## State of North Carolina Department of Environment and Natural Resources RECEIVED/DENR/DWR

**Division of Water Resources** 

MAR 1 4 2014

**Animal Waste Management Systems** Request for Certificate of Coverage

Facility Currently Covered by an Expiring State Non-Discharge General Permittons Section

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.

	9,3	
Ap	ication must be signed and dated by the Permittee.	
1.	Facility Number: 960187 and Certificate of Coverage Number: AWS960187	
2.	Facility Name: Sherrill Johnson	
3	andowner's name (same as on the Waste Management Plan). Nancy Johnson	

City/State: Four Oaks NC Zip: 275248805 Telephone Number (include area code): (919)689-9641 E-mail: joynerjohnson@aol.com

Facility's physical address: 691 N Jordans Chapel Rd

City: Four Oaks State: NC **Zip:** 27524

Landowner's mailing address: 637 N Jordan's Chapel Rd

6. County where facility is located: Wayne

Farm Manager's name (If different than the Landowner): Farm Manager's telephone number (include area code):

Cattle

Integrator's name (if there is not an integrator write "None"): Maxwell Foods Inc

Telephone Number (9/9) 689 - 96 4/ OIC # /7688 10. Operator in Charge (OIC) name: Nancy Johnson

**Dry Poultry** 

11. Lessee's name (if there is not a lessee write "None"):

12. Indicate animal operation type and number:

Swine

Wean to Finish Dairy Calf Non Laying Chickens Wean to Feeder Dairy Heifer Laying Chickens Farrow to Finish Milk Cow Turkeys Feeder to Finish 4320 Dry Cow Other Farrow to Wean Beef Stocker Calf Pullets Farrow to Feeder Beef Feeder Turkey Poults Boar/Stud Beef Brood Cow Gilts Other Other Wet Poultry Horses - Horses Sheep - Sheep Non Laying Pullets Horses - Other Sheep - Other Layers

FORM: RENEWAL-STATE GENERAL 03/2014

Mail one (1) copy of the <u>most recent</u> Waste Utilization Plan (WUP) along with the field maps for this facility with this completed and signed application as required by NC General Statures 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

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: NANCY Johnson	Title: O CON SR	
Signature: Lancy Thuson	Date: 3-12-14	
Name:	Title:	
Signature:	Date:	
Name:	Title:	
Signature:	Date:	<u> </u>

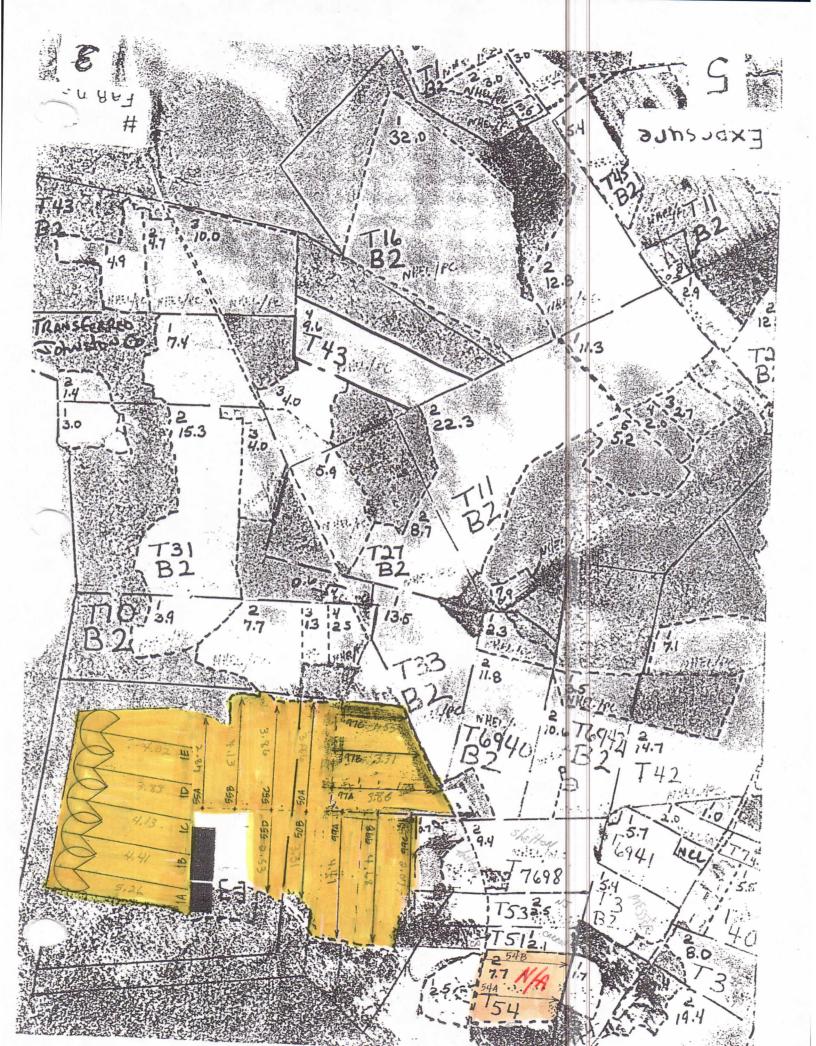
THE COMPLETED APPLICATION SHOULD BE SENT TO THE FOLLOWING ADDRESS:

## 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

FORM: RENEWAL-STATE GENERAL 03/2014



# WASTE UTILIZATION PLAN

Goldsboro Hog Farms, Inc.

Tuesday, March 09, 1999

Producer:

Nancy Johnson

Farm Name:

Sherrill Johnson Farm

637 N Jordan's Chapel Road

Four Oaks, NC 27524

Telephone #:

(919) 689-9641

Type of Operation:

Feeder to Finish Swine

Number of Animals: 4320 hogs design capacity

Application Method: Irrigation

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MAR 1 4 2014

Vater Quality Regional Operations Section

The waste from your animal facility must be land applied at a specified rate to prevent pollution of surface 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 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 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. Always apply waste based on the needs of the crop to be grown and the nutrient contents of the waste. Do not apply more nitrogen than the crop can utilize. Soil types are important as they have different infiltration rates, leaching potentials, cation exchange capacities, and avaialable water holding capacities. Normally waste shall not be applied to land eroding at greater than 5 tons per acre per year. With special pre-cautions, waste may be applied to land eroding at up to 10 tons per acre per year. Do not apply waste on saturated soils, when it is raining, or when the surface is frozen. Either of these conditions may result in runoff to surface waters which is not allowed under DEM regulations. Wind conditions should also be considered to avoid drift and downwind odor problems. To maximize the value of the nutrients for crop production and to reduce the potential for pollution, the waste should be applied to a growing crop or applied to bare ground not more than 30 days prior to planting. Injecting the waste or disking will conserve nutrients and reduce odor problems. This plan is based on waste application through ir igation for this is the manner in which you have chosen to apply your waste. If you choose to inject the waste in the future, you need to revise this plan. Nutrient levels for injecting waste and irrigating waste 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. Attached you will find information on proper sampling techniques, preparation, and transfer of waste samples to the lab for analysis. This waste utilization plan, if carried out, meets the requirements for compliance with 15A NCAC 2H.0217 adopted by the Environmental Management Commission.

AMOUNT OF WASTE PRODUCED PER YEAR (gallons, ft3, tons, etc.)
4320 hogs X 1.9 tons waste/hogs/year = 8208 tons

AMOUNT OF PLANT AVAILABLE NITROGEN (PAN) PRODUCED PER YEAR
4320 hogs X 2.3 lbs PAN/hogs/year = 9936 PAN/year

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 following acreage will be needed for waste application based on the crop to be grown, soil type and surface application.

TABLE 1: ACRES OWNED BY PRODUCER

TRACT	FIE	LD	SOIL TYPE &CLASS- DETERMINING PHASE	CROP	YIELD	LBS AW N/ACRE	N/ACRE	ACRES	USED	APPLIC. TIME
	-	1A	LUCY 0-5%	ВН	5.5	275	0	5.26	1446.5	MAR-OCT
55	-	1A	LUCY 0-5%	SG	1	100	0	5.26	526	SEP-APR
55	~	1B	LUCY 0-5%	ВН	5.5	275	0	4.41	1212.75	MAR-OCT
55	+	1B	LUCY 0-5%	SG	1	100	0	4.41	441	SEP-APR
55	*	1C	LUCY 0-5%	C	80	100	0	4.13	413	MAR-JUN
55	*	1C	LUCY 0-5%	SB	33	132	0	4.13	545.16	APR-SEP 15
55	*		LUCY 0-5%	WA	1	100	0	4.13	413	SEP-APR
55	*	1C	LUCY 0-5%	C	80	100	0	3.85	385	MAR-JUN
55	*	1D	LUCY 0-5%	SB	33	132	0	3 85	508.2	APR-SEP 15
55	_	1D		WA	1	100	0	3.85	385	SEP-APR
55	*	1D	LUCY 0-5%	C	80	100	0	4.02	402	MAR-JUN
55	*	1E	LUCY 0-5%	SB	33		0	4.02	530.64	APR-SEP 15
55	*	1E	LUCY 0-5%	WA				4.02	402	SEP-APR
55	*	1E	LUCY 0-5%	BH	5.5			2.87	789.25	MAR-OCT
55	-	55A	LUCY 0-5%	SG		1 100	_	2.87	287	SEP-APR
55	~	55A	LUCY 0-5%	BH	5.5			4.13	1135.75	MAR-OCT
55	_	55B	LUCY 0-5%	SG	-	1 100			413	SEP-APR
55	~	55B	LUCY 0-5%	BH	5.				1061.5	MAR-OCT
55		55C		SG		1 10			-	SEP-APR
55	~		LUCY 0-5%	BH	5.					
55		55D *		SG	-	1 10				
55	~			C	11					
7697	*	97A	NORFOLK 0-2%					3.86		APR-SEP 1
7697	*	97A	NORFOLK 0-2%	SB	4	1 7		3.86		
7697	*	97A	NORFOLK 0-2%	WA		1				
7697	*	97B	NORFOLK 0-2%	C	11			3.3		APR-SEP 1
7697	*	97B	NORFOLK 0-2%	SB	4	-	5	3.3		
7697	*	97B	NORFOLK 0-2%	WA	-	-				
7697	*	97C	NORFOLK 0-2%	C	11			1.5		APR-SEP 1
7697	*	97C	NORFOLK 0-2%	SB	4			1.5		
7697	*	97C	NORFOLK 0-2%	WA		-	5		-	
7699	*	99A	NORFOLK 0-2%	С	11		-			
7699	*	99A	NORFOLK 0-2%	SB	4	10 16		4.4		APR-SEP 1
7699	*	99A	NORFOLK 0-2%	WA			75	4.4	-	
7699		99B	LUCY 0-5%	ВН	5	.5 27		4.6	-	-
7699	-	99B	LUCY 0-5%	SG		1 10		4.6		
7699		99C	LUCY 0-5%	BH	5	.5 27		2.0		
7699	-	99C	LUCY 0-5%	SG		1 10	00	2.0	7 207	SEP-APR

<sup>~</sup> Indicates that this field is being overseeded (i.e. interplanted) or winter annuals follow summer annuals.

<sup>\*</sup> Indicates a Crop Rotation

NOTE: The applicator is cautioned that P and K may be over applied while meeting the N requirments. Beginning in 1996 the Coastal Zone Management Act will require farmers in some eastern counties of NC to have a nutrient management plan that addresses all nutrients. This plan only addresses Nitrogen.

# TABLE 2: ACRES WITH AGREEMENT OR LONG TERM LEASE

(Agreement with adjacent landowners must be attached.)
(Required only if operator does not own adequate land. See required specifications 2.)

							-	-		
TRACT	FIELD	SOIL TYPE &CLASS- DETERMINING PHASE	CROP	YIELD	LBS AW N/ACRE	-	ACR	ES	LBS AV	V APPLIC. TIME
50	* 50A	LUCY 0-5%	С	80	80	20	3.	86	308.8	MAR-JUN
50	* 50A	LUCY 0-5%	SB	33	132	0	3.	86	509.52	APR-SEP 15
50	* 50A	LUCY 0-5%	WA	1	55	20	3.	86	212.3	SEP-APR
50	* 50B	LUCY 0-5%	С	, 80	80	20	3.	.31	264.8	MAR-JUN
50	* 50B	LUCY 0-5%	SB	33	132	0	3.	31	436.92	APR-SEP 15
50	* 50B	LUCY 0-5%	WA	1	75	0	3.	.31	248.25	SEP-APR

TOTALS: 990.295

- ~ Indicates that this field is being overseeded (i.e. interplanted) or winter annuals follow summer annuals.
- \* Indicates a Crop Rotation
- \* Acreage figures may exceed total acreage in field due to overseeding.
- \*\*Lbs AW N (animal waste nitrogen) equals total required nitrogen less any commercial nitrogen (COMM N) supplied.

The following legend explains the crop codes used in TABLES 1 and 2 above:

CROP C	ODE CROP	UNITS	LBS N/UNIT
С	CORN	BUSHELS	1.25
ВН	HYBRID BERMUDAGRASS-HAY	TONS	50
SG	SMALL GRAIN OVERSEEDED	AC	50
SB	SOYBEANS	BUSHELS	4
WA	WINTER ANNUALS	AC	100

#### **TOTALS FROM TABLES 1 AND 2**

	ACRES	LBS AW N USED
TABLE 1	54.94	14,626
TABLE 2	7.17	990
TOTALS:	62.11	15,616

AMOUNT OF N PRODUCED:

9,936

\*\*\* BALANCE

-5,680

# \*\*\* This number must be less than or equal to 0 in order to fully utilize the animal waste N produced.

Acres show in each of the preceeding 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 fields listed may, and most likely will be, more than the acres shown in the tables.

NOTE: The Waste Utilization Plan must contain provisions for periodic and application of sludge at agronomic rates. The sludge will be nurturient rich and will require precautionary measures to prevent over application of nutrients or other elements. Your production facility will produce approximately 1598.4 pounds of plant available nitrogen (PAN) per year in the sludge that will need to be removed on a periodic basis. This figure is PAN when broadcasting the sludge. Please be aware that additional acres of land, as well special equipment, may be needed when you remove this sludge.

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

#### 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.

Your facility is designed for 180 days of temporary storage and the temporary storage must be removed on the average of once every 5.92 months. In no instance should the volume of waste being stored in your structure be within 1.58 feet of the top of the dike.

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 1 and 2. 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	FIELD	SOIL TYPE	CROP	RATE (in/hr)	APPLICATION AMT (inches)
50	*50A, *50B	LUCY 0-5%	SB	0.60	*1
50	~50A, ~50B	LUCY 0-5%	WA	0.60	*1
50	*50A, *50B	LUCY 0-5%	С	0.60	*1
55	~1C, ~1D, ~1E	LUCY 0-5%	WA	0.60	*1
55	1A, 1B, 55A, 55B, 55C, 55D	LUCY 0-5%	ВН	0.60	*1
55	*1C, *1D, *1E	LUCY 0-5%	С	0.60	*1
55	*1C, *1D, *1E	LUCY 0-5%	SB	0.60	*1
55	A, ~1B, ~55A, ~55B, ~55C, ~5	LUCY 0-5%	SG	0.60	*1
7697	*97A, *97B, *97C	NORFOLK 0-2%	SB	0.50	*1
7697	~97A, ~97B, ~97C	NORFOLK 0-2%	WA	0.50	*1
7697	*97A, *97B, *97C	NORFOLK 0-2%	С	0.50	*1
7699	~99A	NORFOLK 0-2%	WA	0.50	*1
7699	99B, 99C	LUCY 0-5%	BH	0.60	*1

7699	~99B, ~99C	LUCY 0-5%	SG	0.60	*1
7699	*99A	NORFOLK 0-2%	C	0.50	*1
7699	*99A	NORFOLK 0-2%	SB	0.50	*1

<sup>\*</sup> 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 the nitrogen limitation. The maximum application amount shown can be applied under optimum soil conditions.

# NARRATIVE OF OPERATION

This WUP has been amended to reflect wettable acres by irrigation pulls as indicated on the most current FSA map and documented with a D-1. The operator is utilizing the 100 lb overseed option with the following conditions: (1) no animal waste may be applied on the bermuda after August 31, (2) an application of 50 lbs/acre of PAN may be applied between September 15 and October 30 and the remaining 50 lbs/acre may be applied in February-March, and (3) the small grain must be removed by April 7. This guidance provided by NCSU Forage Production Workgroup.

Irrigation pulls 1A-1E has been added with BH/SG, and C/SB/WA crops.

Irrigation pulls 54A and 54B have been deleted from the WUP.

# NAME OF FARM: Sherrill Johnson Farm OWNER / MANAGER AGREEMENT

I (we) understand and will follow and implement the specifications and the operation and maintenance precedures estalished 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/or storage system or construction of new facilities will require a new utilization plan and a new certification to be submitted to DEM before the new animals are stocked.

I (we) understand that I must own or have acces to equipment, primarily irrigation equipment, to land apply the animal waste described in this waste utilization plan. This equipment must be available at the appropriate pumping time such that no discharge occurs from the lagoon in a 25-year 1-day storm event. I also certify that the waste will be applied on the land according to this plan at the appropriate times and at rates that no runoff occurs.

NAME OF FACILITY OW	NER: Nancy Johnson			
SIGNATURE: //an	us Johnso.	M DATE:/	1-25-07	
NAME OF MANAGER (if	different from owner):			
		p	lease print	
SIGNATURE:		DATE:		
NAME OF TECHNICAL S	SPECIALIST: Robert E	B. Mitchell Jr.		
AFFILIATION: Private	Technical Specialist			
ADDRESS (AGENCY):	104 Adler Lane			
	Goldsboro, NC 275	30		
	(919) 736-9406			
SIGNATURE: Robert	B. Muchel h	DATE:	1-25-07	