

**State of North Carolina  
Department of Environment and Natural Resources  
Division of Water Resources**

**Animal Waste Management Systems**

Request for Certificate of Coverage

Facility Currently Covered by an Expiring State Non-Discharge General Permit

On September 30, 2014, the North Carolina State Non-Discharge General Permits for Animal Waste Management Systems will expire. As required by these permits, facilities that have been issued Certificates of Coverage to operate under these State Non-Discharge General Permits must apply for renewal at least 180 days prior to their expiration date. Therefore, all applications must be received by the Division of Water Resources by no later than **April 1, 2014**.

*Please do not leave any question unanswered. Please verify all information and make any necessary corrections below.*

*Application must be signed and dated by the Permittee.*

1. Facility Number: 090054 and Certificate of Coverage Number: AWS090054
2. Facility Name: Graham Farms
3. Landowner's name (same as on the Waste Management Plan): Jerry Graham
4. Landowner's mailing address: 8945 Hwy 87 E  
City/State: Council NC Zip: 284348856  
Telephone Number (include area code): (910)645-6674 E-mail: \_\_\_\_\_
5. Facility's physical address: 1748 Brighten Rd  
City: Riegelwood State: NC Zip: 28456
6. County where facility is located: Bladen
7. Farm Manager's name (If different than the Landowner): \_\_\_\_\_
8. Farm Manager's telephone number (include area code): \_\_\_\_\_
9. Integrator's name (if there is not an integrator write "None"): Prestage Farms Inc
10. Operator in Charge (OIC) name: S Riley Jr Telephone Number 910-214-1151 OIC # 12068
11. Lessee's name (if there is not a lessee write "None"): PRESTAGE FARMS, INC.
12. Indicate animal operation type and number:

**Swine**

Wean to Finish  
Wean to Feeder  
Farrow to Finish  
Feeder to Finish 2940  
Farrow to Wean  
Farrow to Feeder  
Boar/Stud  
Gilts  
Other

Horses - Horses  
Horses - Other

**Cattle**

Dairy Calf  
Dairy Heifer  
Milk Cow  
Dry Cow  
Beef Stocker Calf  
Beef Feeder  
Beef Brood Cow  
Other

Sheep - Sheep  
Sheep - Other

**Dry Poultry**

Non Laying Chickens  
Laying Chickens  
Turkeys  
Other  
Pullets  
Turkey Poults

**Wet Poultry**

Non Laying Pullets  
Layers

RECEIVED/DENR/DWR

APR 01 2014

Water Quality Regional  
Operations Section

Mail one (1) copy of the most recent Waste Utilization Plan (WUP) along with the field maps for this facility with this completed and signed application as required by NC General Statutes 143-215.10C(d) to the address below. The WUP must be signed by the owner and a certified technical specialist.

As a second option to mailing paper copies of the application package, you can scan and email one signed copy of the application and the WUP to: [animalpermits@ncdenr.gov](mailto:animalpermits@ncdenr.gov)

I attest that this application has been reviewed by me and is accurate and complete to the best of my knowledge. I understand that, if all required parts of this application are not completed and that if all required supporting information and attachments are not included, this application package will be returned to me as incomplete. **Note:** In accordance with NC General Statutes 143-215.6A and 143-215.6B, any person who knowingly makes any false statement, representation, or certification in any application may be subject to civil penalties up to \$25,000 per violation. (18 U.S.C. Section 1001 provides a punishment by a fine of not more than \$10,000 or imprisonment of not more than 5 years, or both for a similar offense.)

Printed Name of Signing Official (Landowner, or if multiple Landowners all landowners should sign. If Landowner is a corporation, signature should be by a principal executive officer of the corporation):

Name: JERRY GRAHAM Title: OWNER  
Signature: [Signature] Date: 3/11/14

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

THE COMPLETED APPLICATION SHOULD BE SENT TO THE FOLLOWING ADDRESS:

**NCDENR-DWR**  
**Animal Feeding Operations Branch**  
**1636 Mail Service Center**  
**Raleigh, North Carolina 27699-1636**

**Telephone number: (919) 807-6464**  
**E-mail: [animalpermits@ncdenr.gov](mailto:animalpermits@ncdenr.gov)**

## Waste Utilization Plan

Producer: Jerry Graham County: Bladen  
Name of Farm: Graham Farms  
Location: 8945 Hwy 87 E  
Council NC 28434  
Phone: 910-645-6674  
Type of Operation: Feed-Finish  
Number of Animal: 2940  
Storage Structure: Anaerobic Lagoon  
Method of Application: Irrigation  
Amount of waste produced per year: 5586 ton/year  
Amount of plant available N (PAN) produced/year: 6762 lbs./year

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APR 01 2014

Water Quality Regional  
Operations Section

The waste from your animal facility must be land applied at a specified rate to prevent pollution of surface water and/or groundwater. The plant nutrients in the animal waste should be used to reduce the amount of commercial fertilizer required for the crops in the fields where the waste is to be applied.

This waste utilization plan uses nitrogen as the limiting nutrient. Waste should be analyzed before each application cycle. Annual soil tests are strongly encouraged so that all plant nutrients can be balanced for realistic yields of the crop to be grown.

Several factors are important in the implementing your waste utilization plan in order to maximize the fertilizer value of the waste and to ensure that it is applied in an environmentally safe manner.

1. Always apply waste based on the needs of the crop to be grown and the nutrient content of the waste. Do not apply more nitrogen than the crop can utilize.
2. Soil types are important as they have different infiltration rates, leaching potentials, cation exchange capacities, and available water holding capacities.
3. Normally waste shall not be applied to land eroding at more than 5 tons per acre per year. Waste may be applied to land eroding at 5 or more tons per acre annually, but less than 10 tons per acre per year providing that adequate filter strips are established.
4. Do not apply waste on saturated soils, when it is raining, or when the surface is frozen. Either of these conditions may in runoff to the surface waters which is not allowed under DWQ regulations.
5. Wind conditions should also be considered to avoid drift and downwind odor problems.
6. To maximize the value of the nutrients for crops production and to reduce the potential for pollution, the waste should be applied to a growing crop or applied not more than 30 days prior to planting a crop or forages breaking dormancy. Injecting the waste or disking will conserve nutrients and reduce odor problems.

This plan is based on the waste application method shown above. If you choose to change methods in the future, you need to revise this plan. Nutrient levels for different applications methods are not the same.

The estimated acres needed to apply the animal waste is based on typical nutrient content for this type of facility. Acreage requirements should be based on the waste analysis report from your waste management facility. In some cases you may want to have plant analysis made, which



could allow additional waste to be applied. Provisions shall be made for the area receiving waste to be flexible so as to accommodate changing waste analysis content and the crop type. Lime must be applied to maintain pH in the optimum range for specific crop production. This waste utilization plan, if carried out, meets the requirements for compliance with 15A NCAC 2H .0217 adopted by the Environmental Management Commission.

YOUR WASTE UTILIZATION PLAN IS BASED ON THE FOLLOWING:

Tract No.	Pull No.	Soil Type	Crop Code	Yield/Ac	Lbs. N unit	Acres	Lbs N Used	Month to Apply	Lbs. N Per Ac.
10916	2A	Ln	Fescue/Hay	4.5	43	2.75	534	AUG-JUL	194
10920	3A	GbA	CB/Hay	6.5	46	3.89	1151	MAR-OCT	296
10920	3A	GbA	SG/Hay	1	50	3.89	195	SEP-MAR	50
10920	3B	GbA	CB/Hay	6.5	46	2.90	858	MAR-OCT	296
10920	3B	GbA	SG/Hay	1	50	2.90	145	SEP-MAR	50
10920	3C	GbA	CB/Hay	6.5	46	2.40	710	MAR-OCT	296
10920	3C	GbA	SG/Hay	1	50	2.40	120	SEP-MAR	50
10879	4A	GbA	CB/Hay	6.5	46	3.89	1151	MAR-OCT	296
10879	4A	GbA	SG/Hay	1	50	3.89	195	SEP-MAR	50
10879	4B	Ln	CB/Hay	5.5	43	2.15	510	MAR-OCT	237
10879	4B	Ln	SG/Hay	1	50	2.15	108	SEP-MAR	50
5801	5A1	GbA	CB/Hay	6.5	46	2.15	636	MAR-OCT	296
5801	5A1	GbA	SG/Hay	1	50	2.15	108	SEP-MAR	50
5801	5B1	GbA	CB/Hay	6.5	46	1.51	447	MAR-OCT	296
5801	5B1	GbA	SG/Hay	1	50	1.51	76	SEP-MAR	50
5801	5A2	GbA	CB/Hay	6.5	46	3.18	941	MAR-OCT	296
5801	5A2	GbA	SG/Hay	1	50	3.18	159	SEP-MAR	50
5801	5B2	GbA	CB/Hay	6.5	46	1.81	536	MAR-OCT	296
5801	5B2	GbA	SG/Hay	1	50	1.81	91	SEP-MAR	50

Total	29.53	8669 lbs.
Available Nitrogen		6762 lbs.
Surplus or deficit		-1907 lbs.

Applying the above amount of waste is a big job. You should plan time and have appropriate equipment to apply the waste in a timely manner.

The applicator is cautioned that P and K may be over applied while meeting the N requirements. In the future, regulations may require farmers in some parts of North Carolina to have a nutrient management plan that addresses all nutrients. This plan only addresses nitrogen.

In interplanted fields (i.e. small grain, etc. interseeded in bermudagrass), forage must be removed through grazing, hay and /or silage. Where grazing, plants should be grazed when they reach a height of six to nine inches. Cattle should be removed when plants are grazed to a height of four inches. In fields where small grain etc. is to be removed for hay or silage, care should be exercised not to let small grain to reach maturity, especially late in the season ( i.e. April or May) Shading may result if small grain gets too high and this will definitely interfere with the stand of bermudagrass. This loss of stand will result in reduced yields and less nitrogen being utilized. Rather than cutting small grain for hay or silage just before heading as is the normal situation, you are encouraged to cut the small grain earlier. You may want to consider harvesting hay or silage two to three times during the season, depending on the time small grain is planted in the fall.

The ideal time to interplant small grain, etc. is late September or early October . Drilling is recommended over broadcasting. Bermudagrass should be grazed or mowed to a height of about two inches before drilling for best results.

Caution must be exercised in grazing or haying summer annuals under stressed conditions. Nitrate poisoning may occur in livestock. Sampling forage or hay for nitrate levels is recommended.

Acres shown in the tables are considered to be the usable acres excluding required buffers, filter strips along ditches, odd areas unable to be irrigated, and perimeter areas not receiving full application rates due to equipment limitations. Actual total acres in the field listed may, and most likely will be, more than the acres shown in the tables.

See attached map showing the fields to be used for the utilization of animal waste.

#### SLUDGE APPLICATION:

The waste utilization plan must contain provisions for periodic land application of sludge at agronomic rates. The sludge will be nutrient rich and will require precautionary measures to prevent over application of nutrients or other elements. Your production facility will produce approximately 5292 lbs. of plant available nitrogen per year in the sludge.

If you remove sludge every 5 years you will have approximately 26460 lbs. of PAN to utilize. Assuming you apply this PAN to hybrid bermudagrass hayland at the rate of 300 lbs/acre you will need 88 acres of land. If you apply the sludge to corn at the rate of 125 lbs. of nitrogen per acre you will need 212 acres of land. Please be aware that these are only estimates of the PAN and the land needed. Actual requirements could vary by 25% depending on the sludge waste analysis, soil types, realistic yields, and application methods.

#### APPLICATION OF WASTE BY IRRIGATION

The irrigation application rate should not exceed the intake rate of the soil at the time of irrigation such that runoff or ponding occurs. This rate is limited by initial soil moisture content, soil structure, soil texture, water droplet size, and organic solids. The application amount should not exceed the available water holding capacity

of the soil at the time of irrigation nor should the plant available nitrogen applied exceed the nitrogen needs of the crop.

If surface irrigation is the method of land application for this plan, it is the responsibility of the producer and irrigation designer to ensure that an irrigation system is installed to properly irrigate the acres shown in tables. Failure to apply the recommended rates and amounts of nitrogen shown in the tables may make this plan invalid.

The following table is provided as a guide for establishing application rates and amounts.

Tract No.	Field No.	Soil Type	Crop Code	Applic. Rate(in/hr)	Applic. Amount
10916	2A	Ln	Fescue/Hay	0.5	1.0
10920	3A	GbA	CB/Hay	0.5	1.0
10920	3A	GbA	SG/Hay	0.5	1.0
10920	3B	GbA	CB/Hay	0.5	1.0
10920	3B	GbA	SG/Hay	0.5	1.0
10920	3C	GbA	CB/Hay	0.5	1.0
10920	3C	GbA	SG/Hay	0.5	1.0
10879	4A	GbA	CB/Hay	0.5	1.0
10879	4A	GbA	SG/Hay	0.5	1.0
10879	4B	Ln	CB/Hay	0.5	1.0
10879	4B	Ln	SG/Hay	0.5	1.0
5801	5A1	GbA	CB/Hay	0.5	1.0
5801	5A1	GbA	SG/Hay	0.5	1.0
5801	5B1	GbA	CB/Hay	0.5	1.0
5801	5B1	GbA	SG/Hay	0.5	1.0
5801	5A2	GbA	CB/Hay	0.5	1.0
5801	5A2	GbA	SG/Hay	0.5	1.0
5801	5B2	GbA	CB/Hay	0.5	1.0
5801	5B2	GbA	SG/Hay	0.5	1.0

This is the maximum application amount allowed for the soil assuming the amount of nitrogen allowed for the crop is not over applied. In many situations the application amount shown cannot be applied because of the nitrogen limitations. The maximum application amount shown can be applied under optimum soil conditions.

Your facility is designed for 180 days of temporary storage and the temporary storage must be removed on the average of once every 6 months. In no instances should the volume of the waste be stored in your structure be within the 25 year 24 hour storm storage or one foot of freeboard except in the event of the 25 year 24 hour storm.

It is the responsibility of the producer and the waste applicator to ensure that the spreader equipment is operated properly to apply the correct rates shown in the tables. Failure to apply the recommended rates and amounts of nitrogen shown in the tables may make this plan invalid.

Call your technical specialist after you have receive the waste analysis report for assistance in determining the amount of waste per acre and the proper application rate prior to applying the waste.

#### NARRATIVE OF OPERATION

## WASTE UTILIZATION PLAN AGREEMENT

Name of Farm: Graham Farms

Owner/Manager Agreement Jerry Graham

I (we) understand and will follow and implement the specifications and the operation and maintenance procedures established in the approved animal waste utilization plan for the farm named above. I (we) know that any expansion to the existing design capacity of the waste treatment and storage system or construction of new facilities will require a new certification to be submitted to the North Carolina Division of Water Quality before the new animals are stocked. I (we) also understand that there must be no discharge of animal waste from this system to the surface waters of the state from a storm event less severe than the 25-year, 24 hour storm. The approved plan will be filed on-site at the farm office and at the office of the local Soil and Water Conservation District and will be available for review by NCDWQ upon request.

Name of Facility Owner: Jerry Graham *LEASED BY PRESTAGE FARMS, INC.*Signature: *PRESTAGE FARMS, INC. By H. Glenn Clifton*Date: *3/24/14*

Name of Manager (If different from owner)

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Person Preparing Plan: G. Glenn Clifton

Affiliation: Prestage Farms, Inc.

Phone: 910-596-5749

Address: P.O. Box 438  
Clinton, NC 28329Signature: *H. Glenn Clifton*Date: *3/24/14*





Graham Farms  
AWS090054  
Bladen County  
Spray Field  
1 inch = 250 feet