



Environmental Quality

Facility Permit No: SLAS-42-05
Pearce Concrete
Permit to Operate
December 16, 2015
Page 1 of 4

North Carolina Department of Environmental Quality

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

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

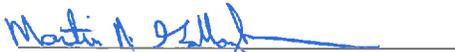
PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Pearce Concrete
James H. Pearce
James E. Pearce
5795 Hwy 903
Roanoke Rapids, NC 27870

is hereby permitted to operate Septage Land Application Site with permit # **SLAS-42-05** located on Hwy 903 in Halifax County at approximate position 36.39668° N latitude and -77.74022° E longitude. This site is permitted only for operations that are conducted in accordance with the representations made in the approved application, with all conditions attached to this permit, and with all of the provisions of 15A NCAC 13B.0800 -- Septage Management. Failure to operate as permitted may result in the Department suspending or revoking this permit, initiating action to enjoin the unpermitted operation, imposing administrative penalties, or invoking any other remedy as provided in Chapter 130A, Article 1, Part 2 of the North Carolina General Statutes.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in effect at the time of review.

Date Issued 12/16/2015


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

CONDITIONS OF OPERATING PERMIT

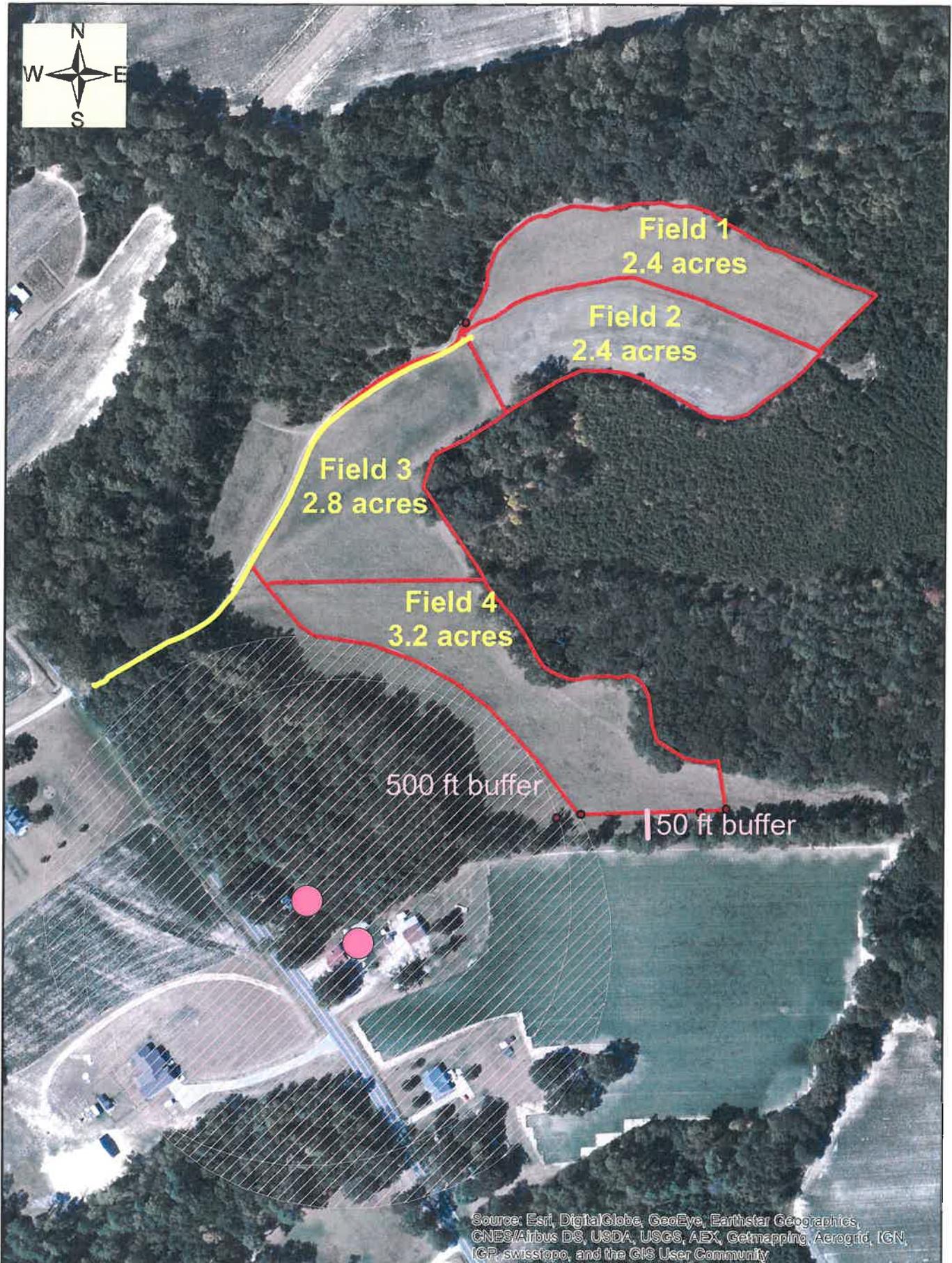
1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of both surface and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by James H. Pearce and approved by the Division of Waste Management. The 10.8-acre site shall be divided into four fields known as **Field 1** (2.4 acres), **Field 2** (2.4 acres), **Field 3** (2.8 acres) and **Field 4** (3.2 acres). The four fields are a combination of common bermudagrass, fescue, and crabgrass. The mandatory 30-day waiting period between the last application of septage and the harvest of the crop shall be met by alternating septage applications between the four fields or utilizing an alternative disposal location. 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 James H. Pearce in such a manner as to prevent the migration of wastes off of the designated waste receiving site. A 50 foot vegetative buffer shall be maintained around the perimeter of the 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 and grease septage.** The pH of domestic septage 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. The pH of grease septage or grease septage mixed with domestic septage be raised to 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application. Grease septage when applied over perennial vegetation shall be diluted as per Rule 15A NCAC 13B .0838 (a) (15).
7. **This site contains approximately 10.8 acres that are available for land application of septage.** The maximum annual application rate shall be 50,000 gal/ac/yr. At this application rate, a maximum annual volume of 540,000 gallons may be applied to this site. Application amounts to the disposal fields shall not exceed the maximum annual application rate or monthly application rates listed in the approved nutrient management plan. The maximum annual application rate assumes equal septage distribution, on an annual basis, over the entire permitted area.
8. An approved above ground septage detention system with a minimum design capacity of 11,000 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 shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner that there is no standing water when the discharge is complete.
10. Septage shall not be applied during any precipitation event, or if there is standing water on the soil surface, if the soil surface is frozen, or if the soil surface is snow covered. The Permittee shall consider pending weather conditions when making the decision to land apply in order to prevent any discharge of septage outside of the permitted boundary.
11. Septage shall not be applied during periods of high soil moisture. Septage applications that will result in ruts greater than three inches in the soil surface are prohibited.
12. Any discharge of septage outside of the permitted boundaries via runoff, aerial drift, etc. is prohibited.

13. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee or an employee of the firm named in this permit shall discharge septage at this site without prior appropriate notification and written approval from the Division.
14. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure. This permit is non-transferable.
15. **This permit shall expire on January 1, 2020.** 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 to meet the minimum setback distances as described in NC Septage Management Rule 15A NCAC 13B .0837 (d) such as 500 feet from any existing wells, residences, places of business, or places of public assembly. Also, septage shall not be disposed of within 50 feet of any property line or within 100 feet of any ditch.



SLAS-42-05



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

1 in = 250 ft

crc, Dec. 2015



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

LINDA CULPEPPER
Director

January 20, 2016

Mr. James H. Pearce and Mr. James E. Pearce
Pearce Concrete
5795 Hwy 903
Roanoke Rapids, North Carolina 27870

**RE: SLAS-42-05 Permit Renewal
Pearce Concrete
Hwy 903 in Halifax County**

Dear Mr. Pearce:

The NC Division of Waste Management has reviewed your application for renewal of Septage Land Application Site, **Permit # SLAS-42-05**, in Halifax County. Your application has been approved in accordance with NC Septage Management Rules and your permit, **SLAS-42-05**, 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. This permit shall expire on **January 1, 2020**. An application for permit renewal and your septage application logs should be submitted at least ninety (90) days prior to the expiration of your permit.

Again, please read all permit conditions carefully. 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-42-05**."

Sincerely,

Chester R. Cobb, Soil Scientist
Division of Waste Management, NCDEQ

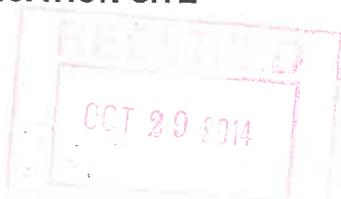
Enclosures

cc: Central Files
Sue B. Tidrick, Landowner
William A. Sparks, Landowner
Halifax County Health Department

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APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
1646 Mail Service Center, Raleigh, NC 27699-1646



I. Site and Operator Information

1. Applicant JAMES H PEARCE / James E Pearce / Pearce Concrete Works
Address 5795 Hwy 903
Roanoke Rapids NC 27870
Phone 252-537-2410 - 252-308-2376 252-308-544

2. Contact person for site operation (if different from applicant): James E Pearce (Jimmy)
Title or position CO OWNER Phone 252-308-2376
Address SAME AS ABOVE

3. Landowner JAMES H PEARCE
Address _____

4. Site Location: County Halifax State Road Number 903
Directions to site: Hwy 48 & 903 CROSS RD. Turn Towards Halifax -
I-95 / House on LEFT FIELD IN WOODS Down THE RD 1/4 mile

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

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

Existing site permit number: 42-05 permit expiration date: 01-1-15

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 10.8 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): Roanoke Rapids Sanitary District
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): Land Apply with moving truck using spreader Pan - Burying PK To 12 After 30 mins - To Hold For 2 Hrs
6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): Land Apply with moving truck using Spreader Pan - Burying PK To 12 After 30 mins To Hold 2 Hrs
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): _____

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.

James H Pearce James E Pearce ^(52mm) 11-6-14 10-20-14
 Signature*** Date

James H Pearce James E Pearce OWNER
 Print name ^(52mm) 11-6-14 Title

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

* Refer to Section .0837(e) of the N.C. Septage Management Rules.
 ** Refer to Section .0837(g) of the N.C. Septage Management Rules.
 ***Signature of company official required.

QUESTION II. 5.

DOMESTIC SEPTAGE WILL BE LIME STABILIZED TO A pH 12 FOR 30 MIN. PRIOR TO LAND APPLICATION.

GREASE SEPTAGE WILL BE LIME STABILIZED TO A pH 12 FOR 2 HR PRIOR TO LAND APPLICATION.

GREASE SEPTAGE TO BE DILUTED WITH AT LEAST 1:1 WITH DOMESTIC SEPTAGE OR WATER TO PREVENT CROP DAMAGE.

QUESTION II. 7.

SITE IS AGRICULTURE LAND.

James Pearce 11-6-14
(Senny)

Landowner's Authorization to Operate a Septage Land Application Site

Division of Waste Management - Solid Waste Section
401 Oberlin Rd, Sta. 150, Raleigh, NC 27605

I, Sue B Tidrick (name of landowner) hereby certify that I am the owner of
12 acres of land located on State Rd 1423 Hwy 903

and identified by 215 (book and page of

recorded deed or tax map parcel) and that I agree to allow James H Pearce + Jimmy Pearce

(name of site operator) to use said land for septage land application for a period of 5 yrs

(length of time), beginning 1-1-2015 (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 _____

William A Sparks (names of all co-owners, or state none).

Signature of landowner Sue B Tidrick Date 9-29-14

Signature of landowner [Signature] Date 9/29/14

Sworn to and subscribed before me this 29th day of September, 2014.

Kathy S. Liles
(Notary Public)

(OFFICIAL SEAL)

My Commission expires: 10-07-2017

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

** As required by Rule .0826

Updated Nutrient Management Plan for James Pearce
January 1, 2010 to January 1, 2015

A. General Information

1. Two samples per year of the septage will be conducted for waste analysis.
2. Soil samples of fields 1,2,3,and 4 will be done annually between September and Dec.
3. Presently Field 1 contains approx.2.5 acres. Field 2 contains approx. 2.5 acres. Fields 3 and 4 contains approximatey 3.5 acres (See map 1). 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 will be lime stabilized.
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.
7. Fields 1,2,3,and 4 will be labeled with signs in accordance with aerial photographs attached.

B. Crops

1. Field 1 has an established stand of Fescue/Common Bermuda grass overseeded with Marshal Ryegrass. It will be a permanent pasture situation.
2. Field 2,3 and 4 has a 60% crabgrass/40% common bermuda grass warm season grass stand. Marshall Ryegrass has been established in these three fields.

Special notes-The crabgrass, bermuda grass and ryegrass species in this system are all annual grass varieties that will persist over time if producer lets them reseed annually. Special reseeding considerations are mentioned in section C-2.

In October of 2007 30 lbs per acre of Marshal Ryegrass will be planted with no till technologies on fields 1,2,3,and 4.

In subsequent Oct./Nov.'s either Marshal ryegrass shall be planted with no till technologies at a rate of 15-20 lbs.per acre or 2 bushels of Cover crop rye shall planted with no-till technologies into a grass stubble of less than 4 inches. Would be best to wait til after first frost to plant either the ryegrass or cover crop rye.

In Late April or May of 2008,, Five lbs.per Acre of Common Bermuda Grass will be planted with no-till tech in Field 4 to keep the fields at a 60/40 ration of Common Bermuda grass to volunteer Crabgrass.

Anytime the summer grass stands go below 85% coverage,, common bermuda grass will be planted in Mid to Late May at a rate of 3-5 lbs per acre with no-till technologies.

C. 1. Nitrogen needs for crops.

2010 - 2015

Field 1 -Fescue/Ryegrass will need approx. 150 lbs of nitrogen /acre/year supplied by commercial fertilizer or septage according to soil sample recommendations during fall, winter and spring months. RYE for Fescue/Ryegrass will be 3-5 tons /acre/year.

In the summer months the Common Bermuda grass will need up to 100 units of N according to soil sample results. The RYE expectations of the common bermuda grass will be 2-4 tons per acre.

Field 2,3 and 4 (Common Bermuda/Crabgrass rotation) will need up to 150 units of N according to soil samples from April 1 to Sept. 15 during Crabgrass and Common bermuda grass growing season. R.Y.E. for Common Bermuda/Crabgrass rotation would be approx. 3-5 tons per acre. It is expected that volunteer crabgrass will come up in Common bermuda/Crabgrass stand.

From Sept 15 to the next April up to 100 lbs. of N will be able to be applied to ryegrass during its growing season. R.Y.E. for ryegrass would be approx 2-3 tons per acre per year. The N needs can be supplied by Septage or Commercial sources.

Nitrogen will be applied on a 6-8 week rotation during the year so that Field 1 will receive Septage for 6-8 weeks then fields 2, 3, and 4 will receive Septage for 5-6 weeks. 30 days after last application of septage, hay will be harvested as needed off the fields not currently getting the septage.

Note: After 5 years of harvest history we may want to reevaluate the N loading.. Normal N loading should be adjusted so that you put out 40-50 units per acre per ton of hay produced. Present recommendations are based on the low/conservative side.

C.2. Special Natural Reseeding and Harvesting Considerations-

Producer will let Crabgrass and bermuda grass seed out from August 1 to September 15 at which time he can cut grass from field and make hay and harvest it, leaving a stubble of less than 4 inches.

Producer will let ryegrass seed out from April 1 to May 15 at which time he will harvest it and market hay off the field, leaving a stubble of less than 4 inches .

Fescue will not need any special reseeding care as it is a perineal plant.

Thinning stands are addressed in Special Notes section.

D. Chart of Application rates from Septage sources.
RELATIVE APPLICATION RATES 2005-09

MONTH	FIELDS 1,2,3,4
JAN	LOW
FEB	MED
MAR	MED
APR	MED
MAY	HIGH
JUNE	HIGH
JULY	HIGH
AUG	HIGH
SEPT	MED
OCT	MED
NOV	MED
DEC	LOW

None=0,, Low=5000gallons

Medium=10,000gallons, High=15000gallons

note: cumulative application rate not to exceed the permitted application rate.

E. Application Method

The preceding information is based on septage being evenly applied over fields 1,2,3 and 4 with trucks equipped with sprayers.

F. Additional fertility Requirements

P and K need to be added to the land according to soil sample results. Buffer strips need to be fertilized with commercial fertilizer according to soil sample results.

G. Harvest of the crops and their use:

1. The Crabgrass and Bermuda grass will be cut as hay and baled whenever it reaches approx. 12-18 inches or roughly every six to eight weeks beginning in May through Oct.

Rygrass can be cut for hay when it reaches approx 12-18 inches from Oct through the next May.

Fescue/Ryegrass mix can be cut for hay when it reaches approx. 12-18 inches from September through the next May.

2. A 30 day period must be observed between the last application of septage and harvest. Septage will be applied in a five to six-eight week rotation using fields 1, 2,3,and 4 for 2015 to 2075.

3. Bales of hay will be sold to local farmers for livestock feeding purposes.

Soil Erosion and Runoff Control Plan

Buffers-

Fields 1,2,3 are continuous with at least a 50ft woodland buffer between the waste application fields and the streams or property lines. This riparian buffer will suffice to prevent seepage from migrating off the fields into streams or other properties.

A 50 ft grass buffer will be maintained around field 4 between waste application fields and the property lines. This grass buffer should suffice to prevent seepage from migrating off of the fields into other properties and/or streams.

Submitted by James H. Peave Date 12-28-09
Landowner: James H. Peave Date 12-28-09
Lessee: _____ Date _____

SUBMITTED BY: James Howell Peave

DATE: 11-17-15

SEPTAGE LAND APPLICATION LOG

CERTIFICATION

Site Operator: PEARCE CONCRETE

SLAS Permit #: 42-03

Site Location: #4
(street address for the site or latitude and longitude)

Number of acres permitted: 3.2

Permitted application rate: 50,000
(gallons septage per acre per year)

Crop(s): BERMUDA / PERAGRASS / ROTATION

Crop nitrogen requirement(s): APP 150 LBS PER ACRE
(pounds nitrogen per acre)

CERTIFICATION:

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

Jonas Pearce
(signature)

10-1-14
(date)

		2013		Field 1 & 2				Field 3		
Septage	Grease	PTW	Field 1	Field 2	Field 3	Field 4	Rate	Amount	Rate	Amount
January						7,900	L	12,000	L	14,000
February			8,900				M	24,000	M	28,000
March				5,800			M	24,000	M	28,000
April					10,000		M	24,000	M	28,000
May					10,900		H	36,000	H	42,000
June			17,800				H	36,000	H	42,000
July				16,700			H	36,000	H	42,000
August					20,900		H	36,000	H	42,000
September						19,000	M	24,000	M	28,000
October			14,000				M	24,000	M	28,000
November				14,000			M	24,000	M	28,000
December					5,000		L	12,000	L	14,000
TOTAL	0	0	40,700	36,500	46,800	26,900	150,900			
			0	120,000	140,000	160,000	540,000			
		2014		Field 1 & 2				Field 3		
Septage	Grease	PTW	Field 1	Field 2	Field 3	Field 4	Rate	Amount	Rate	Amount
January			0	0	0	0	L	12,000	L	14,000
February						5,000	M	24,000	M	28,000
March			3,000				M	24,000	M	28,000
April				9,000			M	24,000	M	28,000
May					20,000		H	36,000	H	42,000
June						19,000	H	36,000	H	42,000
July				17,000			H	36,000	H	42,000
August			15,000				H	36,000	H	42,000
September			21,500				M	24,000	M	28,000
October						17,000	M	24,000	M	28,000
November							M	24,000	M	28,000
December							L	12,000	L	14,000
TOTAL	0	0	39,500	26,000	20,000	41,000	126,500			
			0	120,000	140,000	160,000	540,000			