

Stantonsburg Farm Inc
Stantonsburg Farm
PO Box 1139
Wallace NC 28466

Keith Larick
Supervisor
Animal Feeding Operations Unit
Division of Water Quality
North Carolina Department of Environment & Natural Resources
1636 Mail Service Center
Raleigh NC 27699-1636

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Aquifer Protection Section

MAY 20 2011

Dear Mr. Larick:

We are in receipt of your letter, dated February 14, 2011, in which the NC Department of Environment & Natural Resources alleges that the facility, Stantonsburg Farm, is required to apply for and obtain an NPDES General Permit – Existing Animal Waste Operations as the result of a discharge which had occurred in 2009.

We believe your suggestion that federal regulations requiring us to apply for and obtain a permit based on this event is incorrect and that any permitting requirement under the 2008 CAFO Rule are inapplicable under the present facts.

First, under the Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the Water keeper Decision; Final Rule, 73 FR 70418 November 20, 2008 (“2008CAFO Rule”), there is no categorical requirement for any livestock producer to apply for a permit.

Rather, the 2008 CAFO Rule required simply a “case-by-case evaluation by the CAFO owner operator as to whether the CAFO discharges or proposes to discharge from its production area or land application area based on actual design, construction, operation, and maintenance.” 73 FR 70423. Even in an instance where an operator has suffered a past discharge, that is not necessarily an indication that the “CAFO will discharge in the future.” *Id.* As EPA makes clear in the preamble to the 2008 CAFO Rule, that is especially true where the cause of the past discharge has been identified and corrected, as we have done. *Id.*

Second, the United States Court of Appeals for the 5th Circuit has overturned the 2008 CAFO rules duty to apply in any instance except where a farm was actively discharging. The North Carolina Pork Producers were among the various farm groups who filed challenges to the 2008 CAFO Rule’s duty to apply for an NPDES permit as exceeding U.S. EPA’s statutory authority under the Clean Water Act.

At this time based on these facts, we do not believe that we are under any obligation to apply for or to receive an NPDES permit. We further ask the division to rescind the request for the application of an NPDES permit for this farm.

If you have any questions, please feel free to contact me at 910-285-1357.

Sincerely,



AJ Linton, Environmental Mgr
Murphy Family Ventures

State of North Carolina
Department of Environment and Natural Resources
Division of Water Quality
Animal Feeding Operations Permit Application Form
(THIS FORM MAY BE PHOTOCOPIED FOR USE AS AN ORIGINAL)
NPDES General Permit - Existing Animal Waste Operations

1. GENERAL INFORMATION:

- 1.1 Facility name: Stantonsburg Farm
- 1.2 Print Land Owner's name: Stantonsburg Farm Inc.
- 1.3 Mailing address: PO Box 1139
 City, State: Wallace NC Zip: 28466
 Telephone number (include area code): (910) 385-1005
- 1.4 Physical address: 2938 Sand Pit Road
 City, State: Stantonsburg NC Zip: 27883
 Telephone number (include area code): (252) 238-2574
- 1.5 County where facility is located: Greene
- 1.6 Facility location (directions from nearest major highway, using SR numbers for state roads): see attached
- 1.7 Farm Manager's name (if different from Land Owner): Murphy Brown
- 1.8 Lessee's / Integrator's name (if applicable; circle which type is listed): Murphy Brown LLC
- 1.9 Facility's original start-up date: 4/92 Date(s) of facility expansion(s) (if applicable): _____

2. OPERATION INFORMATION:

- 2.1 Facility number: 40-041
- 2.2 Operation Description: 3,400 farrow to wean

Please enter the Design Capacity of the system. The "No. of Animals" should be the maximum number for which the waste management structures were designed.

Type of Swine	No. of Animals	Type of Poultry	No. of Animals	Type of Cattle	No. of Animals
<input checked="" type="checkbox"/> Wean to Feeder	<u>400</u>	<input type="checkbox"/> Layer	_____	<input type="checkbox"/> Beef Brood Cow	_____
<input checked="" type="checkbox"/> Feeder to Finish	<u>1000</u>	<input type="checkbox"/> Non-Layer	_____	<input type="checkbox"/> Beef Feeder	_____
<input checked="" type="checkbox"/> Farrow to Wean (# sow)	<u>3400</u>	<input type="checkbox"/> Turkey	_____	<input type="checkbox"/> Beef Stocker Calf	_____
<input type="checkbox"/> Farrow to Feeder (# sow)	_____	<input type="checkbox"/> Turkey Poults	_____	<input type="checkbox"/> Dairy Calf	_____
<input type="checkbox"/> Farrow to Finish (# sow)	_____			<input type="checkbox"/> Dairy Heifer	_____
<input type="checkbox"/> Wean to Finish (# sow)	_____			<input type="checkbox"/> Dry Cow	_____
<input type="checkbox"/> Gilts	_____			<input type="checkbox"/> Milk Cow	_____
<input type="checkbox"/> Boar/Stud	_____				

Other Type of Livestock on the farm: Cattle No. of Animals: 50

2.3 Acreage cleared and available for application (excluding all required buffers and areas not covered by the application system): _____ Required Acreage (as listed in the CAWMP): _____

2.4 Number of lagoons: 1 Total Capacity (cubic feet): 2,050,706 Required Capacity (cubic feet): 2,046,541

Number of Storage Ponds: _____ Total Capacity (cubic feet): _____ Required Capacity (cubic feet): _____

2.5 Are subsurface drains present within 100' of any of the application fields? YES or NO (circle one)

2.6 Are subsurface drains present in the vicinity or under the waste management system? YES or NO (circle one)

2.7 Does this facility meet all applicable siting requirements? YES or NO (circle one)

3. REQUIRED ITEMS CHECKLIST:

Please indicate that you have included the following required items by signing your initials in the space provided next to each item.

3.1 One completed and signed original and two copies of the application for NPDES General Permit - Animal Waste Operations; Applicants Initials
df

3.2 Three copies of a general location map indicating the location of the animal waste facilities and field locations where animal waste is land applied and a county road map with the location of the facility indicated; df

3.3 Three copies of the entire Certified Animal Waste Management Plan (CAWMP). If the facility does not have a CAWMP, it must be completed prior to submittal of a permit application for animal waste operations. df

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:*

- 3.3.1 The Waste Utilization Plan (WUP) must include the amount of Plant Available Nitrogen (PAN) produced and utilized by the facility
- 3.3.2 The method by which waste is applied to the disposal fields (e.g. irrigation, injection, etc.)
- 3.3.3 A map of every field used for land application
- 3.3.4 The soil series present on every land application field
- 3.3.5 The crops grown on every land application field
- 3.3.6 The Realistic Yield Expectation (RYE) for every crop shown in the WUP
- 3.3.7 The PAN applied to every land application field
- 3.3.8 The waste application windows for every crop utilized in the WUP
- 3.3.9 The required NRCS Standard specifications
- 3.3.10 A site schematic
- 3.3.11 Emergency Action Plan
- 3.3.12 Insect Control Checklist with chosen best management practices noted
- 3.3.13 Odor Control Checklist with chosen best management practices noted
- 3.3.14 Mortality Control Checklist with the selected method noted
- 3.3.15 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
- 3.3.16 Operation and Maintenance Plan

If your CAWMP includes any components not shown on this list, please include the additional components with your submittal. (Composting, waste transfers, etc.)

4. APPLICANT'S CERTIFICATION:

I, Stantonsburg Farm Inc (Land Owner's name listed in question 1.2), attest that this application for Stantonsburg Farm (Facility name listed in question 1.1) 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.

Signature of letter for Stantonsburg Farm Inc Date 5-16-11

5. MANAGER'S CERTIFICATION: (complete only if different from the Land Owner)

I, _____ (Manager's name listed in question 1.6), attest that this application for _____ (Facility name listed in question 1.1) 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 as incomplete.

Signature _____ Date _____

THE COMPLETED APPLICATION PACKAGE, INCLUDING ALL SUPPORTING INFORMATION AND MATERIALS, SHOULD BE SENT TO THE FOLLOWING ADDRESS:

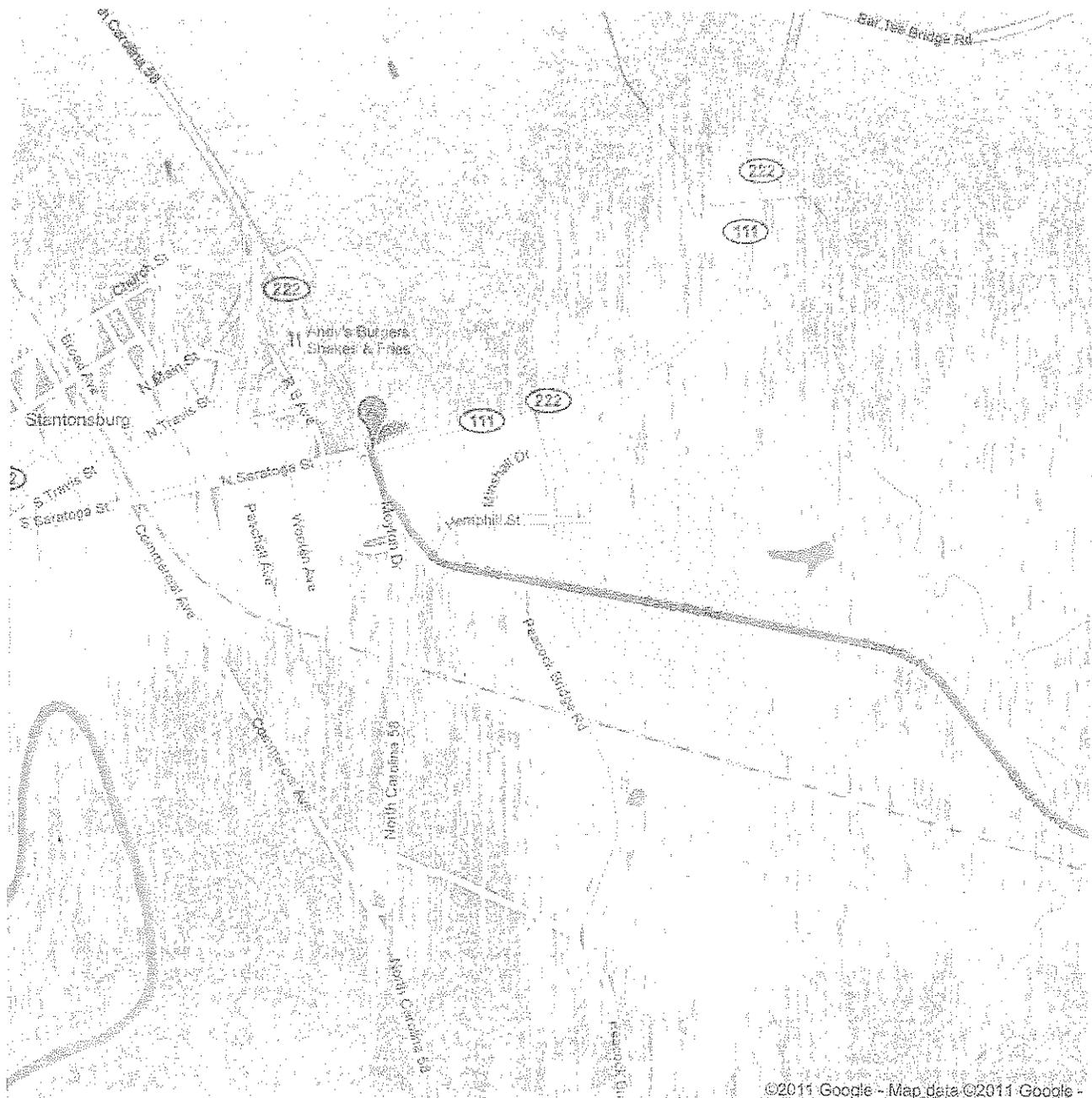
NORTH CAROLINA DIVISION OF WATER QUALITY
AQUIFER PROTECTION SECTION
ANIMAL FEEDING OPERATIONS UNIT
1636 MAIL SERVICE CENTER
RALEIGH, NORTH CAROLINA 27699-1636
TELEPHONE NUMBER: (919) 733-3221
FAX NUMBER: (919) 715-6048

Google maps

Directions to 2874-3250 Sand Pit Rd,
Stantonburg, NC 27883
2.5 mi - about 7 mins

Save trees. Go green!

Download Google Maps on your
phone at google.com/gmm





N Carolina 58 S/Moyton Dr

1. Head south on N Carolina 58 S/Moyton Dr toward Sand Pit Rd

go 400 ft
total 400 ft



2. Slight left onto Sand Pit Rd
About 7 mins

go 2.4 mi
total 2.5 mi



2874-3250 Sand Pit Rd, Stantonsburg, NC 27883

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2011 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

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

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

Facility Currently Covered by an Expiring State Non-Discharge General Permit **MAR 31 2009**

On September 30, 2009, the North Carolina State 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 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 Quality by no later than **April 3, 2009**.

Facilities that do not discharge animal waste to the surface waters or do not propose to have a discharge have the option to request coverage under either an appropriate State General Permit (that will be issued with an effective date of October 1, 2009 and will expire on September 30, 2014) or to request coverage under an appropriate existing NPDES General Permit (that was issued on July 1, 2007 and which will expire on June 30, 2012).

This application form is to be used regardless of the type of General Permit under which coverage is requested. Therefore please select and circle your requested type of permit below and then complete all the information on the application form.

Please do not leave any question unanswered. Please make any necessary corrections to the data below.

1. **Select General Permit Type:** STATE NON-DISCHARGE PERMIT or **NPDES PERMIT**
2. Facility Number: 400041 and Certificate of Coverage Number: AWS400041
3. Facility Name: Stantonsburg Farm
4. Landowner's name (same as on the Waste Management Plan): Stantonsburg Farm Inc
5. Landowner's Mailing address: PO Box 1139
City/State: Rose Hill, NC Zip: 28458 Wallace NC 28466 910-285-1357
Telephone Number (include area code): 9102851005 E-mail: alinton@murfam.com
6. Facility's physical address: 2938 Sand Pit Road
City/State: Stantonsburg, NC Zip: 27883
7. County where facility is located: Greene
8. Farm Manager's name (If different than the Landowner): David Nordin
9. Farm Manager's telephone number (include area code): 9102961800
10. Integrator's name (if there is not an integrator write "None"): Murphy-Brown, LLC
11. Lessee's name (if there is not a lessee write "None"): Murphy-Brown LLC
12. Indicate animal operation type and number:

Swine

- Wean to Finish
- Wean to Feeder 400 ✓
- Farrow to Finish
- Feeder to Finish 1000 ✓
- Farrow to Wean 3400 ✓
- Farrow to Feeder
- Boar/Stud
- Gilts
- Other

Cattle

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

Dry Poultry

- Non Laying Chickens
- Laying Chickens
- Turkeys
- Other
- Pullets
- Turkey Poults

Wet Poultry

- Non Laying Pullets
- Layers

Submit two (2) copies of the most recent Waste Utilization Plan for this facility with this application. The Waste Utilization Plan must be signed by the owner and a technical specialist. If a copy of the facility's most recent Certified Animal Waste Management Plan (CAWMP) has not previously been submitted to the NC Division of Water Quality, two (2) copies of the CAWMP must also be submitted as part of this application.

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: AJ Linton Title: Environmental Mgr.

Signature: *AJ Linton* Date: 3-17-09

Name: _____ Title: _____

Signature: _____ Date: _____

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MAR 31 2009

Name: _____ Title: _____

Signature: _____ Date: _____

THE COMPLETED APPLICATION SHOULD BE SENT TO THE FOLLOWING ADDRESS:

NCDENR – DWQ Animal Feeding Operations Unit
1636 Mail Service Center
Raleigh, North Carolina 27699-1636

Telephone number: (919) 733-3221
Fax Number: (919) 715-6048

Animal Waste Management Plan Certification

(Please type or print all information that does not require a signature)

Existing or New or Expanded (please circle one)

General Information:

Name of Farm: Stantonsburg Sow Farm Facility No: 40-41
 Owner(s) Name: Stantonsburg Farm, Inc. Phone No: 252-238-2574
 Mailing Address: P.O. Box 759 Rose Hill, NC 28458
 Farm Location: _____ County Farm is located in: Greene
 Latitude and Longitude: 35 35' 30" / 77 46' 20" Integrator: Murphy Farms
 Please attach a copy of a county road map with location identified and described below (Be specific: road names, directions, milepost, etc.): Take NC State Road 1232 (Sandpit Rd.) from Stantonsburg about 1 1/2 miles; Farm path is on the left side of the road between two mobile homes.

Operation Description:

Type of Swine	No. of Animals	Type of Poultry	No. of Animals	Type of Cattle	No. of Animals
<input type="checkbox"/> Wean to Feeder	<u>400</u>	<input type="checkbox"/> Layer	_____	<input type="checkbox"/> Dairy	_____
<input type="checkbox"/> Feeder to Finish	<u>1000</u>	<input type="checkbox"/> Pullets	_____	<input type="checkbox"/> Beef	_____
<input type="checkbox"/> Farrow to Wean	<u>3400</u>				
<input type="checkbox"/> Farrow to Feeder	_____				
<input type="checkbox"/> Farrow to Finish	_____				
<input type="checkbox"/> Gilts	_____				
<input type="checkbox"/> Boars	_____				

Expanding Operation Only

Previous Design Capacity	Additional Design Capacity	Total Design Capacity
Acres Available for Application: <u>62.21</u>	Required Acres: <u>60</u>	
Number of Lagoons / Storage Ponds: <u>1</u>	Total Capacity: <u>2,050,706</u> Cubic Feet (ft ³)	
Are subsurface drains present on the farm: <u>Yes</u> or <input checked="" type="checkbox"/> <u>No</u> (please circle one)		
If YES: are subsurface drains present in the area of the LAGOON or SPRAY FIELD (please circle one)		

Owner / Manager Agreement

I (we) verify that all the above information is correct and will be updated upon changing. I (we) understand the operation and maintenance procedures established in the approved animal waste management plan for the farm named above and will implement these procedures. 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 Division of Environmental Management before the new animals are stocked. I (we) understand that there must be no discharge of animal waste from the storage or application system to surface waters of the state either directly through a man-made conveyance or from a storm event less severe than the 25 - year, 24 - hour storm and there must not be run-off from the application of animal waste. I (we) understand that run-off of pollutants from lounging and heavy use areas must be minimized using technical standards developed by the Natural Resources Conservation Service. The approved plan will be filed at the farm and at the office of the local Soil and Water Conservation District. I (we) know that any modification must be approved by a technical specialist and submitted to the Soil and Water Conservation District prior to implementation. A change in land ownership requires written notification to DEM or a new certification (if the approved plan is changed) within 60 days of a title transfer.

Name of Land Owner: Stantonsburg Farm, Inc.
 Signature: [Signature] Date: 03/26/2003
 Name of Manager (if different from owner): Murphy Farms, LLC
 Signature: [Signature] Date: 03/26/2003

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Technical Specialist Certification

I. As a technical specialist designated by the North Carolina Soil and Water Conservation Commission pursuant to 15A NCAC 6F .0005. I certify that the animal waste management system for this farm named above has an animal waste management plan that meets or exceeds standards and specifications of the Division of Environmental Management (DEM) as specified in 15A NCAC 2H.201 and the USDA-Natural Resources Conservation Service (NRCS) and/or the North Carolina Soil and Water Conservation Commission pursuant to 15A NCAC 2H.0217 and 15A NCAC 6F .0001.0005. The following elements are included in the plan as applicable. While each category designates a technical specialist who may sign each certification (SD, SI, WUP, RC, I), the technical specialist should only certify parts for which they are technically competent.

II. Certification of Design

A) Collection, Storage, Treatment System

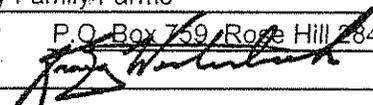
Check the appropriate box

Existing facility without retrofit (SD or WUP)

Storage volume is adequate for operation capacity; storage capability consistent with waste utilization requirements.

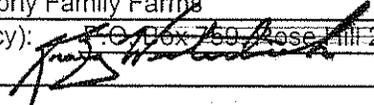
New, expanded or retrofitted facility (SD)

Animal waste storage and treatment structures, such as but not limited to collection systems, lagoons and ponds, have been designed to meet or exceed the minimum standards and specifications.

Name of Technical Specialist (Please Print): Kraig A. Westerbeek
Affiliation Murphy Family Farms Date Work Completed: _____
Address (Agency): P.O. Box 759, Rose Hill 28458 Phone No.: (910) 289-2111
Signature:  Date: 2/10/03

B) Land Application Site (WUP)

The plan provides for minimum separations (buffers); adequate amount of land for waste utilization; chosen crop is suitable for waste management hydraulic and nutrient loading rates.

Name of Technical Specialist (Please Print): Kraig A. Westerbeek
Affiliation Murphy Family Farms Date Work Completed: _____
Address (Agency): P.O. Box 759, Rose Hill 28458 Phone No.: (910) 289-2111
Signature:  Date: 2/10/03

C) Runoff Controls from Exterior Lots

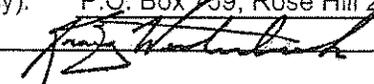
Check the appropriate box

Facility without exterior lots (SD or WUP or RC)

This facility does not contain any exterior lots.

Facility with exterior lots (RC)

Methods to minimize the run off of pollutants from lounging and heavy use areas have been designed in accordance with technical standards developed by NRCS.

Name of Technical Specialist (Please Print): Kraig A. Westerbeek
Affiliation Murphy Family Farms Date Work Completed: _____
Address (Agency): P.O. Box 759, Rose Hill 28458 Phone No.: (910) 289-2111
Signature:  Date: 2/10/03

D). Application and Handling Equipment

Check the appropriate box

Existing or expanding facility with existing waste application equipment (WUP or I)
Animal waste application equipment specified in the plan has been either field calibrated or evaluated in accordance with existing design charts and tables and is able to apply waste as necessary to accommodate the waste management plan: (existing application equipment can cover the area required by the plan at rates not to exceed either the specified hydraulic or nutrient loading rates. A schedule for timing of applications has been established; required buffers can be maintained and calibration and adjustment guidance are contained as part of the plan).

New, expanded or existing facility without existing waste application equipment for spray irrigation. (I)
Animal waste application equipment specified in the plan has been designed to apply waste as necessary to accommodate the waste management plan: (proposed application equipment can cover the area required by the plan at rates not to exceed either the specified hydraulic or nutrient loading rates; a schedule for timing of applications has been established: required buffers can be maintained: calibration and adjustment guidance are contained as part of the plan).

New, expanded or existing facility without existing waste application equipment for land spreading not using spray irrigation. (WUP or I)
Animal waste application equipment specified in the plan has been selected to apply waste as necessary to accommodate the waste management plan: (proposed application equipment can cover the area required by the plan at rates not to exceed either the specified hydraulic or nutrient loading rates: a schedule for timing of applications has been established; required buffers can be maintained: calibration and adjustment guidance are contained as a part of the plan).

Name of Technical Specialist (Please Print): Kraig A. Westerbeek
Affiliation Murphy Family Farms Date Work Completed: _____
Address (Agency): P.O. Box 759, Rose Hill, 28458 Phone No.: (910) 289-2111
Signature: [Signature] Date: 2/10/03

E) Odor Control, Insect Control, Mortality Management and Emergency Action Plan (SD, SI, WUP, RC or I)

The waste management plan for this facility includes a Waste Management Odor Control Checklist, an Insect Control Checklist, a Mortality Management Checklist and an Emergency Action Plan. Sources of both odors and insects have been evaluated with respect to this site and Best Management Practices to Minimize Odors and Best Management Practices to Control Insects have been selected and included in the waste management plan. Both the Mortality Management Plan and the Emergency Action Plan are complete and can be implemented by this facility.

Name of Technical Specialist (Please Print): Kraig A. Westerbeek
Affiliation Murphy Family Farms Date Work Completed: _____
Address (Agency): P.O. Box 759, Rose Hill, 28458 Phone No.: (910) 289-2111
Signature: [Signature] Date: 2/10/03

F) Written Notice of New or Expanding Swine Farm

The following signature block is only to be used for new or expanding swine farms that begin construction after June 21, 1996. If the facility was built before June 21, 1996, when was it constructed or last expanded _____

I (we) certify that I (we) have attempted to contact by certified mail all adjoining property owners and all property owners who own property located across a public road, street or highway from this new or expanding swine farm. The notice was in compliance with the requirements of NCGS 106-805. A copy of the notice and a list of property owners notified is attached.

Name of Land Owner: _____
Signature: _____ Date: _____
Name of Manager (if different from owner): _____
Signature: _____ Date: _____

III. Certification of Installation

A) Collection, Storage, Treatment Installation

New, expanded or retrofitted facility (SI)

Animal waste storage and treatment structures, such as but not limited to lagoons and ponds, have been installed in accordance with the approved plan to meet or exceed the minimum standards and specifications.

For existing facilities without retrofits, no certification is necessary.

Name of Technical Specialist (Please Print): _____

Affiliation _____

Date Work Completed: _____

Address (Agency): _____

Phone No.: _____

Signature: _____

Date: _____

B) Land Application Site (WUP)

Check the appropriate box

The cropping system is in place on all land as specified in the animal waste management plan.

Conditional Approval: all required land as specified in the plan is cleared for planting; the cropping system as specified in the waste utilization plan has not been established and the owner has committed to establish the vegetation as specified in the plan by _____ (month/day/year); the proposed cover crop is appropriate for compliance with the waste utilization plan.

Also check this box if appropriate

If the cropping system as specified in the plan can not be established on newly cleared land within 30 days of this certification, the owner has committed to establish an interim crop for erosion control:

Name of Technical Specialist (Please Print): _____

Kraig A. Westerbeek

Affiliation Murphy Family Farms

Date Work Completed: _____

Address (Agency): P.O. Box 759, Rose Hill, 28458

Phone No.: (910) 289-2111

Signature: _____

Date: _____

2/10/03

This following signature block is only to be used when the box for conditional approval in III. B above has been checked.

I (we) certify that I (we) have committed to establish the cropping system as specified in my (our) waste utilization plan, and if appropriate to establish the interim crop for erosion control, and will submit to DEM a verification of completion from a Technical Specialist within 15 calendar days following the date specified in the conditional certification. I (we) realize that failure to submit this verification is a violation of the waste management plan and will subject me (us) to an enforcement action from DEM.

Name of Land Owner: _____

Signature: _____

Date: _____

Name of Manager (if different from owner): _____

Signature: _____

Date: _____

C) Runoff Controls from Exterior Lots (RC)

Facility with exterior lots

Methods to minimize the run off of pollutants from lounging and heavy use area have been installed as specified in the plan.

For facilities without exterior lots, no certification is necessary.

Name of Technical Specialist (Please Print):

Affiliation _____ Date Work Completed: _____

Address (Agency): _____ Phone No.: _____

Signature: _____ Date: _____

D) Application and Handling Equipment Installation (WUP or I)

Check the appropriate block

Animal waste application and handling equipment specified in the plan is on site and ready for use; calibration and adjustment materials have been provided to the owners and are contained as part of the plan.

Animal waste application and handling equipment specified in the plan has not been installed but the owner has produced leasing or third party application and has provided a signed contract: equipment specified in the contract agrees with the requirements of the plan: required buffers can be maintained: calibration and adjustment guidance have been provided to the owners and are continued as part of the plan.

Conditional approval: Animal waste application and handling equipment specified in the plan has been purchased and will be on site and installed by _____ (month/day/year); there is adequate storage to hold the waste until the equipment is installed and until the waste can be land applied in accordance with the cropping system contained in the plan; and calibration and adjustment guidance have been provided to the owners and are contained as part of the plan.

Name of Technical Specialist (Please Print):

Kraig A. Westerbeek

Affiliation Murphy Family Farms Date Work Completed: _____

Address (Agency): P.O. Box 729, Rose Hill 28458 Phone No.: (910)289-2111

Signature: [Signature] Date: 2/10/03

The following signature block is only used when the box for conditional approval in III D above has been checked.

I (we) certify that I (we) have committed to purchase the animal waste application and handling equipment as specified in my (our) waste management plan and will submit to DEM a verification of delivery and installation from a Technical Specialist within 15 days following the date specified in the conditional certification. I (we) realize that failure to submit this verification is a violation of the waste management plan and will subject me (us) to an enforcement action from DEM.

Name of Land Owner: _____

Signature: _____ Date: _____

Name of Manager (if different from owner): _____

Signature: _____ Date: _____

E) Odor Control, Insect Control and Mortality Management (SD, SI, WUP, RC or I)

Methods to control odors and insects as specified in the Plan have been installed and are operational. The mortality management system in the Plan has also been installed and is operational.

Name of Technical Specialist (Please Print):

Kraig A. Westerbeek

Affiliation Murphy Family Farms Date Work Completed: _____

Address (Agency): P.O. Box 729, Rose Hill 28458 Phone No.: (910)289-2111

Signature: [Signature] Date: 2/10/03

Please return the completed form to the Division of Water Quality at the following Address:

**Department of Environment, Health, and Natural Resources
Division of Water Quality
Water Quality Section, Compliance Group
P.O. Box 29535
Raleigh, NC 27626-0535**

Please remember to submit a copy of this form along with the complete Animal Waste Management Plan to the local Soil and Water Conservation District Office and to keep a copy in your files with your Animal Waste Management Plan.

Date: 3-5-09

Division of Water Quality
Land Application Unit
1636 Mail Service Center
Raleigh, NC 27699-1636

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Aquifer Protection Section

MAR 31 2009

Subject: Permitting Signature Authority

To Whom It May Concern:

As an appropriate signing official for Stantonsburg Farms Inc. (*city/town or business name*) as designated by 15A NCAC 2T .0106(c), I hereby delegate authority to sign and certify all permit applications, reports or other permit related documents to the following staff for the following permit types (sewer, spray, land application) and/or permit numbers:

<u>Position</u>	<u>Person Currently in Position</u>	<u>Permit Type or Permit Number</u>
Environmental Manager	A.J. Linton	AWS400041

If you have any questions, please contact me at the following:

Permittee/Applicant name (please print): David Hulbert

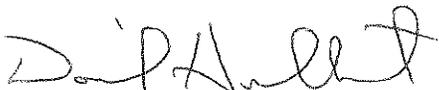
Title: Vice President

Complete mailing address: PO Box 1139

City: Wallace State: NC Zip: 28466

Telephone number: (910) 285-1005 Facsimile number: (910) 285-6142

Sincerely,


signature



North Carolina Department of Environment and Natural Resources
Division of Water Quality

Beverly Eaves Perdue
Governor

Coleen H. Sullins
Director

Dee Freeman
Secretary

February 11, 2011

Stantonsburg Farm, Inc.
Stantonsburg Farm
P.O. Box 1139
Wallace, NC 28466

Subject: Certificate of Coverage No. AWS400041
Stantonsburg Farm
Swine Waste Collection, Treatment,
Storage and Application System
Greene County

Existing COC

Dear Stantonsburg Farm, Inc.:

In accordance with your renewal request received on February 9, 2011, we are hereby forwarding to you this **corrected** Certificate of Coverage (COC) issued to Stantonsburg Farm, Inc. , authorizing the operation of the subject animal waste management system in accordance with General Permit AWG100000.

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 Stantonsburg Farm, located in Greene County, with a swine animal capacity of no greater than the following annual averages:

Wean to Finish:	Feeder to Finish: 1000	Boar/Stud:
Wean to Feeder: 400	Farrow to Wean: 3400	Gilts:
Farrow to Finish:	Farrow to Feeder:	Other:

If this is a Farrow to Wean or Farrow to Feeder operation, there may be one boar for each 15 sows. Where boars are unnecessary, they may be replaced by an equivalent number of sows. Any of the sows may be replaced by gilts at a rate of 4 gilts for every 3 sows.

The COC shall be effective from the date of issuance until September 30, 2014, and shall hereby void Certificate of Coverage Number AWS400041 that was previously issued to this facility. 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 carefully read this COC and the enclosed State General Permit. Please pay careful attention to the record keeping and monitoring conditions in this permit. Record keeping forms are unchanged with this General Permit. Please continue to use the same record keeping forms.

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

The issuance of this COC does not excuse the Permittee from the obligation to comply with all applicable laws, rules, standards, and ordinances (local, state, and federal), nor does issuance of a COC to operate under this permit convey any property rights in either real or personal property.

Per 15A NCAC 2T .0105(h) 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 you wish to continue the activity permitted under the General Permit after the expiration date of the General Permit, then an application for renewal must be filed at least 180 days prior to expiration.

This COC is not automatically transferable. A name/ownership change application must be submitted to the Division prior to a name change or change in ownership.

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 Animal Feeding Operations Unit 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 II.22 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 Newport/Morehead City, NC National Weather Service office at (252) 223-5737, or by visiting their website at: www.erh.noaa.gov/er/mhx/

This facility is located in a county covered by our Washington Regional Office. The Regional Office Aquifer Protection Staff may be reached at (252) 946-6481. If you need additional information concerning this COC or the General Permit, please contact the Animal Feeding Operations Unit staff at (919) 733-3221.

Sincerely,



for Coleen H. Sullins

Enclosure (General Permit AWG100000)

cc: (Certificate of Coverage only for all ccs)
Washington Regional Office, Aquifer Protection Section
Greene County Health Department
Greene County Soil and Water Conservation District
APS Central Files (Permit No. AWS400041)
AFO Notebooks
Murphy-Brown, LLC

Enforcement Case Events

DV-2009-0009

Owner: Stantonsburg Farm Inc

Program Category: Animal Operations

Facility: Stantonsburg Farm

Permit Type: Swine State COC

Permit: AWS400041

Incident Number:

	Event Date	Due Date
<i>Enforcement Conference letter sent</i>	10/28/09	
<i>Remission request acknowledged</i>	08/27/09	
<i>Received response to penalty letter</i>	08/27/09	09/03/09
<i>Remission request received</i>	08/27/09	09/03/09
<i>Facility received penalty letter</i>	08/04/09	
<i>Penalty assessment approved</i>	07/30/09	
<i>Penalty letter sent</i>	07/30/09	
<i>Staff review completed</i>	06/03/09	
<i>Central Office logged in case</i>	05/29/09	
<i>Payment received</i>		
<i>Petition filed at OAH</i>		

NUTRIENT UTILIZATION PLAN

Grower(s): Stantonsburg Farm, Inc.
Farm Name: Stantonsburg Farm
County: Greene

Farm Capacity:	
Farrow to Wean	3400
Farrow to Feeder	
Farrow to Finish	
Wean to Feeder	400
Wean to Finish	
Feeder to Finish	1,000

Storage Structure: Anaerobic Lagoon
Storage Period: >180 days
Application Method: Irrigation

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 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 be applied to land eroding at less 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 result in runoff to 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 crop 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.

RECEIVED / DENR / DWQ
Aquifer Protection Section

FEB 09 2010

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 application 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. 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 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.

AMOUNT OF WASTE PRODUCED PER YEAR (gallons, ft³, tons, etc.):

Capacity	Type	Waste Produced per Animal	Total
3400	Farrow to Wean	3212 gal/yr	10,920,800 gal/yr
	Farrow to Feeder	4015 gal/yr	gal/yr
	Farrow to Finish	10585 gal/yr	gal/yr
400	Wean to Feeder	223 gal/yr	89,200 gal/yr
	Wean to Finish	838 gal/yr	gal/yr
1000	Feeder to Finish	986 gal/yr	986,000 gal/yr
Total			11,996,000 gal/yr

AMOUNT OF PLANT AVAILABLE NITROGEN PRODUCED PER YEAR (lbs):

Capacity	Type	Nitrogen Produced per Animal	Total
3400	Farrow to Wean	5.4 lbs/yr	18,360 lbs/yr
	Farrow to Feeder	6.5 lbs/yr	lbs/yr
	Farrow to Finish	26 lbs/yr	lbs/yr
400	Wean to Feeder	0.48 lbs/yr	192 lbs/yr
	Wean to Finish	1.96 lbs/yr	lbs/yr
1000	Feeder to Finish	2.3 lbs/yr	2,300 lbs/yr
Total			18,055 lbs/yr

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.

LAND UTILIZATION SUMMARY

The following table describes the nutrient balance and land utilization rate for this facility. Note that the Nitrogen Balance for Crops indicates the ratio of the amount of nitrogen produced on this facility to the amount of nitrogen that the crops under irrigation may uptake and utilize in the normal growing season.

		Optional
Total Irrigated Acreage:	83.4	70.9
Total N Required 1st Year:	24072.325	
Total N Required 2nd Year:	20790.075	
Average Annual Nitrogen Requirement of Crops:	22,431.20	
Total Nitrogen Produced by Farm:	18,055.00	
Nitrogen Balance for Crops:	(4,376.20)	

← This value was carried over from the previous permit WUP. (enclosed)
The PAN rate based on on-farm records

The following table describes the specifications of the hydrants and fields that contain the crops designated for utilization of the nitrogen produced on this facility. This chart describes the size, soil characteristics, and uptake rate for each crop in the specified crop rotation schedule for this facility.

Reception Area Specifications

Tract	Field or Pull	Irrigated Acreage	Soil Type	1st Crop Code	Time to Apply	1st Crop Yield	1st Crop lbs N/Unit	Lbs N/Ac Residual	Lbs N/Ac	Lbs N Utilized	2nd Crop Code	Time to Apply	2nd Crop Yield	2nd Crop lbs N/Unit	Lbs N/Ac Residual	Lbs N/Ac	Lbs N Utilized	Total lbs N Utilized	
214	2	4.99	Norfolk	C	Mar-Sept	6.5	50		325	1621.75	K	Sept-April	1	50		50	249.5	1871.25	
214	3	5.85	Norfolk	B/C	Mar-Sept	6.5	43.25		281	1644.581	K	Sept-April	1	50		50	293	1937.081	
214	4	5.04	Norfolk	B/C	Mar-Sept	6.5	43.25		281	1416.87	K	Sept-April	1	50		50	252	1668.87	
214	5	5.53	Norfolk	B/C	Mar-Sept	6.5	43.25		281	1554.621	K	Sept-April	1	50		50	277	1831.121	
214	6	3.69	Kalmia	B/C	Mar-Sept	6.5	43.25		281	1037.351	K	Sept-April	1	50		50	184.5	1221.851	
214	7	5.02	Kalmia	B/C	Mar-Sept	6.5	43.25		281	1411.248	K	Sept-April	1	50		50	251	1662.248	
214	8	5.27	Kalmia	B/C	Mar-Sept	6.5	43.25		281	1481.529	K	Sept-April	1	50		50	263.5	1745.029	
214	9	6.87	Kalmia	D	Feb15-June	110.0	1.25	15	123	841.575	N	Sept-April	60	2.4		144	989	266.5	1830.855
214	10	4.33	Autryville	D	Feb15-June	85.0	1.25	15	91	395.125	N	Sept-April	45	2.4		108	468	862.7525	
214	11	5.64	Autryville	D	Feb15-June	85.0	1.25	15	91	514.65	N	Sept-April	45	2.4		108	609	1123.77	
214	12	5.6	Autryville	D	Feb15-June	85.0	1.25	15	91	511	N	Sept-April	45	2.4		108	604.8	1115.8	
214	Sub 2	4.11	Norfolk	C	Mar-Sept	6.5	50		325	1335.75	K	Sept-April	1	50		50	206	1541.25	
214	Sub 3-5	1.38	Norfolk	B	Mar-Sept	6.5	43.25		281	387.9525	K	Sept-April	1	50		50	69	331.125	456.9525
214	Sub 6-8	4.82	Kalmia	B	Mar-Sept	6.5	43.25		281	1355.023	K	Sept-April	1	50		50	241	331.125	1596.023
214	Sub 9	8.45	Kalmia	D	Feb15-June	110.0	1.25	15	123	1032.675	N	Sept-April	60	2.4		144	1214	2266.5	2246.595
214	Sub 10-12	6.83	Autryville	D	Feb15-June	85.0	1.25	15	91	623.2375	N	Sept-April	45	2.4		108	737.64	199.25	1360.878
Optional	214	4.38	Wagram	D	Feb15-June	75.0	1.25	15	79	344.925	N	Sept-April	40	2.4		96	420.48	174.75	765.405
2583	13	2.44	Norfolk	D	Feb15-June	115.0	1.25	15	129	314.15	N	Sept-April	60	2.4		144	351	272.75	665.51
2583	14	3.63	Norfolk	D	Feb15-June	115.0	1.25	15	129	467.3625	N	Sept-April	60	2.4		144	523	272.75	990.0825
2583	15	0.42	Norfolk	D	Feb15-June	115.0	1.25	15	129	54.075	N	Sept-April	60	2.4		144	60	272.75	114.555
2583	16	2.94	Norfolk	D	Feb15-June	115.0	1.25	15	129	378.525	N	Sept-April	60	2.4		144	423	272.75	801.885
2583	17	5.04	Norfolk	D	Feb15-June	115.0	1.25	15	129	648.9	N	Sept-April	60	2.4		144	726	272.75	1374.66
2583	18	3.53	Norfolk	D	Feb15-June	115.0	1.25	15	129	454.4875	N	Sept-April	60	2.4		144	508	272.75	962.8075
2583	19	5.45	Norfolk	D	Feb15-June	115.0	1.25	15	129	701.6875	N	Sept-April	60	2.4		144	785	272.75	1486.488
2583	20	3.58	Norfolk	D	Feb15-June	115.0	1.25	15	129	460.925	N	Sept-April	60	2.4		144	516	272.75	976.445
2583	21	3.3	Goldsboro	D	Feb15-June	130.0	1.25	15	148	486.75	N	Sept-April	65	2.4		156	515	303.5	1001.55
2583	22	3.78	Goldsboro	D	Feb15-June	130.0	1.25	15	148	557.55	N	Sept-April	65	2.4		156	589.68	303.5	1147.23
2583	23	4.37	Goldsboro	D	Feb15-June	130.0	1.25	15	148	644.575	N	Sept-April	65	2.4		156	681.72	303.5	1326.295
2583	Sub 1	2.72	Wagram	D	Feb15-June	75.0	1.25	15	79	214.2	N	Sept-April	40	2.4		96	261.12	174.75	475.32
2583	Sub 13-16	7.47	Norfolk	D	Feb15-June	115.0	1.25	15	129	961.7625	N	Sept-April	60	2.4		144	1075.68	272.75	2037.443
2583	Sub 17-20	10.2	Norfolk	D	Feb15-June	115.0	1.25	15	129	1313.25	N	Sept-April	60	2.4		144	1468.8	272.75	2782.05
2583	Sub 21-23	7.65	Goldsboro	D	Feb15-June	130.0	1.25	15	148	1128.375	N	Sept-April	65	2.4		156	1193.4	303.5	2321.775
2583	178	2.39	Norfolk	D	Feb15-June	115	1.25	15	129	369.31	N	Sept-April	60	2.4		144	394.16	273	652.47
Totals:		83.4								17764.93							6907.4	24072.33	

Reception Area Specifications

Tract	Field	Irrigated Acreage	Soil Type	1st Crop Code	Time to Apply	1st Crop Yield	1st Crop lbs N/Unit	Lbs N/Ac Residual	Lbs N/Ac	Lbs N /Ac	Total lbs N Utilized	2nd Crop Code	Time to Apply	2nd Crop Yield	2nd Crop lbs N/Unit	Lbs N/Ac Residual	Lbs N /Ac	Total lbs N Utilized	Total lbs N Utilized	
214	2	4.99	Norfolk	C	Mar-Sept	6.5	50		325	1621.75	0	K	Sept-April	1	50		50	249.5	1871.25	
214	3	5.85	Norfolk	B/C	Mar-Sept	6.5	43.25		281	1644.581	0	K	Sept-April	1	50		50	293	1937.081	
214	4	5.04	Norfolk	B/C	Mar-Sept	6.5	43.25		281	1416.87	0	K	Sept-April	1	50		50	252	1668.87	
214	5	5.53	Norfolk	B/C	Mar-Sept	6.5	43.25		281	1554.621	0	K	Sept-April	1	50		50	277	1831.121	
214	6	3.69	Kalmia	B/C	Mar-Sept	6.5	43.25		281	1037.351	0	K	Sept-April	1	50		50	184.5	1221.851	
214	7	5.02	Kalmia	B/C	Mar-Sept	6.5	43.25		281	1411.248	0	K	Sept-April	1	50		50	251	1662.248	
214	8	5.27	Kalmia	B/C	Mar-Sept	6.5	43.25		281	1481.529	0	K	Sept-April	1	50		50	263.5	1745.029	
214	9	6.87	Kalmia	O	Jun-Sept	42.0	4		168	1154.16	0	*					0	168	1154.16	
214	10	4.33	Autryville	O	Jun-Sept	30.0	4		120	519.6	0	*					0	120	519.6	
214	11	5.64	Autryville	O	Jun-Sept	30.0	4		120	676.8	0	*					0	120	676.8	
214	12	5.6	Autryville	O	Jun-Sept	30.0	4		120	672	0	*					0	120	672	
214	Sub 2	4.11	Norfolk	C	Mar-Sept	6.5	50		325	1335.75	0	K	Sept-April	1	50		50	206	1541.25	
214	Sub 3-5	1.38	Norfolk	B	Mar-Sept	6.5	43.25		281	387.9525	0	K	Sept-April	1	50		50	69	456.9525	
214	Sub 6-8	4.82	Kalmia	B	Mar-Sept	6.5	43.25		281	1355.023	0	K	Sept-April	1	50		50	241	1596.023	
214	Sub 9	8.43	Kalmia	O	Jun-Sept	42.0	4		168	1416.24	0	*					0	168	1416.24	
214	Sub 10-12	6.83	Autryville	O	Jun-Sept	30.0	4		120	819.6	0	*					0	120	819.6	
Optional																				
214	1	4.38	Wagram	O	Jun-Sept	28.0	4		112	490.56	0	*					0	112	490.56	
2583	13	2.44	Norfolk	O	Jun-Sept	42.0	4		168	409.92	0	*					0	168	409.92	
2583	14	3.63	Norfolk	O	Jun-Sept	42.0	4		168	609.84	0	*					0	168	609.84	
2583	15	0.42	Norfolk	O	Jun-Sept	42.0	4		168	70.56	0	*					0	168	70.56	
2583	16	2.94	Norfolk	O	Jun-Sept	42.0	4		168	493.92	0	*					0	168	493.92	
2583	17	5.04	Norfolk	O	Jun-Sept	42.0	4		168	846.72	0	*					0	168	846.72	
2583	18	3.53	Norfolk	O	Jun-Sept	42.0	4		168	593.04	0	*					0	168	593.04	
2583	19	5.45	Norfolk	O	Jun-Sept	42.0	4		168	915.6	0	*					0	168	915.6	
2583	20	3.58	Norfolk	O	Jun-Sept	45.0	4		180	601.44	0	*					0	180	601.44	
2583	21	3.3	Goldsboro	O	Jun-Sept	45.0	4		180	594	0	*					0	180	594	
2583	22	3.78	Goldsboro	O	Jun-Sept	45.0	4		180	680.4	0	*					0	180	680.4	
2583	23	4.37	Goldsboro	O	Jun-Sept	45.0	4		180	786.6	0	*					0	180	786.6	
214	Sub 1	2.72	Wagram	O	Jun-Sept	28.0	4		112	304.64	0	*					0	112	304.64	
2583	Sub 13-16	7.47	Norfolk	O	Jun-Sept	42.0	4		168	1254.96	0	*					0	168	1254.96	
2583	Sub 17-20	10.2	Norfolk	O	Jun-Sept	42.0	4		168	1713.6	0	*					0	168	1713.6	
2583	Sub 21-23	7.65	Goldsboro	O	Jun-Sept	45.0	4		180	1377	0	*					0	180	1377	
2583	17B	3.34	Norfolk	O	Jun-Sept	42.0	4		168	461.52	0	*					0	168	461.52	
Totals:		83.4							18505.08									2285	20790.08	

This plan does not include commercial fertilizer. The farm should produce adequate plant available nitrogen to satisfy the requirements of the crops listed above.

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 bermuda), 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 reach maturity, especially late in the season (i.e. April or May). Shading may result if small grain gets too high and this will definately interfere with 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 cut to a height of about two inches before drilling for best results.

CROP CODE LEGEND

Crop Code	Crop	Lbs N utilized / unit yield
A	Barley	1.6 lbs N / bushel
B	Hybrid Bermudagrass - Grazed	50 lbs N / ton
C	Hybrid Bermudagrass - Hay	50 lbs N / ton
D	Corn - Grain	1.25 lbs N / bushel
E	Corn - Silage	12 lbs N / ton
F	Cotton	0.12 lbs N / lbs lint
G	Fescue - Grazed	50 lbs N / ton
H	Fescue - Hay	50 lbs N / ton
I	Oats	1.3 lbs N / bushel
J	Rye	2.4 lbs N / bushel
K	Small Grain - Grazed	50 lbs N / acre
L	Small Grain - Hay	50 lbs N / acre
M	Grain Sorghum	2.5 lbs N / cwt
N	Wheat	2.4 lbs N / bushel
O	Soybean	4.0 lbs N / bushel
P	Pine Trees	40 lbs N / acre / yr

Acres shown in the preceding table 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.

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

SLUDGE APPLICATION:

The following table describes the annual nitrogen accumulation rate per animal in the lagoon sludge

Farm Specifications	PAN/yr/animal	Farm Total/yr
3400 Farrow to Wean	0.84	2856
Farrow to Feeder	1	
Farrow to Finish	4.1	
400 Wean to Feeder	0.072	28.8
Wean to Finish	0.306	
1000 Feeder to Finish	0.36	360

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 3244.8 pounds of plant available nitrogen per year will accumulate in the lagoon sludge based on the rates of accumulation listed above.

If you remove the sludge every 5 years, you will have approximately 16224 pounds of plant available nitrogen to utilize. Assuming you apply this PAN to hybrid bermuda grass hayland at the rate of 300 pounds of nitrogen per acre, you will need 54 acres of land. If you apply the sludge to corn at a rate of 125 pounds per acre, you will need 129.792 acres of land. Please note that these are only estimates of the PAN produced and the land required to utilize that PAN. Actual values may only be determined by sampling the sludge for plant available nitrogen content prior to application. Actual utilization rates will vary with soil type, crop, and realistic yield expectations for the specific application fields designated for sludge application at time of removal.

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 the preceding table. Failure to apply the recommended rates and amounts of nitrogen shown in the tables may make this plan invalid.

*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 limitation. 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 instance should the volume of the waste 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 waste applicator to ensure that the spreader equipment is operated properly to apply the correct rates to the acres 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 receive the waste analysis report for assistance in determining the amount of waste per acre and the proper application prior to applying the waste.

Application Rate Guide

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

Tract	Hydrant	Soil Type	Crop	Application Rate in/hr	Application Amount * inches
214	2	Norfolk	C	0.5	1
214	3	Norfolk	B/C	0.5	1
214	4	Norfolk	B/C	0.5	1
214	5	Norfolk	B/C	0.5	1
214	6	Kalmia	B/C	0.5	1
214	7	Kalmia	B/C	0.5	1
214	8	Kalmia	B/C	0.5	1
214	9	Kalmia	D	0.5	1
214	10	Autryville	D	0.6	1
214	11	Autryville	D	0.6	1
214	12	Autryville	D	0.6	1
214	Sub 2	Norfolk	C	0.5	1
214	Sub 3-5	Norfolk	B	0.5	1
214	Sub 6-8	Kalmia	B	0.5	1
214	Sub 9	Kalmia	D	0.5	1
	Sub 10-12	Autryville	D	0.6	1
Optional					
214					
214	1	Wagram	D	0.6	1
2583	13	Norfolk	D	0.5	1
2583	14	Norfolk	D	0.5	1
2583	15	Norfolk	D	0.5	1
2583	16	Norfolk	D	0.5	1
2583	17	Norfolk	D	0.5	1
2583	17B	Norfolk	D	0.5	1 <i>off</i>
2583	18	Norfolk	D	0.5	1
2583	19	Norfolk	D	0.5	1
2583	20	Norfolk	D	0.5	1
2583	21	Goldsboro	D	0.4	1
2583	22	Goldsboro	D	0.4	1
2583	23	Goldsboro	D	0.4	1
214	Sub 1	Wagram	D	0.6	1
2583	Sub 13-16	Norfolk	D	0.5	1
2583	Sub 17-20	Norfolk	D	0.5	1
2583	Sub 21-23	Goldsboro	D	0.4	1

Additional Comments:

The Bermuda listed for fields 4 & 8 in this plan are written with a hay/graze combination. At least half the forage will be harvested for hay.

Subfield acreage in this plan is the balance of total field acres minus wetted acres for these fields. This acreage will be claimed when making application with aerway machine.

Field 3 - Hydrants 10-12

Field 4 - Hydrants 6-8

Field 5 - Hydrant 9

Field 7 - Hydrants 21-23

Field 8 - Hydrant 3-5

Field 9 - Hydrant 1

Field 10 - Hydrants 17-20

Field 11 - Hydrants 13-16

Field 12 - Hydrant 2

A cover crop at a rate of 35 lbs can be used on the optional land and Field 3 and 5 (Pulls 9-12) and subfields 9-12 instead of wheat.

The amount applied to the cover crop must be subtracted from the following crops PAN rate. Those application windows are Sept - April.

NUTRIENT UTILIZATION PLAN CERTIFICATION

Name of Farm: Stantonsburg Farm
Owner: Stantonsburg Farm, Inc.
Manager:

Owner/Manager Agreement:

I/we understand and will follow and implement the specifications and the operation and maintenance procedures established in the approved animal waste nutrient management 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 nutrient management plan and a new certification to be submitted to DWQ before the new animals are stocked.

I/we understand that I must own or have access to equipment, primarily irrigation equipment, to land apply the animal waste described in this nutrient management plan. This equipment must be available at the appropriate pumping time such that no discharge occurs from the lagoon in the event of a 25 year 24 hour storm. I also certify that the waste will be applied on the land according to this plan at the appropriate times and at rates which produce no runoff.

This 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.

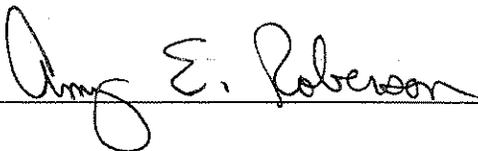
Name of Facility Owner: Stantonsburg Farm, Inc.

Signature:  5/14/07
Date

Name of Manager (if different from owner): _____

Signature: _____
Date

Name of Technical Specialist: Amy E. Roberson
Affiliation: Murphy-Brown, LLC.
Address: 2822 Hwy 24 West, PO Drawer 856
Warsaw, NC 28398
Telephone: (910) 293-3434

Signature:  5-16-07
Date

NUTRIENT UTILIZATION PLAN

REQUIRED SPECIFICATIONS

- 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 which 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 Utilization 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 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 surface is frozen.

NUTRIENT UTILIZATION PLAN

REQUIRED SPECIFICATIONS

(continued)

- 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 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.

NUTRIENT UTILIZATION PLAN

REQUIRED SPECIFICATIONS

(continued)

- 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 soil 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 a minimum of five years.
- 23 Dead animals will be disposed of in a manner that meets North Carolina regulations.

NEW

Earlier WWP

WASTE UTILIZATION PLAN

PRODUCER: Stantonsburg Farm, Inc.

LOCATION: Route 1 Box 459, Stantonsburge; Greene County

TELEPHONE: (252) 753-3116

TYPE OPERATION: Farrow - Wean

NUMBER OF ANIMALS: **3400** Farrow - Wean
 (Design Capacity) **1000** Feeder - Finish
400 Wean - Feeder

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 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 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 content 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 available water holding capacities. Normally waste shall not be applied to land eroding at greater than 5 tons per acre per year. With special precautions, waste may be applied to land eroding at up to 10 tons 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 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.

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.

WASTE UTILIZATION PLAN

Amount of Waste Produced Per Year (gallons, ft, tons, etc.)

400	0.42	168
1,000	1.9	1,900
3,400 animals X	6.1 (tons) waste/animal/year =	20,740 (tons) waste/year.
		<u>22,808</u>

Amount of Plant Available Nitrogen (PAN) Produced Per Year

400	0.48	192
1,000	2.3	2,300
3,400 animals X	5.4 lbs. PAN/animal/year =	18,360 lbs. PAN/year. (PAN from N.C. Guide Std. 633)
		<u>18,055</u> Tech

Reduced

** See Narrative for PAN reduction description

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 and surface application:

Table 1: ACRES OWNED BY PRODUCER

Tract #	Field No.	Soil Type	Crop	Lbs. N Per Acre	Acres	Lbs. N Utilized	Month of Application
T214	3	AuB	Bermuda (G)	235	15.57	3,658.95	March - Sept
T214	4	KaA	Bermuda (G)	270	13.98	3,774.60	March - Sept
T214	5	KaA	Bermuda (G)	270	6.87	1,854.90	March - Sept
T214	8	NoA	Bermuda (G)	260	16.42	4,269.20	March - Sept
T214	9	WaB	Bermuda (G)	235	4.38	1,029.30	March - Sept
T214	12	NoA	Bermuda (G)	260	4.99	1,297.40	March - Sept
	all		Small Grain (G)	50	62.21	3,110.50	Sept - April
Total					62.21	18,994.85	

*This N is from animal waste only. If nutrients from other sources such as commercial fertilizer are applied, they must be accounted for. N must be based on realistic yield expectation.

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

WASTE UTILIZATION PLAN

Table 2: ACRES WITH AGREEMENT OR LONG TERM LEASE
 (Agreement with adjacent landowner must be attached)
 (Required only if operator does not own adequate land [see
 Required Specification 2])

Tract #	Field No.	Soil Type	Crop	Lbs. N Per Acre*	Acres	Lbs. N Utilized	Month of Application
Total						-	

* See footnote for Table 1.

Totals from above Tables

	Acres	Lbs. N Utilized
Table 1	62.21	18,995
Table 2		
Total	62.21	18,995
Amount of N Produced		18,055
Surplus or Deficit		(940)

NOTE: 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 nutrient or other elements.

WASTE UTILIZATION PLAN

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

Application of Waste by Irrigation

Field No.	Soil Type	Crop	Application Rate (In/Hr)	Application Amount (In.)
3	AuB	Bermuda	0.5	.5-1.0
4	Lu	Bermuda	0.5	.5-1.0
4,5	KaA	Bermuda	0.5	.5-1.0
4,8	WaB	Bermuda	0.5	.5-1.0
5	Jo	Bermuda	0.5	.5-1.0
8,12	NoA-B	Bermuda	0.5	.5-1.0
9	WaB	Bermuda	0.5	.5-1.0

THIS TABLE IS NOT NEEDED IF WASTE IS NOT BEING APPLIED BY IRRIGATION, HOWEVER A SIMILAR TABLE WILL BE NEEDED FOR DRY LITTER OR SLURRY.

Your facility is designed for 90 days of temporary storage and the temporary storage must be removed on the average of once every 6 MONTHS. In no instance should the volume of waste being stored in your structure exceed Elevation *see lagoon design.

Call the local Natural Resources Conservation Service (formerly Soil Conservation Service) or Soil and Water Conservation District office after you receive the waste analysis report for assistance in determining the amount per acre to apply and the proper application rate prior to applying the waste.

Narrative of operation: This plan is written for bermuda which is to be grazed and all fields should be overseeded. Fields listed on page 10 are optional, and may be planted in any of the crops listed.

The following is the justification for PAN reduction:

The PAN produced was determined using the NC cooperative extension standards for determining PAN generated. Grower has copies of all IRR-2's and Waste Analysis used to determine this amount, in his file box. Attached to the NUP is a consolidation of that data. The number used on page 2 of this NUP for Total Lbs. PAN/year is more than 35% higher than the total PAN generated using the NC Cooperative Extension standards.

WASTE UTILIZATION PLAN

REQUIRED SPECIFICATIONS

- 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 which 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 waste, he/she shall provide a copy 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 facility to secure an update of the Waste Utilization Plan when there is a change in the operation, increase in the number of animals, method of utilization, or available land.
- 3 Animal waste shall be applied to meet, but not exceed, the nitrogen needs for realistic crop yields based on soil type, available moisture, historical data, climatic conditions, and level of management, unless there are regulations that restrict the rate of application 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 that is eroding at 5 or more tons, but less than 10 tons per acre per year providing grass filter strips are installed where runoff leaves the field. (See FOTG Standard 393 - Filter Strip).
- 5 Odors can be reduced by injecting the waste or disking after waste application. Waste should not be applied when there is danger of drift from the irrigation field.
- 6 When animal waste is to be applied on acres subject to flooding, it will be soil incorporated on conventionally tilled cropland. When 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 or flies.
- 8 Animal waste shall not be applied to saturated soils, during rainfall events, or when the surface is frozen.

WASTE UTILIZATION PLAN

REQUIRED SPECIFICATIONS

(continued)

- 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 Waste nutrients 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 from any perennial stream or river (other than an irrigation ditch or 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. (See Standard 393 - Filter Strips).
- 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 discharge or by over-spraying. Animal waste may be applied to prior converted wetlands provided they 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 courses 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.

WASTE UTILIZATION PLAN

REQUIRED SPECIFICATIONS

(continued)

- 17 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.
- 18 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.
- 19 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 propellant with no further applications animal waste during the crop season.
- 20 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.
- 21 Waste shall be tested within 69 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 element. Zinc and copper levels in the soil shall be monitored and alternative crop sites shall be used when these metal approach excessive levels. pH shall be adjusted for optimum crop production and maintained. Soil and waste analysis records shall be kept for five years. Poultry dry waste application records shall be maintained for three (3) years. Waste application records for all other waste shall be maintained for five (5) years.
- 22 Dead animals will be disposed of in a manner that meets North Carolina regulations.

WASTE UTILIZATION PLAN

WASTE UTILIZATION PLAN AGREEMENT

Name of Farm: Stantonburg Farm

Owner / Manager Agreement

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 Division of Environment Management (DEM) before the new animals are stocked. I (we) also understand that there must be no discharge of animal waste from this system to 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 DEM upon request.

Name of Facility Owner: Stantonsburg Farm, Inc.
(Please print)

Signature: X *David Hulbert* Date: X *6/17/03*

Name of Manager (if different from owner): _____

Signature: _____ Date: _____

Name of Technical Specialist: *(Please print)* Toni W. King

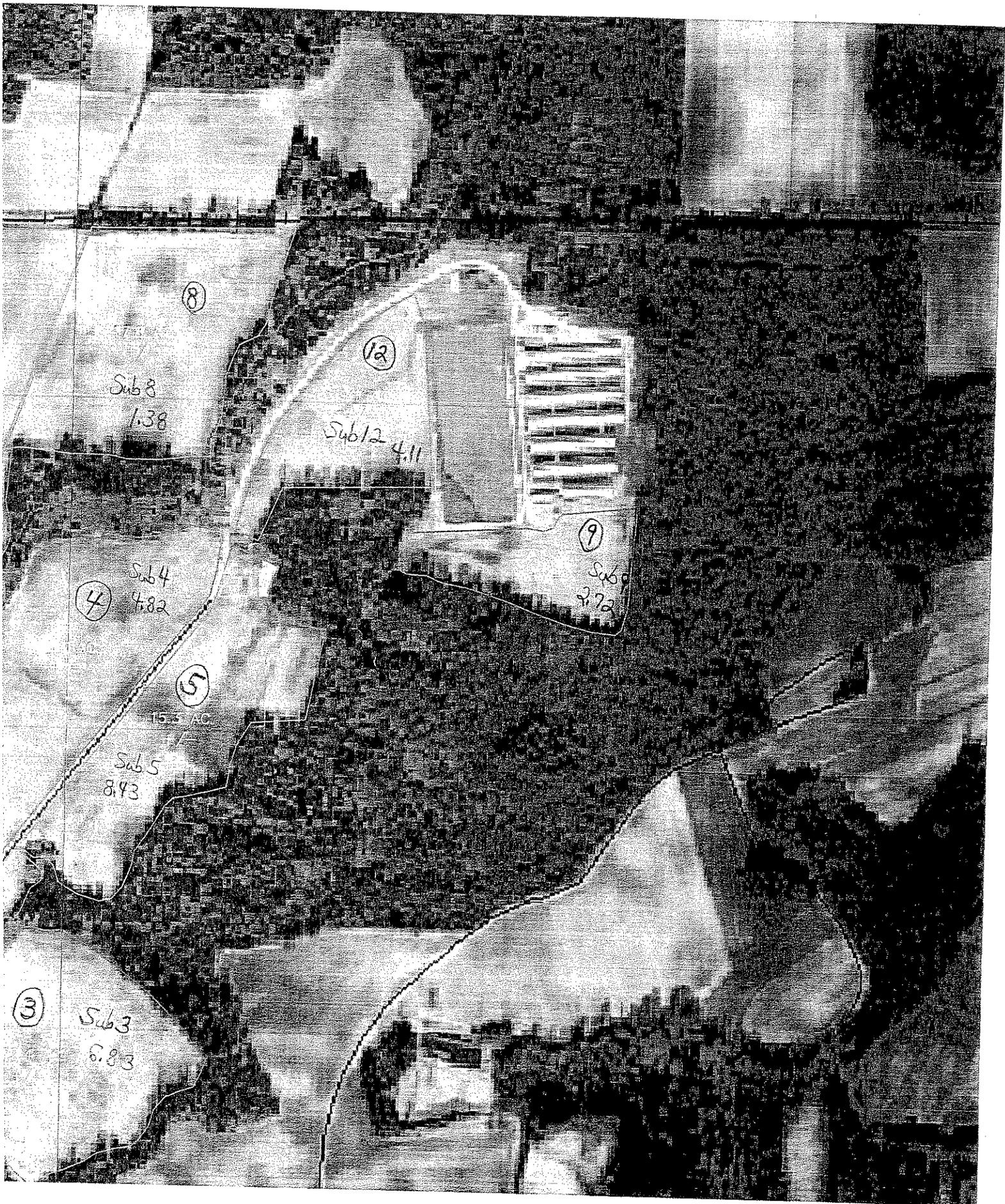
Affiliation: Murphy - Brown, LLC

Address (Agency): P.O. Box 856
Warsaw, NC 28398

Signature: *Toni W. King* Date: *6-17-03*

Setback Map





⑧

Sub 8
1.38

⑫

Sub 12
4.11

⑨

Sub 9
2.72

④

Sub 4
4.82

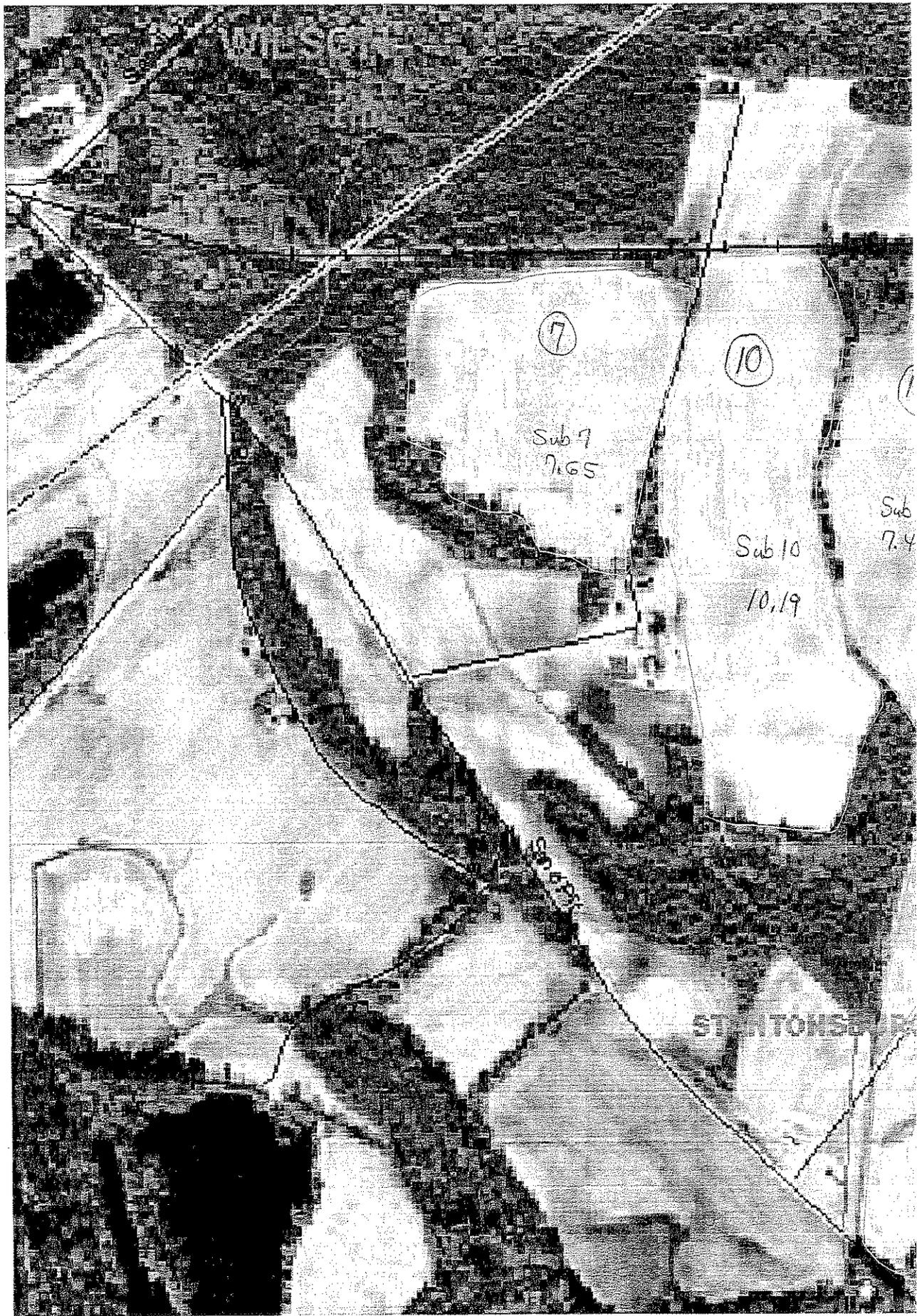
⑤

15.5 AC

Sub 5
8.43

③

Sub 3
6.83



7

Sub 7
7.65

10

Sub 10
10.19

Sub
7.4

STANTON ST



New Map
 6-30-04
 P/L



- SB 515 Setbacks apply:
- 200' Dwelling (not owned by P)
- 100' Well
- 75' Property Line
- 75' Public ROW

Equipment Used:

- * 3" Traveller's w/ 1000' hose
- 1.08" Ring Nozzle
- 60 psi gun pressure
- 182 GPM
- * 200' hydrant spacings (67%)
- * Class 200 6" PVC
- * Sch 80 fittings on dry hydrants
- TB - Thrust Block
- AV - Air Vent



a.b

11

12

MURPHY

FAMILY VENTURES LLC

PO Box 1139 Wallace, NC 28466

February 8, 2010

RE: Stantonsburg additional info

To J.R. Joshi:

I hope that this is the information that you need. The irrigation design is for the new risers 13-23. There is no design for risers 1-12. These fields fall under the wettable acres rule. I have included all the info that I can find. I may be reached by phone at 910-285-1357 or by e-mail at alinton@murfam.com. Please feel free to contact me if you need any additional information.

Sincerely,



Alfred J. Linton
Environmental Manager
Murphy Family Ventures

RECEIVED / DENR / DWQ
Aquifer Protection Section

FEB 09 2010

TABLE 4 - Irrigation System Specifications

	Traveling Irrigation Gun	Solid Set Irrigation
Flow Rate of Sprinkler (gpm)	182	
Operating Pressure at Pump (psi)	109.0	
Design Precipitation Rate (in/hr)	0.31	
Hose Length (feet)	9,841,000	XXXXXXXXXX
Type of Speed Compensation	Mechanical	XXXXXXXXXX
Pump Type (PTO, Engine, Electric)	Engine	
Pump Power Requirement (hp)	21.0	

TABLE 5 - Thrust Block Specifications	
	THRUST BLOCK AREA (sq. ft.)
90 degree bend	4.94
Dead End	3.5
Tee	2.45
Gate Valve	3.5
45 degree bend	2.66

IRRIGATION SYSTEM DESIGNER

Name: Kraig Westerbeek
Company: Murphy-Brown, LLC
Address: PO Box 853 Warsaw, NC
Phone: (910) 293 5330

Required Documentation

The following details of design and materials must accompany all irrigation designs:

1. A scale drawing of the proposed irrigation system which includes hydrant locations, pipelines, thrust block locations and buffer areas where applicable.
2. Assumptions and computations for determining total dynamic head and horsepower requirements.
3. Computations used to determine all mainline and lateral pipe sizes.
4. Sources and/or calculations used for determining application rates.
5. Computations used to determine the size of thrust blocks and illustrations of all thrust block configurations required in the system
6. Manufacturer's specifications for the irrigation pump, traveler and sprinkler(s).
7. Manufacturer's specifications for the irrigation pipe and/or USDA-NRCS standard for IRRIGATION WATER CONVEYANCE.
8. The information required by this form are the minimum requirements. It is the responsibility of the designer to consider all relevant factors at a particular site and address them as appropriate.
9. Irrigation pipes should not be installed in lagoon or storage pond embankments without the approval of the designer.

NOTE: A buffer strip of 50' or wider must be maintained between the limits of the irrigation system and all perennial streams and surface waters per NC Statutes.

Narrative of Irrigation System Operation

This design is for an irrigation expansion on this farm. The system will tie into the existing system at the last hydrant in T214, Field 8. The land in T2583 has been purchased by the farm owner. SB 515 setback requirements apply to fields 8, 10 and 11 in this tract, however, the only ones that specifically apply to this design are 75' from the railroad ROW, and 100' from wells.

Irrigation will be accomplished through the use of existing 3" irrigation travellers. The traveller with 1000' of hose must be used for pulls 6,8. Producer is familiar with the operation of this equipment.

CALCULATIONS**Sprinkler Specifications**

Sprinkler Type: Nelson 150
 Nozzle Size: 1.08 inches
 Sprinkler Pressure: 60 psi
 Flowrate(GPM): 182 gpm
 Wetted Diameter: 300 feet

Lane Spacings

Desired Spacing (%): 70 %
 Design Spacing(feet): 210 feet

 Actual Spacing (feet): 200 feet
 Actual Spacing (%): 67 %

Application Rate

Application Rate = $(96.3 \times \text{Flowrate}) / (3.1415 \times (.9 \times \text{radius})^2)$

Design App. Rate = 0.31 in/hr

 330 degree arc = 0.33 in/hr
 220 degree arc = 0.50 in/hr
 180 degree arc = 0.61 in/hr

Traveller Speed

Travel speed = $1.605 \times \text{Flowrate} / \text{Desired application amount} \times \text{Lane Spacing}$

Desired app. (in.) = 0.75 inches
 330 degree arc = 1.95 ft/min
 220 degree arc = 2.34 ft/min
 180 degree arc = 3.89 ft/min

Mainline Velocity

Velocity = $.408 \times \text{Flowrate} / \text{pipe diameter squared}$ feet/sec.**

**For buried pipelines, velocity should be below 5 feet per second

Pipe size: 6 inches

Velocity= 2.06 ft/sec.

Maximum Mainline Friction Loss

Most distant hydrant: 12
 Total distance: 4050 feet

Friction Loss is figured using Hazen/William's Equation

Friction Loss= 0.24 feet/100 feet
 Max. Mainline Loss = 9.8 feet or 4.3 psi

Total Dynamic Head

Sprinkler Pressure: 60 psi
 Loss through traveller: 35 psi
 Elevation head: 2.4 psi
 Mainline loss: 4.3 psi
 Suction head and lift: 2.2 psi
 5% fitting loss: 5.2 psi
TOTAL(TDH) = 109.0 psi or 251.9 feet

Horsepower Required

Horsepower = Flowrate x TDH(feet) / 3960 / Pump efficiency

Pump Description: Berkeley B3J
 Pump Efficiency: 55 %

Horsepower Required: 21.0 Hp

Thrust Blocking

Thrust Block Area = Thrust / Soil Bearing Strength

Thrust: 4200 feet
 Soil Bearing Strength: 1200 feet

End Cap: 3.5 ft²
 90 degree elbow: 4.9 ft²
 Tee: 2.5 ft²
 45 degree elbow: 2.7 ft²

Pipe Pressure Rating Check

Pressure Rating of Pipe to be Used: 200 psi
 Max. Pressure on system when running: 109.0 psi
 70% of Pressure Rating: 140 psi

If Max. Pressure on system is less than 70% of Pressure Rating, OK

Net Positive Suction Head Check

NPSHA: 21.5

NPSHR: 6 *from pump curve

If NPSHA>NPSHR OK

ACREAGE CALCULATIONS							
Irrigation Expansion							
T2583							
Pull#	Width	Length	Start End	Stop End	Pull Acres	Field#	Field Acres
13	217	395	0.47	0	2.44	11	9.44
14	217	635	0.47	0	3.63		
15	100	0	0.23	0.19	0.42		
16	190	620	0.24	0	2.94		
17b	110	770	0.26	0.19	2.39	10	20
17	200	1000	0.45	0	5.04		
18	217	615	0.47	0	3.53		
19	217	1000	0.47	0	5.45		
20	217	625	0.47	0	3.58		
21	217	490	0.47	0.39	3.3	7	11.45
22	200	645	0.45	0.37	3.78		
23	217	705	0.47	0.39	4.37		

OLD LAND

Field	Pull	Acres
3	10,11,12	15.57
4	6,7,8	13.98
5	9	6.87
8	3,4,5	16.42
9	1	4.38
12	2	4.99
		62.21