



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

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

January 17, 2012

Mr. C. Mort Hurst
Robersonville Ice and Coal Inc.
PO Box 106
Robersonville, NC 27871

**RE: SLAS-59-03 Permit Modification
Robersonville Ice and Coal Inc.
SR 1300 in Martin County**

Dear Mr. Hurst:

The NC Division of Waste Management has reviewed documents submitted by you for modification of the previous approved nutrient management plan. The Division has approved the modification of your nutrient management plan. The modifications to the nutrient management plan included the change of cover crops in Field 1 from bermudagrass overseeded with small grains to a bermudagrass / fescue cropping system and the use of Roundup in the early spring to kill the small grain and weeds within the bermudagrass field, Field 3. You must now follow the guidelines as listed in the letter from Al Cochran dated March 30, 2011 and the nutrient management, soil erosion, and surface water run-off plan signed on November 18, 2011. These changes will be incorporated into permit **SLAS-59-03**. This permit is still set to expire on September 10, 2013.

This letter serves as the modification to permit **SLAS-59-03**. Please place this letter with the current permit for **SLAS-59-03**. Another permit will not be mailed out for this modification. Remember that nutrient management plans are incorporated into the permit and 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 permit or septage in general, please feel free to contact me at 919-707-8283.

Sincerely,

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

Enclosures

cc: Central Files
Martin County Health Department

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

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

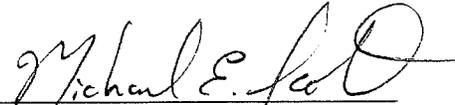
C. Morton Hurst
Robersonville Ice and Coal Inc.
PO Box 106 E. Railroad St.
Robersonville, NC 27871

is hereby issued a permit to operate a Septage Land Application Site with permit # **SLAS-59-03** on SR 1300 in Martin County at approximate position 35.8500° N latitude and -77.3036° 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 affect at the time of review.

Date Issued

9/10/08



Michael E. Scott, Branch Head
Solid Waste Section

Operator: C. Morton Hurst
SLAS# 59-03
County: Martin

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Permit Conditions:

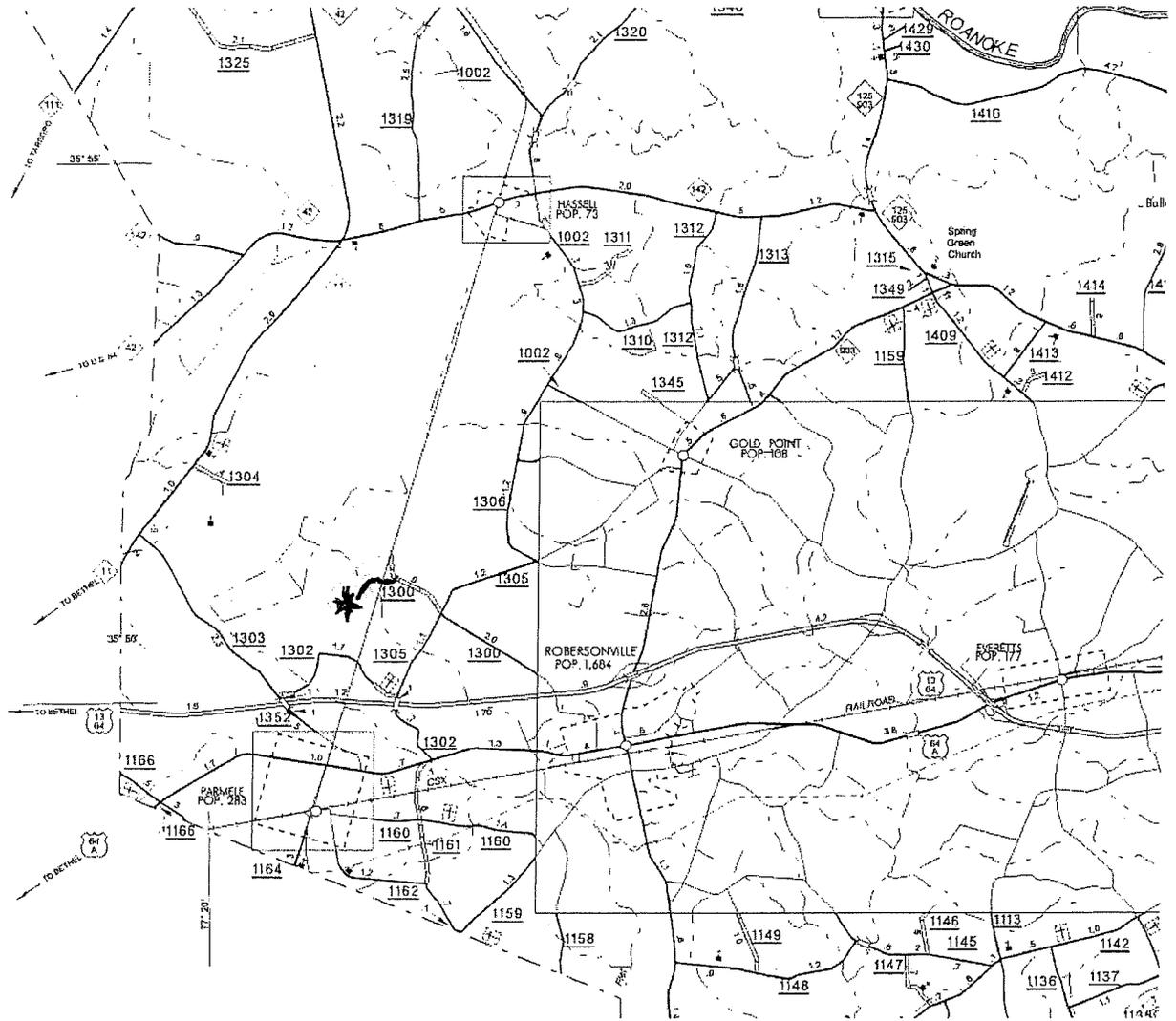
1. This permit shall become voidable if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters.
2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by C. Mort Hurst and approved by the Division. The 7.7 acre site is divided into 4 fields known as Field 1 (2.0 acres), Field 2A (1.9 acres), Field 2B (1.8 acres), and Field 3 (2.0 acres). Fields 1 and 3 are established in bermudagrass. Field 2A shall be established in fescue in the fall of 2008. Field 2B is established in fescue. If the bermudagrass stand drops below 80% in groundcover within the bermudagrass fields, the bare areas will be sprigged at 30-40 bu/ac or seeded at 5-7 lbs/ac. The bermudagrass fields will be overseeded with a small grain at a rate of 120 lbs/ac in September of each year. If the fescue stand drops below 80% in groundcover within the fescue fields, the bare areas will be reseeded at a rate of 10 lbs/ac, drilled. The 30-day withdrawal period prior to harvest shall be met by alternating septage applications between the active 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 C. Mort Hurst. 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 the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, and federal) which have jurisdiction. It is the responsibility of the permittee to be in compliance with the requirements of 40 CFR 503.
5. This permit may be modified or reissued to incorporate any conditions, limitations and monitoring requirements of the Division of Waste Management deems necessary to adequately protect the environment and public health.
6. This site is only permitted for the land application of domestic septage, portable toilet waste, grease septage, commercial / industrial septage. **Commercial/industrial septage shall only be land applied after the waste from each source is tested and the results approved by the Solid Waste Section.** 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 7.7 acres that are available for the land application of septage. The maximum annual application rate for Fields 1, 2A, and 3 shall be 50,000 gallons per acre per year, for a total, maximum annual application of 295,000 gallons. The total, maximum annual application amount for this site may be increased up to 385,000 upon the opening of the inactive Field 2B.** 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.

Operator: C. Morton Hurst
SLAS# 59-03
County: Martin

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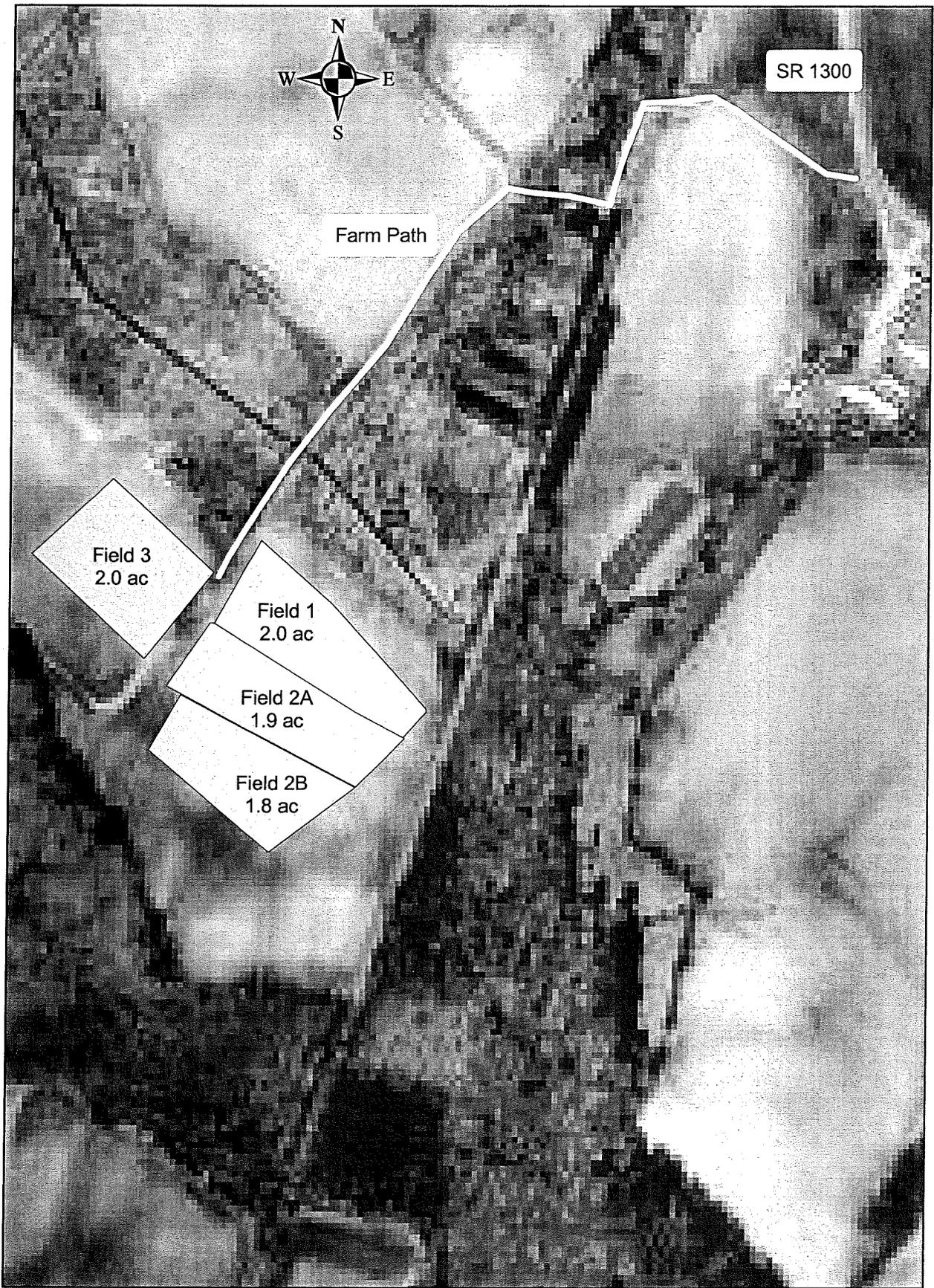
8. An approved above ground septage detention system with a minimum design capacity of 5,000 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated 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. Septage shall not be applied during periods of high soil moisture.
10. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee shall discharge septage at this site without prior appropriate notification and written approval of the Division of Waste Management.
11. 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.
12. **This permit shall expire on September 10, 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 .0822 (e) (1) of the NC Septage Management Rules and 40 CFR Part 503.17(b) of the Federal Register. This permit is non-transferable.
13. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division of Waste Management upon request.
14. Any duly authorized officer, employee, or representative of the Division of Waste Management 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.
15. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site.
16. 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.
17. **Fields 2A and 2B must be inspected by the Division prior to any septage applications in these fields. Field 2A shall be established in fescue in the fall of 2008. Field 2B is considered inactive until further notice. A written notice shall be submitted to the Division at least two weeks prior to when you wish open the field.**

D E C O M B E C O U N T Y

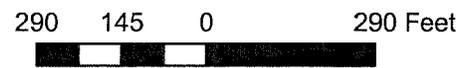


SLAS-59-03

- Robersonville Ice & Coal Inc. / Morton Hurst
- Site located off of SR 1300 (turn left off of road before it ends)
- Coordinates: 35.85° N latitude -77.30361°W longitude



SLAS-59-03



* Robersonville Ice & Coal Inc.

* Coordinates: 35.8500 degrees N and -77.3036 degrees W

Robersonville Ice & Coal Company
Railroad St
Robersonville, NC 27871

Nutrient Management Plan for Septage Application to SLAS-59-03

A. General Information:

1. The septage land application site consists of four fields totaling approximately 7.7 acres. The acreages within the four fields are 2.0 acres for Field #1, 1.9 acres for Field #2A, 1.8 acres for Field #2B, and 2.0 for Field #3.
2. The predominant soil type of these four fields is Goldsboro sandy loam.
3. Currently, Fields #1 is established in fescue and bermudagrass and will be harvested for hay. Field #2B is established in fescue and is fenced such as to allow for grazing. Field #2A is to be established in fescue and will be cut for hay. Field #3 is established in bermudagrass and will be harvested for hay.
4. Septage storage will be provided to account for the average volume of septage pumped per week. A permit to dispose of septage at a WWTP is also held by Robersonville Ice & Coal Company.
5. There will be septage sampling on a periodic schedule.
6. 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 the sod greater than three inches in depth).

B. Crops to be grown and approximate planting times:

1. Field #1 is currently established in coastal bermudagrass and fescue. If there is less than 80% crop coverage going into the spring, then the field will be planted in bermudagrass. If there is less than 80% crop coverage going into the fall, then the field will be planted in fescue. See recommendations below.
2. Field #3 was established in common bermudagrass in 2006. Field 3 will be overseeded in September with a small grain (wheat, oats, etc.) at a seeding rate of 120 lbs/ac.
3. Field #2B currently has an adequate stand of fescue.
4. Field #2A is to be established in fescue during the fall of 2008. The fescue will be planted during September or October at a seeding rate of 15 – 20 lbs/ac broadcast or 10 – 15 lbs/ac if drilled.
5. If the bermudagrass stand falls below 80% in groundcover across an entire field, the field will be resprigged in March or April at 30-40 bu/ac or seeded at 5-7 lbs/ac (drilled). For spot planting, the bermudagrass will be drilled. Follow the planting recommendations for the variety of bermudagrass to be planted.
6. If the fescue stand falls below 80% in groundcover across the entire field, the bare spots will be reseeded at a rate of 10 lbs/ac drilled between September 1 and October 31.

Robersonville Ice & Coal Company

Page 2 of NMP for SLAS-59-03

C. Nitrogen requirements for crops grown:

Crop	RYE ¹	N App. Rate ²	lbs N/acre
Coastal Bermudagrass / small grain overseed (hay)	8.2 X	46 lbs N/dry ton =	377
Fescue (hay)	4.0 X	46 lbs N/dry ton =	184
Fescue (graze)	4.0 X	34 lbs N/dry ton =	136
Common Bermudagrass (hay)	4.9 X	46 lbs N/dry ton =	225
Bermudagrass / Fescue (hay)	5.9 X	46 lbs N/dry ton =	271
Small grain overseed (hay)			50

¹ RYE = Realistic Yield Expectations

² N application rate based on RYE for soil type

At the lowest application rate of 136 lbs N / acre, 52,308 gallons septage / acre would be needed to supply the required N (136 / 0.0026). However, septage rules require a maximum annual application rate of 50,000 gallons septage / acre. As a rule of thumb, septage supplies approximately 2.6 lbs N / 1,000 gallons.

D. Relative application rate for Fields #1, #2A, #2B and #3:

Month	Field 1	Field 2A	Field 2B	Field 3
January	5,000	5,000	5,000	5,000
February	5,000	10,000	10,000	5,000
March	15,000	15,000	15,000	10,000
April	15,000	15,000	15,000	15,000
May	10,000	10,000	10,000	10,000
June	15,000	5,000	5,000	15,000
July	10,000	5,000	5,000	15,000
August	10,000	5,000	5,000	10,000
September	10,000	10,000	10,000	10,000
October	10,000	10,000	10,000	5,000
November	5,000	10,000	10,000	5,000
December	5,000	5,000	5,000	5,000

Note: Cumulative application rate is not to exceed the permitted application rate of 50,000 gal/acre/yr.

The operator of the site is responsible for observing the 30-day withdrawal period prior to crop harvest for all crops and all fields. Refer to part G for more details.

E. Application Method:

The proceeding information is based on septage being evenly applied over the entire permitted site by liquid spread trucks.

Robersonville Ice & Coal Company

Page 3 of NMP for SLAS-59-03

F. Additional Fertility Requirements:

Each year in the fall, soil tests will be performed to determine the amount of commercial fertilizer needed. Supplemental nitrogen will be applied to the fields on an as needed basis at rates that do not exceed crop requirements. Nutrient recommendation as outlined on the annual soil reports will be followed for other nutrient requirements such as phosphorus and potassium.

The buffer areas will be fertilized with 500 lbs/ac of 10-10-10 fertilizer. Yearly soil tests will be followed and recommendations followed.

G. Harvest of the crops and their use:

1. For Field #1, the bermudagrass will be harvested as hay when it reaches 12 inches in height or about every 30-45 days beginning in June. The fescue will be cut and baled whenever it reaches approximately 12 inches in height or just before seed head emergence. This will usually take place in late May and again in September or October.
2. For Field #3, the bermudagrass will be harvested as hay when it reaches 12 inches in height or about every 30-45 days beginning in June. The small grain will be sprayed with Roundup prior to green up of the bermudagrass (see attached letter from Mr. Al Cochran on March 30, 2011).
3. For Fields #2A and #2B, the fescue will be harvested as hay or grazed. For hay production, the fescue will be cut and baled whenever it reaches approximately 12 inches in height or just before seed head emergence. This will usually take place in late May and again in September or October. At least two harvests will be made each year. For grazing, the field will be undisturbed for 30 days before the cows will be allowed to graze. During the waiting period and the time while the cows are grazing, septage applications will be rotated to one of the other three fields.
4. A 30-day waiting period must be observed between the last application of septage and the cutting of the forage for hay or grazing of the forage. Beginning in March or April of each year one of the bermudagrass fields will sit idle for 30 days while the other field receives waste applications. After 30 days, the cover crop on this field will be harvested for hay. After the first bermudagrass field has been harvested, this same rotation will be used for the other bermudagrass field. By May, the fescue fields should be ready for harvest. The 30 day rotation will also apply to all harvests.
5. The bermudagrass will cut and bale the hay to feed to our beef cows.

Robersonville Ice & Coal Company

Page 4 of NMP for SLAS-59-03

H. Soil erosion and surface water run-off plan:

1. A grass border will be established between the septage disposal area and ditches and woods. The border will be 25 feet in width. The vegetative area will act as a buffer zone between the woods and ditches in catching septage run-off during heavy rains. This grass border will also prevent erosion.
2. During excessive rains, septage will be disposed of at the Robersonville Sewage Plant or SDTF-59-03.
3. The Martin County Soil Conservation drainage plan for this property has been implemented. A map for that plan is included.
4. The soil classification of the four fields are as follows:
 - a. This site consists of Goldsboro fine sandy loam and Norfolk loamy fine sand Goldsboro: moderately well drained on uplands, permeability is moderately slow Norfolk: well-drained soils on uplands, permeability is moderate (source: Martin County Soil Survey pg 5).

C. Mark Hurst
Signature

Nov 18-11
Date

C. Mark Hurst
Print Name

Nov 18-11
Title



Martin County Center
104 Kehukee Park Road
Williamston NC 27892
Phone: (252) 789-4370
FAX: (252) 789-4389
<http://martin.ces.ncsu.edu>

March 30, 2011

Division of Waste Management
Solid Waste Section
1646 Mail Service Center
Raleigh, NC, 27699-1646

To whom it may concern:

This letter is concerning the spray field for Mort and Jeff Hurst. They plant a cover crop in the fall on their bermuda grass fields. They apply septage on the fields in the winter months. To improve the growth of the bermuda grass, I have recommend they spray it with Roundup while the bermuda grass is dormant in the early spring. Applying Roundup will kill the cover crop and any winter weeds that are present. The cover crop will shade out the bermuda grass if not cut or killed in the spring. If done properly while the Bermuda grass is dormant, applying Roundup will not hurt the bermuda grass. If you have any question concerning this matter please call me at 252-789-4370.

Sincerely,

A handwritten signature in cursive script that reads "Al Cochran".

Al Cochran
Extension Agent