



North Carolina Department of Environment and Natural Resources

Division of Water Resources
Water Quality Programs
Thomas A. Reeder
Director

Pat McCrory
Governor

John E. Skvarla, III
Secretary

March 3, 2014

Turner Farms LLC
Turner Farms, LLC
PO Box 246
Pink Hill, NC 28572

Subject: Application for Renewal of Coverage for Expiring State General Permit

Dear Permittee:

Your facility is currently approved for operation under one of the Animal Waste Operation State Non-Discharge General Permits, which expire on September 30, 2014. Copies of the new animal waste operation State Non-Discharge General Permits are available at <http://www.ncwaterquality.org/web/wq/aps/afo/apps> or by writing or calling:

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

Telephone number: (919) 807-6464

In order to assure your continued coverage under the State Non-Discharge General Permits, you must submit an application for permit coverage to the Division. Enclosed you will find a 'Request for Certificate of Coverage Facility Currently Covered by an Expiring State Non-Discharge General Permit.' The application form must be completed, signed and returned by **April 1, 2014**. Please note that you must **include one (1) copy of your most recent Waste Utilization Plan with the signed application form.**

Failure to request renewal of your coverage under a general permit within the time period specified may result in a civil penalty. Operation of your facility without coverage under a valid general permit would constitute a violation of NCGS 143-215.1 and could result in assessments of civil penalties of up to \$25,000 per day.

If you have any questions about the State Non-Discharge General Permits, the enclosed application, or any related matter please feel free to contact the Animal Feeding Operations Branch staff at 919-807-6464.

Sincerely,

S. Jay Zimmerman, P.G., Chief
Water Quality Regional Operations Section

Enclosures

cc (w/o enclosures): Wilmington Regional Office, Water Quality Regional Operations Section
Duplin County Soil and Water Conservation District
WQROS Unit Central Files - AWS310057
Murphy-Brown LLC

1636 Mail Service Center, Raleigh, North Carolina 27699-1636
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6464 \ FAX: 919-807-6492
Internet: www.ncwaterquality.org

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

Animal Waste Management Systems

Request for Certificate of Coverage

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

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

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

Application must be signed and dated by the Permittee.

1. Facility Number: 310057 and Certificate of Coverage Number: AWS310057
2. Facility Name: Turner Farms, LLC
3. Landowner's name (same as on the Waste Management Plan): Turner Farms LLC
4. Landowner's mailing address: PO Box 246
City/State: Pink Hill NC Zip: 28572
Telephone Number (include area code): (252)568-4727 E-mail: alinton@murfam.com
5. Facility's physical address: 160 Farrowwood Rd
City: Warsaw State: NC Zip: 28398
6. County where facility is located: Duplin
7. Farm Manager's name (If different than the Landowner): A J Linton
8. Farm Manager's telephone number (include area code): 910-285-1357
9. Integrator's name (if there is not an integrator write "None"): Murphy-Brown LLC
10. Operator in Charge (OIC) name: Kendall Huffman Telephone Number 252-526-1446 OIC # 16819
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 **6131**
Farrow to Feeder
Boar/Stud
Gilts
Other

Horses - Horses
Horses - Other

Cattle

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

Sheep - Sheep
Sheep - Other

Dry Poultry

Non Laying Chickens
Laying Chickens
Turkeys
Other
Pullets
Turkey Poults

Wet Poultry

Non Laying Pullets
Layers

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

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

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:  Date: 3/20/2014

Name: _____ Title: _____

Signature: _____ Date: _____

Name: _____ Title: _____

Signature: _____ Date: _____

THE COMPLETED APPLICATION SHOULD BE SENT TO THE FOLLOWING ADDRESS:

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

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

WASTE UTILIZATION PLAN

Facility Number: **31-57**
Facility COC Number: **NCA231057**
Facility Name: **Turner Sow Farm**
Landowner's Name: **Turner Farms**
Landowner's Mailing Address: **PO Box 1139 Wallace, NC 28466**
Facility's physical address: **160 Farrowwood Rd., Warsaw, NC 28398**
Type of Operation: **Farrow to Wean**
Number of Animals: **6131 Sows**

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 acre per year. Do not apply waste on saturated soils, when it is raining, or when the surface is frozen. Either of these conditions may result in runoff to surface waters which is not allowed under DEM regulations. Wind conditions should also be considered to avoid drift and downwind odor problems. To maximize the value of 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.)

$$3,131 \text{ animals X } 3212 \text{ (gallons) waste/animal/year} = \frac{19,692,772}{19,692,772} \text{ (gallons) waste/year.}$$

Amount of Plant Available Nitrogen (PAN) Produced Per Year

$$6,131 \text{ animals X } 5.4 \text{ lbs. PAN/animal/year} = \frac{33,107}{33,107} \text{ lbs. PAN/year. (PAN from N.C. Guide Std. 633) Tech}$$

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
1701	1	Autryville	Bermuda Sod	240	4.30	1032	March - Sept
1701	1	Autryville	Small Grain OS	75	4.30	322.5	Oct - Mar
1701	3	Goldsboro	Corn	140	19.95	2793	March - July
1701	3	Goldsboro	Wheat	144	19.95	2872.8	Sept - April
1816	4	Autryville	Bermuda Sod	240	11.54	2769.6	March - Sept
1816	4	Autryville	Small Grain OS	75	11.54	865.5	Oct - Mar
1816	5	Norfolk	Corn	120	6.30	756	March - July
1816	5	Norfolk	Wheat	144	6.30	907.2	Sept - April
1819	6	Goldsboro	Corn	140	6.40	896	March - July
1819	6	Goldsboro	Wheat	144	6.40	921.6	Sept - April
71605	7	Autryville	Corn	80	26.30	2104	March - July
71605	7	Autryville	Wheat	96	26.30	2524.8	Sept - April
1605	8	Autryville	Bermuda Sod	240	12.26	2942.4	March - Sept
1605	8	Autryville	Small Grain OS	75	12.26	919.5	Oct - Mar
71604	9	Norfolk	Corn	120	29.30	3516	March - July
71604	9	Norfolk	Wheat	144	29.30	4219.2	Sept - April
1819	Fin 1-3	Goldsboro	Corn	140	29.10	4074	March - July
1819	Fin 1-3	Goldsboro	Wheat	144	29.10	4190.4	Sept - April
Total					145.45	38,626.50	

**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	145.45	38,627
Table 2		
Total	145.45	38,627
Amount of N Produced		33,107
Surplus or Deficit		(5,519)

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

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

$$6,131 \text{ animals} \times 3212 \text{ (gallons) waste/animal/year} = \frac{19,692,772}{19,692,772} \text{ (gallons) waste/year.}$$

Amount of Plant Available Nitrogen (PAN) Produced Per Year

$$6,131 \text{ animals} \times 5.4 \text{ lbs. PAN/animal/year} = \frac{33,107}{33,107} \text{ lbs. PAN/year. (PAN from N.C. Guide Std. 633) Tech}$$

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
1701	1	Autryville	Bermuda Sod	240	4.30	1032	March - Sept
1701	1	Autryville	Small Grain OS	75	4.30	322.5	Oct - Mar
1701	3	Goldsboro	Soybeans	150	19.95	2992.5	April - Sep 15
1701	3	Goldsboro	Small Grain Hay	100	19.95	1995	Oct - Mar
1816	4	Autryville	Bermuda Sod	240	11.54	2769.6	March - Sept
1816	4	Autryville	Small Grain OS	75	11.54	865.5	Oct - Mar
1816	5	Norfolk	Soybeans	150	6.30	945	April - Sep 15
1816	5	Norfolk	Small Grain Hay	100	6.30	630	Oct - Mar
1819	6	Goldsboro	Soybeans	150	6.40	960	April - Sep 15
1819	6	Goldsboro	Small Grain Hay	100	6.40	640	Oct - Mar
71605	7	Autryville	Soybeans	150	26.30	3945	April - Sep 15
71605	7	Autryville	Small Grain Hay	70	26.30	1841	Oct - Mar
1605	8	Autryville	Bermuda Sod	240	12.26	2942.4	March - Sept
1605	8	Autryville	Small Grain OS	75	12.26	919.5	Oct - Mar
71604	9	Norfolk	Soybeans	150	29.30	4395	April - Sep 15
71604	9	Norfolk	Small Grain Hay	100	29.30	2930	Oct - Mar
1819	Fin 1-3	Goldsboro	Soybeans	150	29.10	4365	April - Sep 15
1819	Fin 1-3	Goldsboro	Small Grain Hay	100	29.10	2910	Oct - Mar
Total					145.45	37,400.00	

**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 N^{itrogen}.

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	145.45	37,400
Table 2		
Total	145.45	37,400
Amount of N Produced		33,107
Surplus or Deficit		(4,293)

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.)
1,7,8	Autryville	Corn, Soybeans, Bermuda Sod, small grain	0.6	1
3,6, Fin 1-3	Goldsboro	Corn, Soybeans, and Small Grain	0.4	1
4,5,9	Norfolk	Corn, Soybeans, Bermuda Sod, small grain	0.5	1

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 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 waste being stored in your structure exceed Elevation *see lagoon staff gauge.

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

The method of nutrient removal will be through harvesting the row crops for grain and the bermuda sod and overseed will be completely removed by sod harvesting equipment.

This facility utilizes an underground dry hydrant system with irrigation reels.

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: Turner Sow 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: Turner Farms
(Please print)

Signature:  Date: 5-11-07

Name of Manager (If different from owner): _____

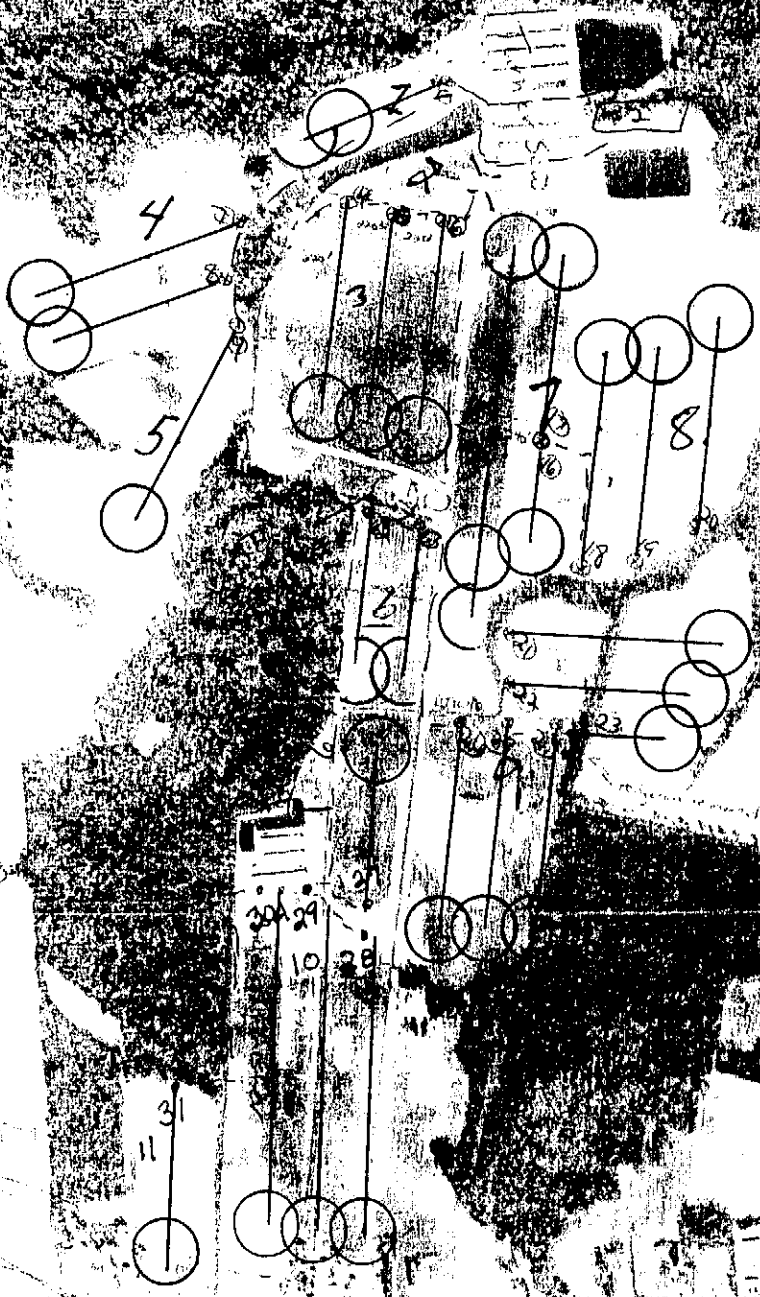
Signature: _____ Date: _____

Name of Technical Specialist: (Please print) Kevin Pope

Affiliation: Murphy Family Ventures, LLC

Address (Agency): PO Box 1139
Wallace, NC 28466

Signature:  Date: 5-11-07



11/3/01