

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 NPDES General Permit

On June 30, 2017, the North Carolina NPDES General Permits for Animal Waste Management Systems will expire. Facilities that have been issued Certificates of Coverage to operate under these NPDES General Permits must apply for renewal within 30 days of receipt of this application.

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: 900001 and Certificate of Coverage Number: NCA490001
2. Facility Name: Simpson's Eggs Inc
3. Landowner's name (same as on the Waste Management Plan): Simpson's Eggs Inc
4. Landowner's mailing address: 5015 Hwy 218 E
City/State: Monroe NC Zip: 28110
Telephone Number (include area code): (704)753-1478 E-mail: alex@simpsonsegs.com
5. Facility's physical address: 5015 Hwy 218 E
City: Monroe State: NC Zip: 28110
6. County where facility is located: Union
7. Farm Manager's name (If different than the Landowner): ~~Richard Simpson~~ Alex Simpson
8. Farm Manager's telephone number (include area code): 704-221-3621
9. Integrator's name (if there is not an integrator write "None"): None
10. Operator in Charge (OIC) name: ~~Richard Simpson~~ Tyler Medlin
11. Lessee's name (if there is not a lessee write "None"): None
12. Indicate animal operation type and number:

Swine

Wean to Finish
Wean to Feeder
Farrow to Finish
Feeder to Finish
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 1,200,000 1,400,000 
Turkeys
Other
Pullets
Turkey Poult

Wet Poultry

Non Laying Pullets
Layers

Submit two (2) copies of the most recent Certified Animal Waste Management Plan (CAWMP). The CAWMP must include the following components. Some of these components may not have been required at the time the facility was certified but should be added to the CAWMP for permitting purposes:

- The Waste Utilization Plan (WUP) must include the amount of Plant Available Nitrogen (PAN) produced and utilized by the facility
- The method by which waste is applied to the disposal fields (e.g. irrigation, injection, etc.)
- A map of every field used for land application
- The soil series present on every land application field
- The crops grown on every land application field
- The Realistic Yield Expectation (RYE) for every crop shown in the WUP
- The PAN to be applied to every land application field
- Phosphorous to be applied on every land application field with a "HIGH" PLAT rating.
- The waste application windows for every crop utilized in the WUP
- The required NRCS Standard specifications
- A site schematic
- Emergency Action Plan
- Insect Control Checklist with chosen best management practices noted
- Odor Control Checklist with chosen best management practices noted
- Mortality Control Checklist with the selected method noted. A mass mortality plan must also be included.
- Site-Specific Conservation Practices necessary to prevent runoff of pollutants to waters of the State.
- PLAT results including datasheets for each field.
- Lagoon/storage pond capacity documentation (design, calculations, etc.); please be sure to include any site evaluations, wetland determinations, or hazard classifications that may be applicable to your facility
- Operation and Maintenance Plan

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: Alex R. Simpson Title: U.P.

Signature:  Date: 8/25/17

Name: _____ Title: _____

Signature: _____ Date: _____

THE COMPLETED APPLICATION SHOULD BE SENT TO THE FOLLOWING ADDRESS:

NCDENR – DWR Animal Feeding Operations Program
 1636 Mail Service Center
 Raleigh, North Carolina 27699-1636

Telephone Number: (919) 707-9129
 Fax Number: (919) 807-6480



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Beverly Eaves Perdue
Governor

Charles Wakild, P.E.
Director

Dee Freeman
Secretary

August 20, 2012

Simpson's Eggs
Simpson's Egg, Inc.
5015 Hwy 218 E
Monroe, NC 28110

Subject: Certificate of Coverage No. NCA490001
Simpson's Egg, Inc.
Animal Waste Management System
Union County

Dear Simpson's Eggs:

In accordance with your renewal application received on May 30, 2012, we are hereby forwarding to you this Certificate of Coverage (COC) issued to NC Department Of Corrections, authorizing the operation of the subject animal waste management system in accordance with NPDES General Permit NCA400000.

This COC shall be effective from the date of issuance until June 30, 2017 and replaces the NPDES COC issued to this facility with an expiration date of June 30, 2012.

This approval shall consist of the operation of this system including, but not limited to, the management and land application of animal waste as specified in the facility's Certified Animal Waste Management Plan (CAWMP) for the Simpson's Egg, Inc., located in Union County, with an animal capacity of no greater than the following wet system poultry annual averages:

Non-Laying Pullets: 0

Layers: 1,200,000 birds on a dry litter system*

*Only the egg washwater is collected in the waste storage structure for land application.

Pursuant to this COC, you are authorized and required to operate the system in conformity with the conditions and limitations as specified in the General Permit, the facility's CAWMP, and this COC. An adequate system for collecting and maintaining the required monitoring data and operational information must be established for this facility. Any increase in waste production greater than the certified design capacity or increase in number of animals authorized by this COC (as provided above) will require a modification to the CAWMP and this COC and must be completed prior to actual increase in either wastewater flow or number of animals.

Please pay careful attention to the record keeping and monitoring conditions in this permit. The Animal Facility Annual Certification Form must be completed and returned to the Division of Water Quality by no later than March 1st of each year.

If your Waste Utilization Plan has been developed based on site-specific information, careful evaluation of future samples is necessary. Should your records show that the current Waste Utilization Plan is inaccurate you will need to have a new Waste Utilization Plan developed.

Existing COC

Upon abandonment or depopulation for a period of four years or more, the Permittee must submit documentation to the Division demonstrating that all current NRCS standards are met prior to restocking of the facility.

Per 15A NCAC 02T .0111(c) a compliance boundary is provided for the facility and no new water supply wells shall be constructed within the compliance boundary. Per NRCS standards a 100-foot separation shall be maintained between water supply wells and any lagoon, storage pond, or any wetted area of a spray field.

Please be advised that any violation of the terms and conditions specified in this COC, the General Permit or the CAWMP may result in the revocation of this COC, or penalties in accordance with NCGS 143-215.6A through 143-215.6C including civil penalties, criminal penalties, and injunctive relief.

If any parts, requirements, or limitations contained in this COC are unacceptable, you have the right to apply for an individual permit by contacting the staff member listed below for information on this process. Unless such a request is made within 30 days, this COC shall be final and binding.

In accordance with Condition III.27 of the General Permit, waste application shall cease within four (4) hours of the time that the National Weather Service issues a Hurricane Warning, Tropical Storm Warning, or a Flood Watch associated with a tropical system for the county in which the facility is located. You may find detailed watch/warning information for your county by calling the Greenville/Spartanburg, SC National Weather Service office at (864) 848-3859, or by visiting their website at: www.erh.noaa.gov/er/gsp/

This facility is located in a county covered by our Mooresville Regional Office. The Regional Office Aquifer Protection staff may be reached at (704) 663-1699. If you need additional information concerning this COC or the General Permit, please contact the Animal Feeding Operations Unit staff at (919) 807-6464.

Sincerely,

for Charles Wakild, P.E.

Enclosures (General Permit NCA400000, Record Keeping and Reporting Package)

cc: (Certificate of Coverage only for all cc's)
Union County Health Department
Union County Soil and Water Conservation District
Mooresville Regional Office, Aquifer Protection Section
AFO Unit Central Files
Permit File NCA490001

Nutrient Management Plan For Animal Waste Utilization
05-04-2017

This plan has been prepared for:

Simpson Eggs
Simpson Eggs
5015 Hwy 218E
Monroe, NC 28110
704-7531-478


RECEIVED/NCDEQ/DWR

AUG 23 2017

Water Quality Regional
Operations Section

This plan has been developed by:

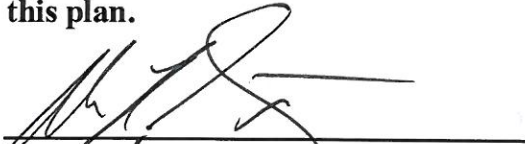
Richard E. Pigg
NRCS
3230-D Presson Rd.
Monroe, NC 28110
(704) 233-1621


Developer Signature

Type of Plan: Nutrient Management with Manure Only

Owner/Manager/Producer Agreement

I (we) understand and agree to the specifications and the operation and maintenance procedures established in this nutrient management plan which includes an animal waste utilization plan for the farm named above. I have read and understand the Required Specifications concerning animal waste management that are included with this plan.


Signature (owner)

5/16/17
Date

Signature (manager or producer)

Date

This plan meets the minimum standards and specifications of the U.S. Department of Agriculture - Natural Resources Conservation Service or the standard of practices adopted by the Soil and Water Conservation Commission.

Plan Approved By: 
Technical Specialist Signature

5/15/17
Date

Nutrients applied in accordance with this plan will be supplied from the following source(s):

Commercial Fertilizer is not included in this plan.

U1	Rainwater and washwater waste generated 910,000 gals/year by a 1,400,000 animal Layer Lagoon Liquid operation. This production facility has waste storage capacities of approximately 90 days.				
Estimated Pounds of Plant Available Nitrogen Generated per Year					
Broadcast	204				
Incorporated	355				
Injected	395				
Irrigated	222				
	Max. Avail. PAN (lbs) *	Actual PAN Applied (lbs)	PAN Surplus/ Deficit (lbs)	Actual Volume Applied (Gallons)	Volume Surplus/ Deficit (Gallons)
Year 1	222	226	-4	926,293	-16,293

S15	Layer Paved Surface Scraped waste generated 39,200.00 tons/year by a 1,400,000 animal Layer Paved Surface Scraped operation.				
Estimated Pounds of Plant Available Nitrogen Generated per Year					
Broadcast	417086				
Incorporated	680508				
Injected	N/A				
Irrigated	N/A				
	Max. Avail. PAN (lbs) *	Actual PAN Applied (lbs)	PAN Surplus/ Deficit (lbs)	Actual Quantity Applied (Tons)	Surplus/Deficit (Tons)
Year 1	680,508	0	680,508	0.00	39,200.00

This plan includes a User Defined Source to determine the total pounds of PAN in lieu of NRCS Standard values. Refer to North Carolina Cooperative Extension Service publication AG-439-42 entitled "Soil Facts: Use of On-Farm Records for Modifying a Certified Animal Waste Management Plan" for guidance on using on-farm records to develop a User Defined Source.

Note: In source ID, S means standard source, U means user defined source.

* Max. Available PAN is calculated on the basis of the actual application method(s) identified in the plan for this source.

Narrative

This operation is a caged layer dry scrape and a liquid lagoon operation consisting of 1,400,000 birds. It was previously a lagoon liquid system. Only 1 lagoon remains on the facility to accommodate the egg room wash water of approx 2500 gallons/day and the rainfall that falls on the surface of the lagoon. The dry waste (litter) produced by this farm is sold to third party applicators who then utilize on fields by receiving landowners for the nutrient value. It will be Simpson's Eggs responsibility to provide these third party applicators with the waste analysis of the waste removed prior to their application and to maintain a record of the third party applicators names, address, and phone numbers, etc as required by NC State Law. The third party applicators will then be responsible for maintaining records of the landowners, dates, amounts etc as required by NC State Law. The liquid waste will be removed and land applied to spray fields maintained by Simpson Eggs. All pertinent records such as rainfall, lagoon levels, waste analysis, dates and amounts pumped will be kept by Simpson Eggs. These and dry waste records must be maintained at all times and made available to the proper authorities for inspection. Any spills, major animal head deviations, crop type changes, etc must be reported to NC State and an update Waste Utilization Plan Obtained.

The table shown below provides a summary of the crops or rotations included in this plan for each field. Realistic Yield estimates are also provided for each crop, as well as the crop's P2O5 Removal Rate. The Leaching Index (LI) and the Phosphorous Loss Assessment Tool (PLAT) Rating are also provided for each field, where available.

If a field's PLAT Rating is High, any planned manure application is limited to the phosphorous removal rate of the harvested plant biomass for the crop rotation or multiple years in the crop sequence. Fields with a Very High PLAT Rating should receive no additional applications of manure. Regardless of the PLAT rating, starter fertilizers may be recommended in accordance with North Carolina State University guidelines or recommendations. The quantity of P2O5 applied to each crop is shown in the following table if the field's PLAT rating is High or Very High.

Planned Crops Summary

Tract	Field	Total Acres	Useable Acres	Plat Rating	LI	Soil Series	Crop Sequence	RYE	P2O5	
									Removal (lbs/acre)	Applied (lbs/acre)
T3995	3	45.30	32.30	Unknown	10.0	Cid	Fescue Pasture	4.5 Tons	7	N/A

PLAN TOTALS:

45.30 32.30 *Med (ref)*

LI	Potential Leaching	Technical Guidance
< 2	Low potential to contribute to soluble nutrient leaching below the root zone.	None
>= 2 & <= 10	Moderate potential to contribute to soluble nutrient leaching below the root zone.	Nutrient Management (590) should be planned.
> 10	High potential to contribute to soluble nutrient leaching below the root zone.	Nutrient Management (590) should be planned. Other conservation practices that improve the soils available water holding capacity and improve nutrient use efficiency should be considered. Examples are Cover Crops (340) to scavenge nutrients, Sod-Based Rotations (328), Long-Term No-Till (778), and edge-of-field practices such as Filter Strips (393) and Riparian Forest Buffers (391).

PLAT Index	Rating	P Management Recommendation
0 - 25	Low	No adjustment needed; N based application
25 - 50	Medium	No adjustment needed; N based application
51 - 100	High	Application limited to crop P removal
> 100	Very High	Starter P application only

The Waste Utilization table shown below summarizes the waste utilization plan for this operation. This plan provides an estimate of the number of acres of cropland needed to use the nutrients being produced. The plan requires consideration of the realistic yields of the crops to be grown, their nutrient requirements, and proper timing of applications to maximize nutrient uptake.

This table provides an estimate of the amount of nitrogen required by the crop being grown and an estimate of the nitrogen amount being supplied by manure or other by-products, commercial fertilizer and residual from previous crops. An estimate of the quantity of solid and liquid waste that will be applied on each field in order to supply the indicated quantity of nitrogen from each source is also included. A balance of the total manure produced and the total manure applied is included in the table to ensure that the plan adequately provides for the utilization of the manure generated by the operation.

Waste Utilization Table

Year 1

Tract	Field	Source ID	Soil Series	Total Acres	Use. Acres	Crop	Applic. Period	Nitrogen PA Nutrient Req'd (lbs/A)	Comm. Nutrient Applied (lbs/A)	Res. (lbs/A)	Applic. Method	Manure PA Nutrient Applied (lbs/A)	Liquid Manure Applied (acre)	Solid Manure Applied (acre)	Liquid Manure Applied (Field)	Solid Manure Applied (Field)
T3995	3	U1	Cid	45.30	32.30	Fescue Pasture	8/1-7/31	146	0	0	Irrig.	146	598.14	0.00	19,319.84	0.00
Total Applied, 1000 gallons													910.00			
Total Produced, 1000 gallons													-18,409.84			
Balance, 1000 gallons														0.00		
Total Applied, tons														39,200.00		
Total Produced, tons														39,200.00		
Balance, tons																

Notes: 1. In the tract column, ~ symbol means leased, otherwise, owned. 2. Symbol * means user entered data.

The Irrigation Application Factors for each field in this plan are shown in the following table. Infiltration rate varies with soils. If applying waste nutrients through an irrigation system, you must apply at a rate that will not result in runoff. This table provides the maximum application rate per hour that may be applied to each field selected to receive wastewater. It also lists the maximum application amount that each field may receive in any one application event.

Irrigation Application Factors

Tract	Field	Soil Series	Application Rate (inches/hour)	Application Amount (inches)
T3995	3	Cid	0.20	1.0

The Nutrient Management Recommendations table shown below provides an annual summary of the nutrient management plan developed for this operation. This table provides a nutrient balance for the listed fields and crops for each year of the plan. Required nutrients are based on the realistic yields of the crops to be grown, their nutrient requirements and soil test results. The quantity of nutrient supplied by each source is also identified.

The total quantity of nitrogen applied to each crop should not exceed the required amount. However, the quantity of other nutrients applied may exceed their required amounts. This most commonly occurs when manure or other byproducts are utilized to meet the nitrogen needs of the crop. Nutrient management plans may require that the application of animal waste be limited so as to prevent over application of phosphorous when excessive levels of this nutrient are detected in a field. In such situations, additional nitrogen applications from nonorganic sources may be required to supply the recommended amounts of nitrogen.

Nutrient Management Recommendations Test

YEAR		1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract	Field	T3995	3	Req'd Nutrients	146	0	0	0	0	0	0	0
Acres	App. Period	32.30	8/1-7/31	Supplied By:								
CROP		Fescue Pasture		Starter	0	0	0	0	0	0	0	0
				Commercial Fert.	0	0	0	0	0	0	0	0
Soil Series		Cid		Residual	0	0	0	0	0	0	0	0
RYE	Sample Date	4.5 Tons	08-13-15	Manure	146	278	1266	0	0	0	0	0
P Removal	Rating	7 lbs/ac.	Unknown	BALANCE	0	278	1266	0	0	0	0	0

NOTE: Symbol * means user entered data.

The Required Soil Test Values shown in the following table provide a summary of recommended actions that should be taken if soil tests indicate excessive levels of copper or zinc. Fields that receive manure must have an annual soil analysis for these elements. High levels of zinc and copper can adversely affect plant growth. Alternative crop sites must be used when the concentration of these metals approach excessive levels. Site life can be estimated by dividing the amount of copper and zinc to be applied in lbs/acre by 0.036 and 0.071, respectively and multiplying the result by 0.85. By adding this quantity to the current soil index for copper or zinc, we can predict life of the site for waste disposal.

In addition to copper and zinc indices, this table also provides a summary of lime recommendations for each crop based on the most recent soil sample. Application of lime at recommended rates is necessary to maintain soil pH in the optimum range for crop production .

Required Soil Test Values

Tract	Field	Crop	pH	Lime Recom. (tons/acre)	Cu-I	Copper Recommendation	Zn-I	Zinc Recommendation
T3995	3	Fescue Pasture	7.3	0.0	129	None	616	None

The Available Waste Storage Capacity table provides an estimate of the number of days of storage capacity available at the end of each month of the plan. Available storage capacity is calculated as the design storage capacity in days minus the number of days of net storage volume accumulated. The start date is a value entered by the user and is defined as the date prior to applying nutrients to the first crop in the plan at which storage volume in the lagoon or holding pond is equal to zero.

Available storage capacity should be greater than or equal to zero and less than or equal to the design storage capacity of the facility. If the available storage capacity is greater than the design storage capacity, this indicates that the plan calls for the application of nutrients that have not yet accumulated. If available storage capacity is negative, the estimated volume of accumulated waste exceeds the design storage volume of the structure. Either of these situations indicates that the planned application interval in the waste utilization plan is inconsistent with the structure's temporary storage capacity.

Available Waste Storage Capacity

Source Name	Rainwater and washwater		Design Storage Capacity (Days)
Start Date	9/1		90
Plan Year	Month	Available Storage Capacity (Days) *	
1	1	59	
1	2	31	
1	3	90	
1	4	60	
1	5	29	
1	6	90	
1	7	59	
1	8	28	
1	9	90	
1	10	59	
1	11	29	
1	12	90	

* Available Storage Capacity is calculated as of the end of each month.

Required Specifications For Animal Waste Management

- 1. Animal waste shall not reach surface waters of the state by runoff, drift, manmade conveyances, direct application, or direct discharge during operation or land application. Any discharge of waste that reaches surface water is prohibited.**
- 2. There must be documentation in the design folder that the producer either owns or has an agreement for use of adequate land on which to properly apply the waste. If the producer does not own adequate land to properly dispose of the waste, he/she shall provide evidence of an agreement with a landowner, who is within a reasonable proximity, allowing him/her the use of the land for waste application. It is the responsibility of the owner of the waste production facility to secure an update of the Nutrient Management Plan when there is a change in the operation, increase in the number of animals, method of application, receiving crop type, or available land.**
- 3. Animal waste shall be applied to meet, but not exceed, the nitrogen needs for realistic crop yields based upon soil type, available moisture, historical data, climatic conditions, and level of management, unless there are regulations that restrict the rate of applications for other nutrients.**
- 4. Animal waste shall be applied to land eroding less than 5 tons per acre per year. Waste may be applied to land eroding at more than 5 tons per acre per year but less than 10 tons per acre per year provided grass filter strips are installed where runoff leaves the field (see USDA, NRCS Field Office Technical Guide Standard 393 - Filter Strips).**
- 5. Odors can be reduced by injecting the waste or by disking after waste application. Waste should not be applied when there is danger of drift from the land application field.**
- 6. When animal waste is to be applied on acres subject to flooding, waste will be soil incorporated on conventionally tilled cropland. When waste is applied to conservation tilled crops or grassland, the waste may be broadcast provided the application does not occur during a season prone to flooding (see "Weather and Climate in North Carolina" for guidance).**

- 7. Liquid waste shall be applied at rates not to exceed the soil infiltration rate such that runoff does not occur offsite or to surface waters and in a method which does not cause drift from the site during application. No ponding should occur in order to control odor and flies.**
- 8. Animal waste shall not be applied to saturated soils, during rainfall events, or when the soil surface is frozen.**
- 9. Animal waste shall be applied on actively growing crops in such a manner that the crop is not covered with waste to a depth that would inhibit growth. The potential for salt damage from animal waste should also be considered.**
- 10. Nutrients from waste shall not be applied in fall or winter for spring planted crops on soils with a high potential for leaching. Waste/nutrient loading rates on these soils should be held to a minimum and a suitable winter cover crop planted to take up released nutrients. Waste shall not be applied more than 30 days prior to planting of the crop or forages breaking dormancy.**
- 11. Any new swine facility sited on or after October 1, 1995 shall comply with the following: The outer perimeter of the land area onto which waste is applied from a lagoon that is a component of a swine farm shall be at least 50 feet from any residential property boundary and canal. Animal waste, other than swine waste from facilities sited on or after October 1, 1995, shall not be applied closer than 25 feet to perennial waters.**
- 12. Animal waste shall not be applied closer than 100 feet to wells.**
- 13. Animal waste shall not be applied closer than 200 feet of dwellings other than those owned by the landowner.**
- 14. Waste shall be applied in a manner not to reach other property and public right-of-ways.**

15. **Animal waste shall not be discharged into surface waters, drainageways, or wetlands by a discharge or by over-spraying. Animal waste may be applied to prior converted cropland provided the fields have been approved as a land application site by a "technical specialist". Animal waste shall not be applied on grassed waterways that discharge directly into water courses, and on other grassed waterways, waste shall be applied at agronomic rates in a manner that causes no runoff or drift from the site.**
16. **Domestic and industrial waste from washdown facilities, showers, toilets, sinks, etc., shall not be discharged into the animal waste management system.**
17. **A protective cover of appropriate vegetation will be established on all disturbed areas (lagoon embankments, berms, pipe runs, etc.). Areas shall be fenced, as necessary, to protect the vegetation. Vegetation such as trees, shrubs, and other woody species, etc., are limited to areas where considered appropriate. Lagoon areas should be kept mowed and accessible. Berms and structures should be inspected regularly for evidence of erosion, leakage, or discharge.**
18. **If animal production at the facility is to be suspended or terminated, the owner is responsible for obtaining and implementing a "closure plan" which will eliminate the possibility of an illegal discharge, pollution, and erosion.**
19. **Waste handling structures, piping, pumps, reels, etc., should be inspected on a regular basis to prevent breakdowns, leaks, and spills. A regular maintenance checklist should be kept on site.**
20. **Animal waste can be used in a rotation that includes vegetables and other crops for direct human consumption. However, if animal waste is used on crops for direct human consumption, it should only be applied pre-plant with no further applications of animal waste during the crop season.**
21. **Highly visible markers shall be installed to mark the top and bottom elevations of the temporary storage (pumping volume) of all waste treatment lagoons. Pumping shall be managed to maintain the liquid level between the markers. A marker will be required to mark the maximum storage volume for waste storage ponds.**

- 22. Waste shall be tested within 60 days of utilization and soil shall be tested at least annually at crop sites where waste products are applied. Nitrogen shall be the rate-determining nutrient, unless other restrictions require waste to be applied based on other nutrients, resulting in a lower application rate than a nitrogen based rate. Zinc and copper levels in the soils shall be monitored and alternative crop sites shall be used when these metals approach excessive levels. pH shall be adjusted and maintained for optimum crop production. Soil and waste analysis records shall be kept for a minimum of five years. Poultry dry waste application records shall be maintained for a minimum of three years. Waste application records for all other waste shall be maintained for five (5) years.**
- 23. Dead animals will be disposed of in a manner that meets North Carolina regulations.**

Crop Notes

The following crop note applies to field(s): 3

Fescue: Piedmont

Adaptation: Well-adapted.

In the Piedmont, tall fescue can be planted Aug. 20 to Oct. 10 (best) and Feb. 15 to Mar. 20. For pure-stand broadcast seedings use 20 to 30 lb/ac., for drilled use 15 to 20 lb/ac. seed. Use certified seed to avoid introducing weeds or annual ryegrass. Plant seed 0.25" to 0.5" deep for pure stands, 0.25" in mixture with clovers. Soil test for preplant and maintenance lime, phosphorus, and potassium recommendations. Apply 40 to 60 lb/ac nitrogen at planting for pure stands only. Do not apply N for mixtures with clovers but use proper legume inoculation techniques. Apply 150 to 200 lb/ac. N to pure-stand fescue for hay production; reduce N rates by 25% for grazing. Apply N Feb. 1 to Mar. 20 and Aug. 20 to Sept. 30, with equal amounts in each window. Refer to NCSU Technical Bulletin 305 Production and Utilization of Pastures and Forages in North Carolina for additional information or consult your regional agronomist or extension agent for assistance.

JOINT RESPONSIBILITY--PRODUCER/THIRD-PARTY APPLICATOR

We agree that the third party listed below is responsible for application of waste materials produced by Simpson's Eggs, Inc. and that waste materials will be applied in a manner consistent with requirements set forth by the state of North Carolina in 15A NCAC 02T Section .1400 (Manure Hauler Regulations) and NRCS standard 590 (Nutrient Management). The producer maintains responsibility for keeping records on the amount of waste generated by the operation, and providing the responsible third party with waste analysis records, and the third-party applicator is responsible for applying materials at agronomic rates, soil testing, field evaluations, etc.

It is recommended that the third-party applicator keep records on forms DRY-2 and/or DRY-3, available at the website http://www.enr.state.nc.us/DSWC/pages/guidance_docs.html under Appendix 5.3, Poultry Management Plan and Recordkeeping Forms.

The producer is responsible for keeping records of application on land he owns or controls, and having owned and/or controlled land receiving waste materials included in a waste management plan.

THIRD PARTY APPLICATOR: Owen Mallett

ADDRESS: 3221 Lowyers Road East Monroe N.C. 28110

DATE OF AGREEMENT: 9/29/17 EXPIRATION OF AGREEMENT: 9/29/22

****USDA does not have a regulatory role in nutrient management. Although Comprehensive Nutrient Management Plans (CNMPs) are only required by USDA for animal operations participating in the Environmental Quality Incentives Program under the 2002 Farm Bill, your CNMP may assist you in meeting federal or state water quality regulations or permit requirements.**

****Shared responsibility/third party applicator documentation compliant with NC regulations for operations that house greater than 30,000 birds is included in Dry Litter Plan guidance from the SB 1217 Interagency Committee, also available at the website http://www.enr.state.nc.us/DSWC/pages/guidance_docs.html**

JOINT RESPONSIBILITY--PRODUCER/THIRD-PARTY APPLICATOR

We agree that the third party listed below is responsible for application of waste materials produced by **Simpson's Eggs, Inc.** and that waste materials will be applied in a manner consistent with requirements set forth by the state of North Carolina in 15A NCAC 02T Section .1400 (Manure Hauler Regulations) and NRCS standard 590 (Nutrient Management). The producer maintains responsibility for keeping records on the amount of waste generated by the operation, and providing the responsible third party with waste analysis records, and the third-party applicator is responsible for applying materials at agronomic rates, soil testing, field evaluations, etc.

It is recommended that the third-party applicator keep records on forms DRY-2 and/or DRY-3, available at the website http://www.enr.state.nc.us/DSWC/pages/guidance_docs.html under Appendix 5.3, Poultry Management Plan and Recordkeeping Forms.

The producer is responsible for keeping records of application on land he owns or controls, and having owned and/or controlled land receiving waste materials included in a waste management plan.

THIRD PARTY APPLICATOR: Triple S Cattle, LLC. MS

ADDRESS: 7901 Morgan Mill Rd. Monroe, NC 28110

DATE OF AGREEMENT: 8/25/17 EXPIRATION OF AGREEMENT: 8/25/22

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The producer is responsible for keeping records of application on land he owns or controls, and having owned and/or controlled land receiving waste materials included in a waste management plan.

THIRD PARTY APPLICATOR: 

ADDRESS: 7104 Honey Bee Road, Monroe, NC 28110

DATE OF AGREEMENT: 8/29/17

EXPIRATION OF AGREEMENT: 8/29/22

****USDA does not have a regulatory role in nutrient management. Although Comprehensive Nutrient Management Plans (CNMPs) are only required by USDA for animal operations participating in the Environmental Quality Incentives Program under the 2002 Farm Bill, your CNMP may assist you in meeting federal or state water quality regulations or permit requirements.**

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LIQUID APPLICATION PLAN MAP

Date: 5-15-17

Simpson Eggs Spray Fields

District: Union Soil And Water Conservation District

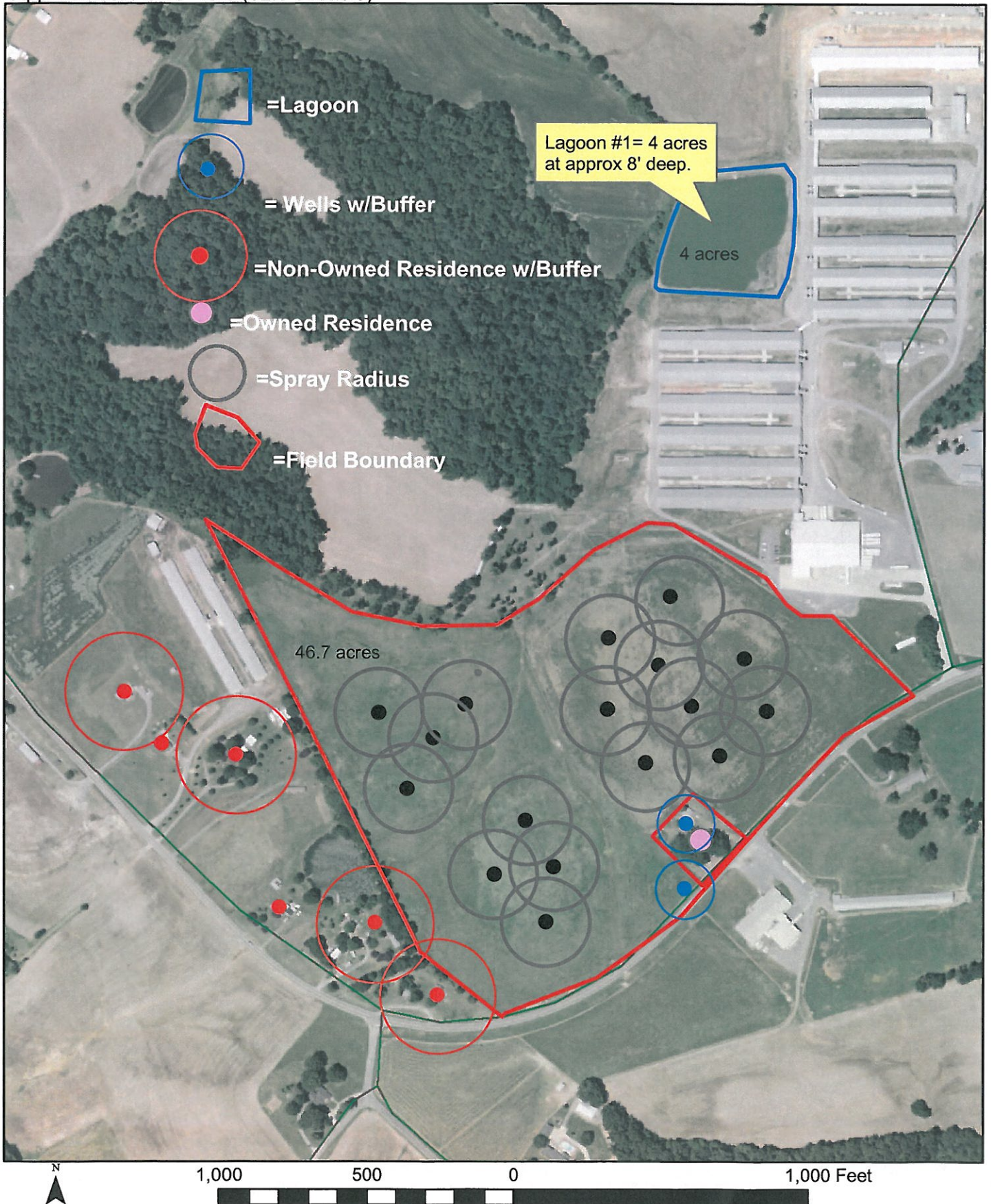
Approximate Acres 45.3 (32.3 useable)

Field Office: Monroe service Center

Agency: USDA/NRCS

Assisted By: Richard E. Pigg

Tract 3191



LIQUID APPLICATION SOILS MAP

Date: 5-15-17

Simpson Eggs Spray Fields

District: Union Soil And Water Conservation District

Approximate Acres 45.3 (32.3 useable)

Field Office: Monroe service Center

Agency: USDA/NRCS

Assisted By: Richard E. Pigg

Tract 3191



INPUTS


Calendar Year: 2014
 County: Union
 Producer Identifier: SimpsonEgg
 Tract Number: 3191
 Field Number: 3
 Soil Series: CmB: Cid channery silt loam, 1 to 5 percent slopes
 Crop: Fescue (Pasture) :
 Fertilizers: Layer-Lagoon liquid
 Yearly Applied Amount: 1 ac in
 Lb P2O5: 7.35 lb
 Application Method: All other surface applications

 Soil Loss: 1 t/ac/yr
 Receiving Slope Distance 30-49 ft
 Soil Test 0" - 4" 497
 WV_Factor (DATABASE) 1.1
 Artificial Drainage System: NO
 Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P = 6
 SOLUBLE P = 36
 LEACHATE P = 0
 SOURCE P = 0

 TOTAL P RATING = 42 (MEDIUM)





Predictive Soil Report
Mehlich-3 Extraction

Client: Alex Simpson
c/o Simpson Farms
5015 Hwy 218 East
Monroe, NC 28110
Advisor:

Sampled County : Union

Sampled: 08/13/2015 Received: 09/14/2015 Completed: 09/22/2015 Farm: 90-1

[Links to Helpful Information](#)

Sample ID: 50151	Recommendations:	Lime (tons/acre)	Nutrients (lb/acre)										Na	More Information
Lime History:	Crop 1 - Fescue/OGGrass/Tim, l 2 -	0.0	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	Note: 12 Note: \$		
			120-200	0	0	0	0	pH\$	0	0	0			

Test Results [units - WV in g/cm³; CEC and Na in meq/100 cm³; NO₃-N in mg/dm³]:

HM% WV	CEC	BS%	Ac	pH	P-I	K-I	Mn-I	S-I	Mn-A1	Mn-A2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.56	1.01	22.1	100	0.0	7.3	497	454	83	76	13	351	207	616	616	129	0.7	3

Soil Class: Mineral

Sample ID: 50152	Recommendations:	Lime (tons/acre)	Nutrients (lb/acre)										Na	More Information
Lime History:	Crop 1 - Fescue/OGGrass/Tim, l 2 -	0.0	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	Note: 12 Note: \$		
			120-200	0	0	0	0	pH\$	0	0	0			

Test Results [units - WV in g/cm³; CEC and Na in meq/100 cm³; NO₃-N in mg/dm³]:

HM% WV	CEC	BS%	Ac	pH	P-I	K-I	Mn-I	S-I	Mn-A1	Mn-A2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.51	1.00	21.6	100	0.0	7.3	490	450	80	76	13	344	203	610	610	128	0.7	3

Soil Class: Mineral

Sample ID: 50153	Recommendations:	Lime (tons/acre)	Nutrients (lb/acre)										Na	More Information
Lime History:	Crop 1 - Fescue/OGGrass/Tim, l 2 -	0.0	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	Note: 12 Note: \$		
			120-200	0	0	0	0	pH\$	0	0	0			

Test Results [units - WV in g/cm³; CEC and Na in meq/100 cm³; NO₃-N in mg/dm³]:

HM% WV	CEC	BS%	Ac	pH	P-I	K-I	Mn-I	S-I	Mn-A1	Mn-A2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.46	0.98	21.2	100	0.0	7.4	470	441	77	76	13	343	202	575	575	124	0.7	3

Soil Class: Mineral



Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.
Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- Steve Trox

Alex Simpson Page 2 of 3

Sample ID: 50154	Recommendations:										Nutrients (lb/acre)					More Information Note: 12 Note: \$
	Crop	Lime (tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B					
Lime History:	1 - Fescue/OGrass/Tim, l	0.0	120-200	0	0	0	0	pH\$	0	0	0					

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO₃-N in mg/dm³]:

HM% W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.41	1.09	20.9	100	0.0	7.1	454	776	67	14	109	214	129	594	594	104	0.7	3		

Soil Class: Mineral

Sample ID: 50155	Recommendations:										Nutrients (lb/acre)					More Information Note: 12 Note: \$
	Crop	Lime (tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B					
Lime History:	1 - Fescue/OGrass/Tim, l	0.0	120-200	0	0	0	0	pH\$	0	0	0					

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO₃-N in mg/dm³]:

HM% W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.36	1.02	22.4	100	0.1	7.1	484	797	68	14	112	228	137	654	654	107	0.7	3		

Soil Class: Mineral

Sample ID: 50156	Recommendations:										Nutrients (lb/acre)					More Information Note: 12 Note: \$
	Crop	Lime (tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B					
Lime History:	1 - Fescue/OGrass/Tim, l	0.0	120-200	0	0	0	0	pH\$	0	0	0					

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO₃-N in mg/dm³]:

HM% W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.41	1.08	21.3	100	0.0	7.1	470	747	68	14	109	226	136	636	636	106	0.7	3		

Soil Class: Mineral



Predictive

Waste Report

Links to Helpful Information

Advisor:

Client: Jessica Haigler
Simpsons Eggs Inc.
5015 Highway 218 E
Monroe, NC 28110
Union County

PALS #:

PALS #: 403753

Farm: 90-1

Completed: 04/24/2017

Received: 04/19/2017

Sample Information

Sample ID: 1
Waste Code: NLA
Description: Animal By-products (liquid)
Comments:

Nutrient and Other Measurements

Nitrogen (N) (ppm)	P (ppm)	K (ppm)	Ca (ppm)	Mg (ppm)	S (ppm)	Fe (ppm)	Mn (ppm)	Zn (ppm)	Cu (ppm)	B (ppm)	Mo (ppm)	C (ppm)	
Total N	42.0	48.2	82.0	15.4	70.2	1.19	0.27	0.94	0.08	0.09			
Total Kjeldahl N	176												
Inorganic N													
NH4-N													
NO3-N													
Organic N													
Urea													
	pH	DM (%)	SS (10 ⁻⁵ S/cm)	EC (mS/cm)	CCE (%)	ALE(1000 gal.)						C:N	BD (g/cm ³)
	8.09			283	2.83								
	Ni (ppm)	Cd (ppm)	Pb (ppm)	Al (ppm)	Se (ppm)	As (ppm)	Cr (ppm)	Na (ppm)	Cl (ppm)				
				0.18				590					

Estimate of Nutrients Available for First Crop (lb / 1000 gal.)

N	P ₂ O ₅	K ₂ O	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo	Na	Cl	Ni	Cd	Pb	Al	Se
1.47	0.80	0.48	0.68	0.13	0.59	0.01	T	0.01	T	T	T	4.92						T

Agronomist's Comments:

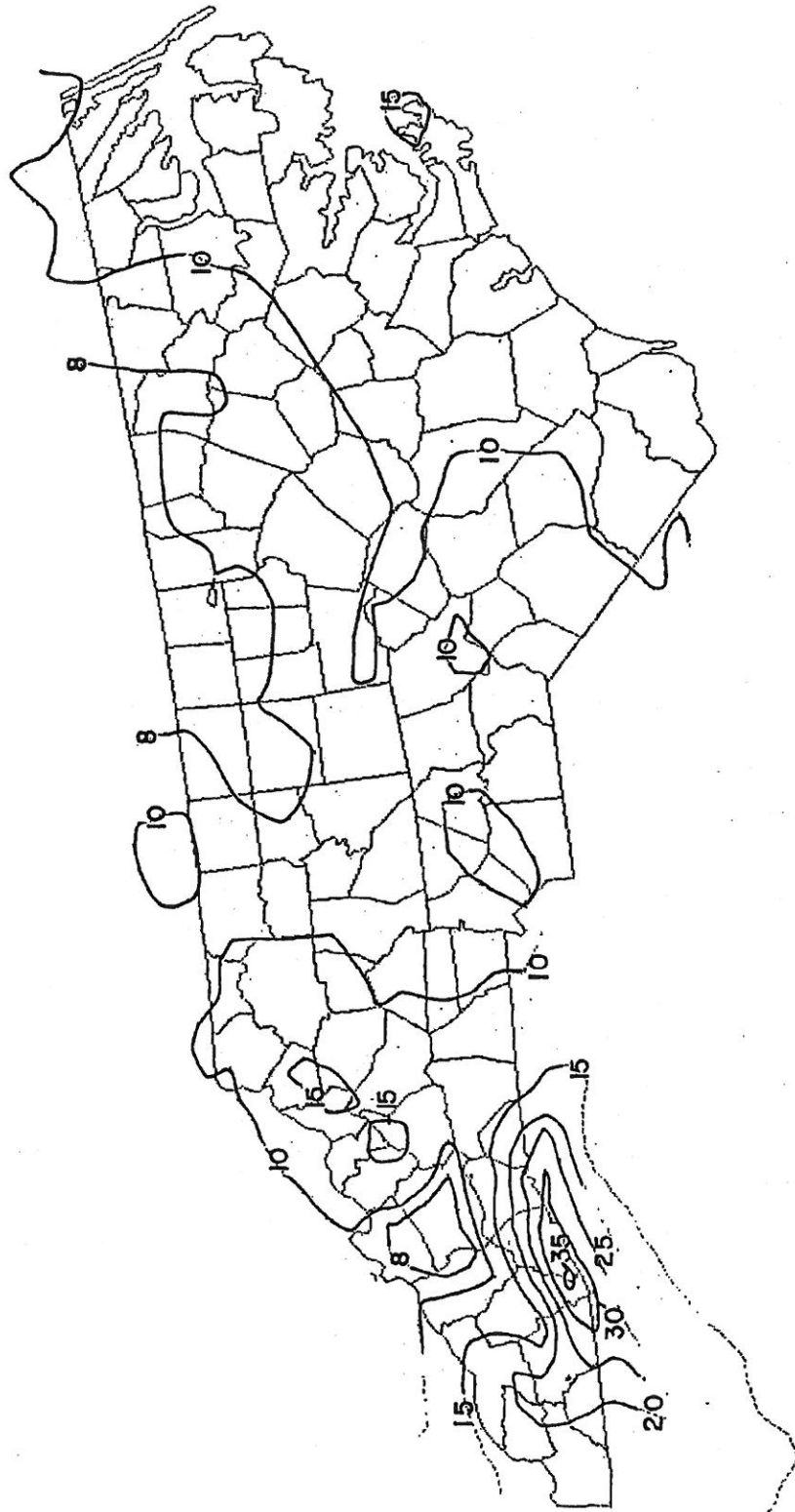
Insufficient information is available regarding the first year availability of nutrients in this material. The nutrient availability reported here is therefore the TOTAL nutrients in the material. Samples submitted prior to 2016 reported an estimated value rather than total nutrient levels. Please contact me if you have any questions.



Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- Steve Troxler, Commissioner of Agriculture.

LEACHING INDEX FOR HYDROLOGIC GROUP C
North Carolina



EMERGENCY ACTION PLAN

PHONE NUMBERS

DWQ 704-663-1699
EMERGENCY MANAGEMENT SYSTEM 704-283-3575
SWCD 704-233-1621
NRCS 704-233-1621

This plan will be implemented in the event that wastes from your operation are leaking, overflowing, or running off site. You should not wait until wastes reach surface waters or leave your property to consider that you have a problem. You should make every effort to ensure that this does not happen. This plan should be posted in an accessible location for all employees at the facility. The following are some action items you should take.

1. Stop the release of wastes. Depending on the situation, this may or may not be possible. Suggested responses to some possible problems are listed below.
 - A. Lagoon overflow-possible solutions are:
 - a. Add soil to berm to increase elevation of dam.
 - b. Pump wastes to fields at an acceptable rate.
 - c. Stop all flows to the lagoon immediately.
 - d. Call a pumping contractor.
 - e. Make sure no surface water is entering lagoon.
 - B. Runoff from waste application field-actions include:
 - a. Immediately stop waste application.
 - b. Create a temporary diversion to contain waste.
 - c. Incorporate waste to reduce runoff.
 - d. Evaluate and eliminate the reason(s) that caused the runoff.
 - e. Evaluate the application rates for the fields where runoff occurred.
 - C. Leakage from the waste pipes and sprinklers-action include:
 - a. Stop recycle pump.
 - b. Stop irrigation pump.
 - c. Close valves to eliminate further discharge.
 - d. Repair all leaks prior to restarting pumps.
 - D. Leakage from flush systems, houses, solid separators-action include:

- a. Stop recycle pump.
- b. Stop irrigation pump.
- c. Make sure no siphon occurs.
- d. Stop all flows in the house, flush systems, or solid separators.
- e. Repair all leaks prior to restarting pumps.

E. Leakage from base or sidewall of lagoon. Often this is seepage as

- a. Dig a small sump or ditch away from the embankment to catch all seepage, put in a submersible pump, and pump back to the lagoon.
- b. If holes are caused by burrowing animals, trap or remove animals and fill holes and compact with a clay type soil.
- c. Have a professional evaluate the condition of the side walls and lagoon bottom as soon as possible.

2. Assess the extent of the spill and note any obvious damages.

- a. Did the waste reach any surface waters?
- b. Approximately how much was released and for what duration?
- c. Any damage noted, such as employee injury, fish kills, or property damage?
- d. Did the spill leave the property?
- e. Does the spill have the potential to reach surface waters?
- f. Could a future rain event cause the spill to reach surface waters?
- g. Are potable water wells in danger (either on or off of the property)?
- h. How much reached surface waters?

3. Contact appropriate agencies.

- a. During normal business hours, call your DWQ (Division of Water Quality) regional office; Phone - - . After hours, emergency number: 919-733-3942. Your phone call should include: your name, facility, telephone number, the details of the incident from item 2 above, the exact location of the facility, the location or direction of movement of the spill, weather and wind conditions. The corrective measures that have been under taken, and the seriousness of the situation.
- b. If spill leaves property or enters surface waters, call local EMS phone number - - .
- c. Instruct EMS to contact local Health Department.
- d. Contact CES, phone number - - , local SWCD office phone number - - , and local NRCS office for advice/technical assistance phone number - - .

4. If none of the above works call 911 or the Sheriff's Department and explain your problem to them and ask that person to contact the proper agencies for you.

5. Contact the contractor of your choice to begin repair of problem to minimize off-site damage.
 - a. Contractors Name: CD Philemon Grading + Trucking, Inc.
 - b. Contractors Address: _____
 - c. Contractors Phone: 704-309-7522

6. Contact the technical specialist who certified the lagoon (NRCS, Consulting Engineer, etc).
 - a. Name: Richard E. Pigg
 - b. Phone: 704-233-1621

7. Implement procedures as advised by DWQ and technical assistance agencies to rectify the damage, repair the system, and reassess the waste management plan to keep problems with release of wastes from happening again.

Poultry Layer Farm Waste Management Odor Control Checklist

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Farmstead	● Poultry Production	<input checked="" type="checkbox"/> Vegetative or wooded buffers; <input checked="" type="checkbox"/> Recommended best management practices; <input checked="" type="checkbox"/> Good judgement and common sense	
Floor surfaces (walk aisles)	● Wet dirt surfaces	<input checked="" type="checkbox"/> Scrape manure, dust, feathers into collection alleys; <input type="checkbox"/> Splash boards along upper ends of collection alleys; <input checked="" type="checkbox"/> Proper ventilation	<i>N/A</i>
Cage manure dropping boards	● Manure-covered surface	<input checked="" type="checkbox"/> Scrape manure into collection alleys	
Manure collection alleys	● Partial microbial decomposition	<input checked="" type="checkbox"/> Frequent manure removal by flush or scrape; <input checked="" type="checkbox"/> Frequent checks and maintenance on waters and water pipes	
Ventilation exhaust fans	● Volatile gases;	<input checked="" type="checkbox"/> Fan maintenance;	
	● Dust	<input checked="" type="checkbox"/> Efficient air movement	
Indoor surfaces	● Dust	<input checked="" type="checkbox"/> Vacuum or washdown between flocks;	
Manure conveyors	● Partial microbial decomposition	<input checked="" type="checkbox"/> Keep mechanical equipment in good repair; <input checked="" type="checkbox"/> Remove manure accumulations promptly	
Storage tank or basin surface	● Partial microbial decomposition;	<input type="checkbox"/> Bottom or midlevel loading; <input type="checkbox"/> Tank covers;	<i>N/A</i>
	● Volatile gas emissions	<input type="checkbox"/> Basin surface mats of solids; <input type="checkbox"/> Proven biological additives or oxidants	
Manure slurry or sludge spreader outlets	● Agitation when spreading; ● Volatile gas emissions	<input type="checkbox"/> Soil injection of slurry/sludges; <input type="checkbox"/> Wash residual manure from spreader after use; <input type="checkbox"/> Proven biological additives or oxidants	<i>N/A</i>
Uncovered manure slurry or sludge on field surfaces	● Volatile gas emissions while drying	<input type="checkbox"/> Soil injection of slurry/sludges; <input type="checkbox"/> Soil incorporation within 48 hrs.	<i>N/A</i>

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Outside drain collection or junction boxes	● Agitation during wastewater conveyance	<input checked="" type="checkbox"/> Box covers	
Lift stations	● Agitation during sump tank filling and drawdown	<input type="checkbox"/> Sump tank covers	N/A
End of drainpipes at lagoon	● Agitation during wastewater conveyance	<input checked="" type="checkbox"/> Extend discharge point of pipes underneath lagoon liquid level	
Lagoon surfaces	● Volatile gas emission;	<input checked="" type="checkbox"/> Proper lagoon liquid capacity;	
	● Biological mixing;	<input checked="" type="checkbox"/> Correct lagoon startup procedures;	
	● Agitation	<input checked="" type="checkbox"/> Minimum surface area-to-volume ratio;	
		<input checked="" type="checkbox"/> Minimum agitation while pumping;	
		<input type="checkbox"/> Mechanical aeration; N/A	
		<input type="checkbox"/> Proven biological additives N/A	
Irrigation sprinkler nozzles	● High pressure agitation;	<input checked="" type="checkbox"/> Irrigate on dry days with little or no wind;	
	● Wind drift	<input checked="" type="checkbox"/> Minimum recommended operating procedure;	
		<input checked="" type="checkbox"/> Pump intake near lagoon liquid surface;	
		<input type="checkbox"/> Pump from second-stage lagoon N/A	
Dead birds	● Carcass decomposition	<input checked="" type="checkbox"/> Proper disposition of carcasses	
Dead bird disposal pits	● Carcass decomposition	<input type="checkbox"/> Complete covering of carcasses in burial pits;	
		<input type="checkbox"/> Proper location/construction of disposal pits; N/A	
		<input type="checkbox"/> Disposal pit covers tight fitting	
Standing water around facilities	● Improper drainage	<input checked="" type="checkbox"/> Grade and landscape such that water drains away from facilities	
	● Microbial decomposition of organic matter		
Mud tracked onto public roads from farm access	● Poorly maintained access roads	<input checked="" type="checkbox"/> Farm access road maintenance	

Additional Information:

Available From:

Insect Control Checklist for Animal Operations

Source	Cause	BMPs to Minimize Insects	Site Specific Practices
Liquid Systems			
Flush Gutters	● Accumulation of Solids	<input type="checkbox"/> Flush system is designed and operated sufficiently to remove accumulated solids from gutters as designed. <input type="checkbox"/> Remove bridging of accumulated solids at discharge	N/A
	● Crusted Solids	<input checked="" type="checkbox"/> Maintain lagoons, settling basins and pits where pest breeding is apparent to minimize the crusting of solids to a depth of no more than 6 - 8 inches over more than 30% of surface.	
Excessive Vegetative Growth	● Decaying vegetation	<input checked="" type="checkbox"/> Maintain vegetative control along banks of lagoons and other impoundments to prevent accumulation of decaying vegetative matter along water's edge on impoundment's perimeter.	
Dry Systems			
Feeders	● Feed Spillage	<input checked="" type="checkbox"/> Design, operate and maintain feed systems (e.g., bunkers and troughs) to minimize the accumulation of decaying wastage. <input checked="" type="checkbox"/> Clean up spillage on a routine basis (e.g., 7 - 10 day interval during summer; 15-30 day interval during winter).	
Feed Storage	● Accumulation of feed residues	<input checked="" type="checkbox"/> Reduce moisture accumulation within and around immediate perimeter of feed storage areas by insuring drainage away from site and/or providing adequate containment (e.g., covered bin for brewer's grain and similar high moisture grain products).	
	<input checked="" type="checkbox"/> accumulated solids in filter strips around feed storage as needed.		

Source	Cause	BMPs to Minimize Insects	Site Specific Practices
Animal Holding Areas	<ul style="list-style-type: none"> ● Accumulations of animal wastes and feed wastage 	<ul style="list-style-type: none"> <input type="checkbox"/> Eliminate low areas that trap moisture along fences and other locations where waste accumulates and disturbance by animals is <input type="checkbox"/> maintain fence rows and filter strips around animal holding areas to minimize accumulations of wastes (i.e. inspect for and remove or break up accumulated solids as needed). 	N/A
Dry Manure Handling Systems	<ul style="list-style-type: none"> ● Accumulations of animal wastes 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Remove spillage on a routine basis (e.g., 7-10 day interval during summer; 15-30 day interval during winter) where manure is loaded <input type="checkbox"/> for land application or disposal provide adequate drainage around manure stockpiles. <input type="checkbox"/> Inspect for an remove or break up accumulated wastes in filter strips around stockpiles and manure handling areas as needed. 	

For more information contact the Cooperative Extension Service, Department of Entomology, Box 7613, North Carolina State University, Raleigh, NC 27695-7613

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Poultry Manure Management; .0200 Rule/BMP Packet			NCSU, County Extension Center
Poultry Layer Production Facility Manure Management: High Rise, Deep Pit; EBAE 131-88			NCSU - BAE
Poultry Layer Production Facility Manure Management: Underage Flush - Lagoon Treatment; EBAE 130-88			NCSU - BAE
Lagoon Design and Management for Livestock Manure Treatment and Storage; EBAE 103-83			NCSU - BAE
Calibration of Manure and Wastewater Application Equipment; EBAE Fact Sheet			NCSU - BAE
Proper Disposal of Dead Poultry; PS&T Guide No. 19			NCSU - Poultry Science
Nuisance Concerns in Animal Manure Management: Odors and Flies; PRO107, 1995 Conference Proceedings			Florida Cooperative Extension

Mortality Management Methods
(check which method(s) are being implemented)

- Burial three feet beneath the surface of the ground within 24 hours after knowledge of the death. The burial must be at least 300 feet from any flowing stream or public body of water.
- Rendering at a rendering plant licensed under G.S. 106-168.7.
- Complete incineration
- In the case of dead poultry only, placing in a disposal pit of a size and design approved by the Department of Agriculture.
- Any method which in the professional opinion of the State Veterinarian would make possible the salvage of part of a dead animal's value without endangering human or animal health. (Written approval of the State Veterinarian must be attached)

December 18, 1996