERMIT # (if applicable) _____

WELL USE (Circle applicable use): Monitoring Municipal/Public Industrial/Commercial Residential Recovery Injection Irrigation Agricultural Other (list use) _____

3. WELL LOCATION:

COUNTY W. ISON QUADRANGLE NAME _____

NEAREST TOWN: SARHOGA NC.

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope Valley Flat Ridge Other _____
(Circle appropriate setting)

LATITUDE 35° 41.363

LONGITUDE 67° 47.867

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: GPS Topographic map
(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID # (if applicable) _____

NAME OF FACILITY _____

STREET ADDRESS _____

City or Town _____ State _____ Zip Code _____

4b. CONTACT PERSON/WELL OWNER:

NAME Joseph D. Gardner

STREET ADDRESS 6519 GARDNERS Rd.

Stantonsburg, N.C. 27883

City or Town _____ State _____ Zip Code _____

() - _____
Area code - Phone number

5. WELL DETAILS:

a. Total Depth: 28' ft. Diameter: 24" in.

b. Water Level (Below Measuring Point): 13 ft.
Measuring point is 2 ft. above land surface.

6. CASING:

a. Casing Depth (if known): 28' ft. _____ in.

b. Casing Removed: 8 ft. 24 in.

7. DISINFECTION: 3 Gal

(Amount of 65%-75% calcium hypochlorite used)

8. SEALING MATERIAL:

Neat Cement Sand Cement
Cement _____ lb. Cement 3 yds lb.
Water _____ gal. Water _____ gal.

Bentonite
Bentonite _____ lb.
Type: Slurry _____ Pellets _____
Water _____ gal.

Other
Type material Red dry clay
Amount unknown

9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

installed red dry clay & poured cement into well

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED NOV. 30, 2011

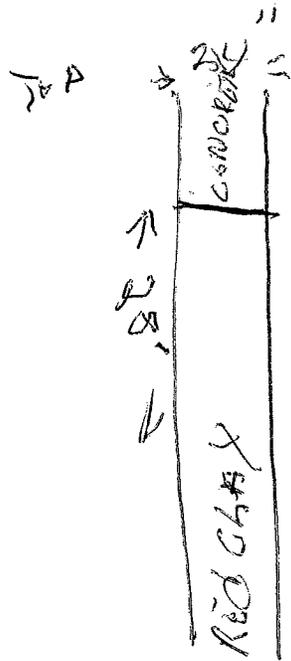
I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR _____ DATE _____

Joseph D. Gardner

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE _____
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joseph D. Gardner
PRINTED NAME OF PERSON ABANDONING THE WELL



Well was renovated
 pumped dry
 8 ft. Tile took off top.
 filled with red clay + packed
 up to 20'. Concrete poured
 rest of way to fill up.

Revised Nutrient Management Plan For Land Application of Septage
To Sorghum(Grain)/Wheat
Allen Roberson Site
Janice Ct. (PIN 3750.78.4209), Wilson County, North Carolina



A. General Information

1. Periodic sampling (at least 1 /year) of the septage will be conducted for waste analysis.
2. The site lies on a +/- 112 acre tract of land. The area meeting the requirements for land application of septage consists of four application areas totaling 28.0 acres.
3. The dominant soil series at this site are Norfolk (10.51 acre field, 10.25 acre field, and 2.4 acre field), Goldsboro, Gritney (combined 4.83 acre field) and Rains (unsuitable areas). The application areas shown consist of Norfolk, Goldsboro and Gritney soils.
4. Septage will not be applied where the site is untrafficable. (Untrafficable is defined as soil that will allow a loaded truck to leave a depression in sod greater than 3 inches in depth).
5. 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. An application for a storage detention facility accompanies this plan. Applicant has and will maintain NCS# 01202; therefore, discharge to municipal sewer is available if needed.
6. There shall be a 50' setback from the septage application area to any food crop and to any adjoining property not owned or under the control of the applicant.
7. An investigation of the tract revealed the presence of wetlands; however, there are no wetlands within 50' of any proposed septage application area.
8. There is a 100' setback from the ditches to the septage application areas.
9. There is a minimum 200' setback from surface waters located on the east side of the property to the septage application areas.
10. There is a 500' setback from existing residences to the septage application areas. The only area that should be affected by this setback is an area on the northwest corner of the site. The residence is an abandoned house and if destroyed would eliminate the 500' setback shown on the attached map. An existing structure located adjacent to the proposed detention facility will be converted to an office to be used by the owner and applicant.
11. There is a 500' setback from any existing wells to the septage application areas. The well shown near the detention facility is planned for abandonment. If abandoned to DWQ standards, the 500' setback should be eliminated. A well abandonment form accompanies this application. If the wells located at the abandoned house on the northwest corner of the

site are abandoned to DWQ standards, the 500' setback should be eliminated. If the abandoned house is removed and the wells properly abandoned, an additional 4.1 acres should be available for land application of septage.

B. Crops to be grown and approximate planting times:

1. All 28 acres of the application area, the 100' ditch setbacks, the 50' property setbacks and the 50' vegetative buffer are proposed for a crop rotation of Sorghum (grain) and Wheat (grain). Sorghum is planned for planting in July at the rate of 40 lb/ac and harvesting in late October of each year. Wheat at the rate of 100 lb/ac will follow Sorghum from November to harvest in June of each year. To promote stand establishment the following steps should be taken the first year: Treat for weeds and see additional fertility requirements.
2. If crop areas fail to establish 80% of the seeding rate, application of septage shall not be allowed until 80% of the seeding rate is established.

C. Nitrogen needs for crops grown

R.Y.E = Realistic Yield Expectations

N. App. Rate = Suggested N application rate based on R.Y.E for soil type

<u>1. Crop</u>	<u>R.Y.E</u>		<u>N App. Rate</u>		<u>lbs N/acre</u>
Sorghum	<u>54 CWT</u>	X	<u>1.78 lbs N/CWT</u>	=	<u>96</u>
Wheat	<u>59 bu</u>	X	<u>2.09 lbs N/bu</u>	=	<u>123</u>
			<u>Total</u>		<u>219</u>

So $219 / .0026 = 84,231$ gallons septage/acre for the 10.51-acre, 10.25-acre and 2.40-acre fields shown on the attached map. Septage rules require a maximum annual application rate of 50,000 gallons septage/acre unless otherwise authorized by the Division of Waste Management.

<u>2. Crop</u>	<u>R.Y.E</u>		<u>N App. Rate</u>		<u>lbs N/acre</u>
Sorghum	<u>54.5 CWT</u>	X	<u>1.67 lbs N/CWT</u>	=	<u>91</u>
Wheat	<u>54.5 bu</u>	X	<u>1.98 lbs N/bu</u>	=	<u>108</u>
			<u>Total</u>		<u>199</u>

So $199 / .0026 = 76,544$ gallons septage/acre for the 4.83-acre field shown on the attached map. The realistic yields for Goldsboro and Gritney soils were averaged

because the 4.83-acre is relatively small and contains both soil types. Septage rules require a maximum annual application rate of 50,000 gallons septage/acre unless otherwise authorized by the Division of Waste Management.

D. Crop Plan

All 28 acres	
Month	Crop
January	Wheat
February	Wheat
March	Wheat
April	Wheat
May	Wheat
June	Wheat
July	Sorghum
August	Sorghum
September	Sorghum
October	Sorghum
November	Wheat
December	Wheat

E. Relative application rate (Sorghum/Wheat)

Jan.	Feb.	Mar	Apr.	May	Jun.	Jul	Aug.	Sep.	Oct.	Nov.	Dec.
Low	Low	Med	High	Med	High	High	Med	Med	Low	Low	Low

Note: None = 0 gallons; Low = 5,000 gallons; Med. = 10,000 gallons; High = 15,000 gallons. Cumulative application rate is not to exceed the permitted application rate.

F. Application Method

The preceding information is based on septage being evenly applied over the entire permitted site by spraying uniformly from moving pump truck. Applicant has indicated he may utilize hose tow irrigation in the future.

G. Additional Fertility Requirements

According to NCDA&CS Agronomic Division no additional phosphorus should be applied at this time. Recommended potassium (K₂O) application rates range from 60 – 80 lbs per acre on the 10.51 acre field, the 10.25 acre field, and the 4.83 acre field. The K₂O rate for the 2.4 acre field should be 50 – 70 lbs per acre. The K₂O rate for the unsuitable areas (shade gray on the enclosed map) should be 30 – 50 lbs per acre. Lime should be added at the rate of 1.0 ton per acre on the 10.25, and 2.5 acre fields. Lime should be added at the rate of .9 ton per acre

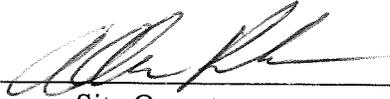
on the unsuitable areas. For information on application times and amounts see the enclosed copy of the soils report.

H. Harvest of Crops:

1. The Sorghum will be harvested in late October to early November and will be sold as animal feed.
2. The wheat will be harvested in June and sold as animal feed.
3. A 30-day waiting period must be observed between last application of septage and harvest. Septage may be applied to crop stubble after harvest and before the establishment of the next crop. During the 30-day waiting period septage may be stored in an approved detention facility or sprayed on other fields.

I. Soil Erosion and Runoff Control Plan

Slopes on the actual application areas range from 0 to 6 %. All ditch setbacks and property line setbacks that are not wooded will be planted in Sorghum/Wheat to control runoff. The unsuitable areas (shaded gray on the enclosed map) will also be planted in Sorghum/Wheat to control erosion and runoff. A 50' erosion control and food crop buffer needs to be planted on the sideslope between the 10.51 acre field and the field labeled "Area Not Considered For Septage Disposal". The food crop buffer will be planted in the same Sorghum/Wheat rotation as the septage application areas; however, no septage can be applied to the 50' buffer. The wooded area between the surface water on the east side of the property and the application areas should suffice as adequate buffer. There are a series of terraces on the east side of the 10.25 and 2.40 acre fields. No septage application should take place below the terraces. A 50' vegetative buffer should be provided below the terraces. Some areas already meet this requirement. Other areas will need the vegetative buffer established.

Submitted by:  Date: 6-15-12
Site Operator

Plan Prepared by: Ray Hays Date: 6/11/12

Address: 1806 Goldsboro St S/W
Wilson, NC 27893

Phone: _____

Addendum to Nutrient Management Plan Submitted on June 15, 2012



Weed Control

Weed control for row crops may be needed in order to produce the realistic yield expectations for the sorghum and wheat. Weed control can be obtained through different means or a combination of means. For row crops, cultivation and herbicides are often used for weed control methods. For specific recommendations, proper identification of the weed or weeds is necessary. Contact the local Cooperative Extension Office or other crop expert for herbicide recommendations.

E. Relative application rate (Sorghum/Wheat)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Low	Low	Med	High	Med	Low	Med	Med	High	Low	Med	Low

Note: None = 0 gallons; Low = 5,000 gallons; Medium (Med) = 10,000 gallons; High = 15,000 gallons. Cumulative application rate is not to exceed the permitted application rate.

F. Application Method

The required documentation listed in NC Septage Management Rule .0835 (c) 17. must be provided to the Division of Waste Management prior to the use any type of irrigation system.

Submitted by:



Site Operator

Date:

6-19-12

**Environmental and Soil
Service, Inc.**

P.O. 82
Pinetops, N.C 27864
Ph (252) 531-3471
Fax (252) 827-1382

ESS
ESS

July 25, 2011

Allen Roberson
6049 US 301 N.
Elm City, NC 27822



Subject: Applications and Nutrient Management Plan for +/- 28-acre septage application site located on SR 1549 (Janice Court) (Lat 35° 41' 21" N, Long 77° 47' 51" W), Wilson County, North Carolina.

Please find enclosed

1. An Application For A Permit To Operate A Septage Land Application Site
2. An Application For A Permit To Operate A Septage Detention Or Treatment Facility
3. A Landowner's Authorization To Operate A Septage Land Application Site
4. A Landowner's Authorization To Operate A Septage Detention Or Treatment Facility
5. A Nutrient Management Plan for Septage
6. Soil descriptions
7. A soil/field map and aerial photo of the site
8. A vicinity/USGS map
9. Copy of the Wilson County Soil Survey
10. Results of soil samples
11. A copy of the tax card for the parcel
12. An aerial photo of the site that extends to a distance of at least 2500'
13. A well abandonment form

Please submit the landowner's authorizations to Mr. & Mrs. Gardner for signing and notarizing. One they sign these forms, one copy of the package should be submitted to Chester Cobb, NCDENR, Division of Waste Management, 1601 Mail Service Center, Raleigh, NC 27699-1601.

If you have questions or if I can be of further assistance please feel free to contact me at (252) 531-3471.

Respectfully Submitted,

Scott Stone
Licensed Soil Scientist
Registered Sanitarian

Enclosures



Soil Descriptions
Allen Roberson, Septage Application
Janice Court (SR 1549), Wilson County, NC

B 1

- Ap 0 - 8 inches; light olive brown (2.5Y 5/4) sandy loam; granular structure; very friable
E 8 - 14 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak subangular blocky structure; very friable
Bt 14 - 39 inches; yellowish brown (10YR 5/6) sandy clay loam; weak subangular blocky structure; slightly sticky and slightly plastic; friable
Bt2 39 - 48 inches; yellowish brown (10YR 5/8) sandy clay loam; common fine distinct yellowish red (5YR 5/8) mottles; weak subgranular blocky structure; slightly sticky and slightly plastic; friable

Note: Water Table > 48 inches. Most like Norfolk soil series

B2

- Ap 0 - 7 inches; light olive brown (2.5Y 5/3) sandy loam; granular structure; very friable
E 7 - 12 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak subangular blocky structure; very friable
Bt 12 - 42 inches; yellowish brown (10YR 5/8) sandy clay loam; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt2 42 - 48 inches; yellowish brown (10YR 5/6) sandy clay loam; few fine and medium distinct red and yellowish red (5YR 5/8) and common medium distinct gray (10YR 6/1) mottles; medium subangular blocky; slightly sticky and slightly plastic; friable

Note: Water Table 42 inches. Most like Norfolk soil series

B3

- Ap 0 - 7 inches; light olive brown (2.5Y 5/3) sandy loam; granular structure; very friable
E 7 - 13 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak subangular blocky structure; very friable
Bt 13 - 19 inches; olive yellow (2.5Y 6/6) sandy clay loam; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt2 19 - 25 inches; olive yellow (2.5Y 6/6) sandy clay loam; common medium distinct light yellowish brown (2.5Y 6/3) and common fine distinct strong brown (7.5YR 5/8) mottles; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt3 25 - 36 inches; olive yellow (2.5Y 6/6) sandy clay loam; common fine distinct yellowish brown (10YR 5/8) and common medium distinct light brownish gray (2.5Y 6/2) mottles; weak subangular blocky structure; slightly sticky and slightly plastic; friable

Note: Water Table 25 inches. Most like Goldsboro soil series

B4

- Ap 0 - 7 inches; light olive brown (2.5Y 5/4) sandy loam; granular structure; very friable
E 7 - 11 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak subangular blocky structure; very friable
Bt 11 - 15 inches; yellowish brown (10YR 5/8) sandy clay loam; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt2 15 - 20 inches; strong brown (7.5YR 5/6) sandy clay; angular blocky structure; sticky and plastic; firm
Bt3 20 - 36 inches; strong brown (7.5YR 5/6) sandy clay; few medium distinct brownish yellow (10YR 6/8) and common medium distinct light brownish gray (10YR 6/2) and common medium distinct red (2.5YR 4/6) mottles; angular blocky structure; sticky and plastic; firm

Note: Water table 20 inches. Most like Gritney soil series

B5

- Ap 0 - 9 inches; light olive brown (2.5Y 5/3) sandy loam; granular structure; very friable
E 9 - 18 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak subangular blocky structure; very friable
Bt 18 - 25 inches; olive yellow (2.5Y 6/6) sandy clay loam; few medium distinct brownish yellow (10YR 6/8) mottles; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt2 25 - 28 inches; olive yellow (2.5Y 6/6) sandy clay loam; few fine distinct light yellowish brown (2.5Y 6/3) and common fine distinct brownish yellow (10YR 6/8) mottles; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt3 28 - 36 inches; olive yellow (2.5Y 6/6) sandy clay loam; common fine distinct brownish yellow (10YR 6/8) and common medium distinct light brownish gray (2.5Y 6/2) mottles; weak subangular blocky structure; slightly sticky and slightly plastic; friable

Note: Water Table 28 inches. Most like Goldsboro soil series

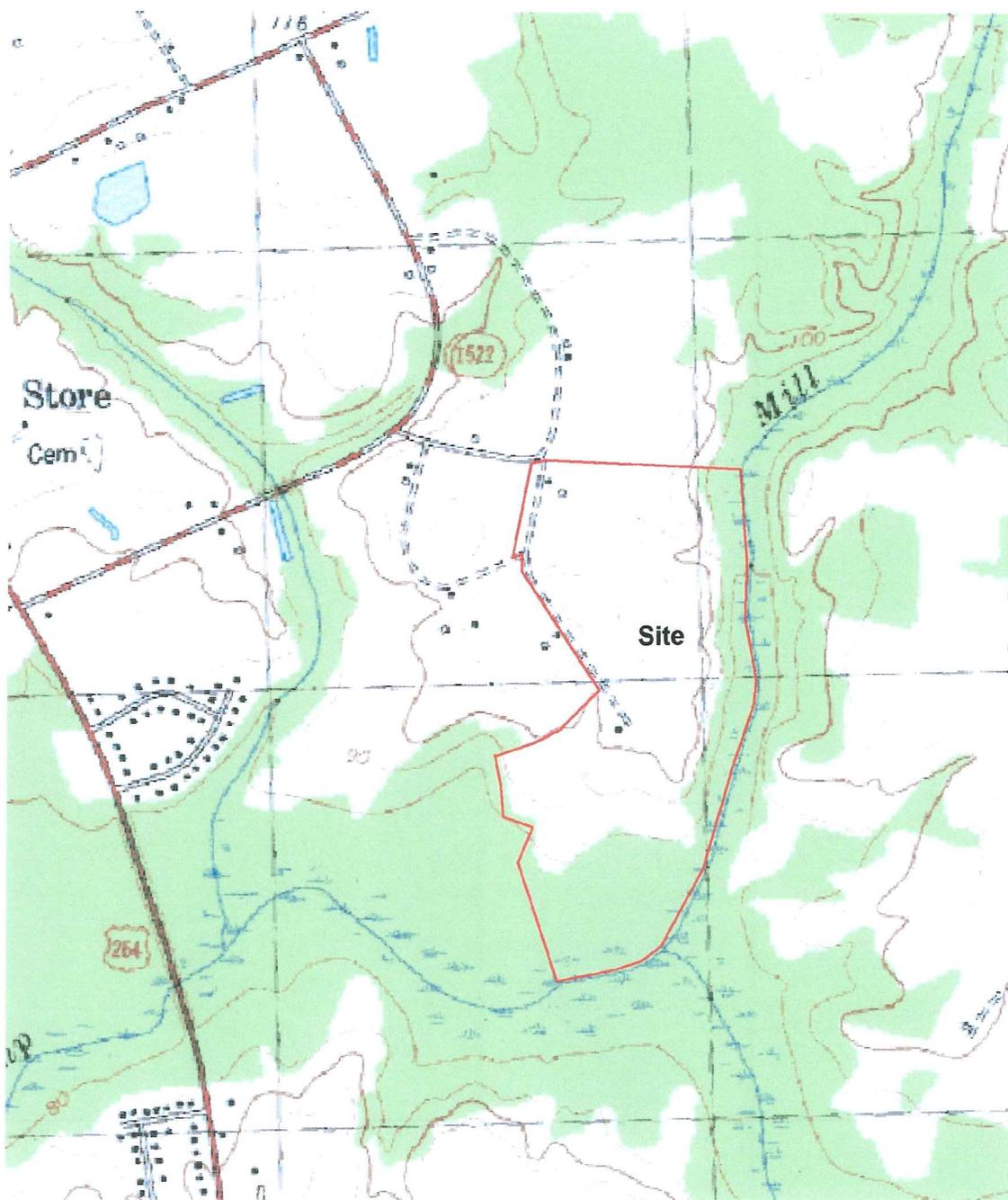
B6

- Ap 0 - 11 inches; light olive brown (2.5Y 5/4) sandy loam; granular structure; very friable
E 11 - 14 inches; olive yellow (2.5Y 6/6) sandy loam; weak subangular blocky structure; very friable
Bt 14 - 30 inches; yellowish brown (10YR 5/8) sandy clay loam; medium subangular blocky structure; slightly sticky and slightly plastic; friable
Bt2 30 - 37 inches; yellowish brown (10YR 5/8) sandy clay loam; few fine distinct yellowish red (5YR 4/6) mottles; medium subangular blocky; slightly sticky and slightly plastic; friable
Bt3 37 - 48 inches; yellowish brown (10YR 5/8) sandy clay loam; common medium distinct and yellowish red (5YR 4/6) and common medium distinct light yellowish brown (2.5Y 6/3) mottles; medium subangular blocky; slightly sticky and slightly plastic; friable

Note: Water table >48 inches. Most like Norfolk soil series



Allen Roberson Site, Wilson County



Center: 35.6918°N 77.8004°W
Elevation at center: 102 feet (31 meters)
Quad: USGS Saratoga
Drg Name: o35077f7
Drg Source Scale: 1:24,000

Allen Roberson Site, Wilson County

