

July 29, 2003

Mike & Karen Gardner Gardner Farms 219 Despain Road Umpire, AR 71971

RE: Plan Update; AFIN No. 31-00089; Permit No. 4034-WG-AW-2

Dear Mr. & Mrs. Gardner:

The Department received an updated waste management plan for the referenced facility on July 14, 2003. The plan has been reviewed and is hereby approved and amended to the above referenced permit. This plan indicates that you wish to change from a 300 sow / 660 feeder pig facility to a 430 sow / 454 weaner pig facility. Since this change results in a less than 10% increase in the amount of waste generated at your facility, it is considered a minor modification and is hereby approved. You should carefully review the enclosed General Permit conditions for this permit. Also enclosed is an updated Statement of Basis.

Enclosed are Annual Report and Land Application Record forms for your convenience. Please write the above referenced Permit and AFIN numbers on all documents you submit to the Department. If you have any questions, please contact the State Permits Branch at (501) 682-0648.

Sincerely,

Billy C. Staton, P.E.

Billy C. Staton

Engineer

Enclosures

cc: Joslyn Burleson, Program Coordinator, State Permits Branch

Shan Lynch, District Field Inspector, Howard County

Randy Childress, USDA Natural Resources Conservation Service

file (AFIN No. 31-00089; Permit No. 4034-WG-AW-2)

STATEMENT OF BASIS

THIS IS A STATE WATER PERMIT FOR A NO-DISCHARGE OPERATION UNDER PERMIT NUMBER 4034-WG-AW-2 AND AFIN (FILE) NUMBER 31-00089. WASTE MUST NOT BE DISCHARGED FROM THIS FACILITY TO THE WATERS OF THE STATE OR ONTO LAND IN ANY MANNER WHICH MAY RESULT IN RUNOFF TO THE WATERS OF THE STATE.

DATE: July 29, 2003

ISSUING OFFICE:

Arkansas Department of Environmental Quality Water Division, State Permits Branch 8001 National Drive Post Office Box 8913 Little Rock, Arkansas 72219

ADEQ EVALUATING ENGINEER: Billy C. Staton, P.E.

APPLICANT:

CONSULTANT:

Mike & Karen Gardner

Randy Childress

Gardner Farms

USDA Natural Resources Conservation Service

2510 N. Hervey, Suite B

219 Despain Road Umpire, AR 71971

Hope, AR 71802

(870) 583-6339

(870) 777-8800

1. **FACILITY INFORMATION**

SIC Code: 0213

NAICS Code: 11221

Facility Type and Size: Swine; 430 sow / 454 weaner pig facility

Waste Storage/Treatment Component(s): holding pond

Freeboard Information: 23 inches

Washwater Source: recycled

Waste Application Method: irrigation system / liquid manure spreader

Total Available Acreage:

69.4 acres

Minimum Acreage Required: 38.1 acres (at 150 lbs N/acre)

Dead Animals Disposal Method: burial / incineration / freezer unit

Stream Segment: 1C

Nearest Stream: Saline River

Nearest Community: Athens

County: Howard

Section: 15 Township: 5 South Range: 28 West

Facility Latitude: 34° 18′ 34″ N

Facility Longitude: 93° 59′ 12″ W

Road Location Description: 1/2 mile west of Athens off Hwy. 84

Additional Site Information: Permit 4034-W issued 5/17/91 for a 300 sow / 660 feeder pig facility. General Permit 4034-WG-AW issued 4/24/95. Updated waste management plan (4034-WG-AW-1) approved on 2/4/98. The current increase to a 430 sow / 454 weaner pig facility is considered a minor modification since this results in a 9.9% increase in the amount of waste generated.

List of all Land Application Sites:

					Total
Site					Available
<u>No.</u>	Owner Name	<u>Section</u>	Township 1	Range	<u>Acres</u>
1	Mike Gardner	15,16	5 South	28 West	41.1
2	Mack Smith	7,18	5 South	28 West	28.3
					50 4
				Total Acres:	69.4

2. GENERAL REQUIREMENTS

The storage volume required for the waste generated at the facility is based on the size of the facility and the amount of waste produced. The waste storage facility must be adequate to handle manure, washwater and rainwater minus evaporation for at least 120 days. This will provide for temporary storage of wastes. The management of the waste storage facility requires that specific freeboard be maintained at all times to provide storage for rainfall from a 25-year, 24-hour design storm event plus the minimum standard design freeboard of 12 inches. Freeboard on the settling basin shall not be less than 12 inches.

Solid material accumulated in all waste storage basins must be removed as necessary to maintain the basin's design volume. Storage basin liners must be maintained to prevent leakage or seepage. Any leaks or seeps must be reported to the Department and appropriately corrected. Any discharge from the waste storage system such as an overflow, broken pipe, etc., must be reported to the Department immediately.

Frequent pump-down of the waste storage facility, especially a total pump-down prior to winter, is necessary in order to reduce the likelihood of overtopping the embankments. Wastes should not be applied to dormant pastures or crops. The storage facility must not be cut, breached or have a spillway of any type.

Based on estimates of nitrogen uptake of specific crops in the form of Plant Available Nitrogen (PAN) a minimum number of acres, excluding buffer zones, must be available as per the management plan.

As required by Regulation No. 5, the permittee must submit a report to the Department prior to May 30 of each year (Annual Report Form will be provided by the Department). The annual report must include the copy of soil analysis for each field and waste analysis. The waste analysis must include pH, Total Nitrogen, Ammonia Nitrogen, Total Potassium, Total Phosphorus, and Percent Solids. The soil analysis must include pH, Potassium, Phosphorus, and Nitrates.

3. BASIS FOR PERMIT CONDITIONS

The Arkansas Department of Environmental Quality has made a tentative determination to issue a permit for the no-discharge facility as described in the application and waste management plan. Permit requirements and conditions are based on Regulation No. 5 and regulations pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et. seq.), and Clean Water Act 33 U.S.C. et. Seq., and 40 CFR Part 122.23, and 40 CFR Part 112 Appendix B.

4. SOURCES FOR DOCUMENT DEVELOPMENT

- A. Regulation No. 5, Liquid Animal Waste Management Systems.
- B. Regulation No. 2, Water Quality Standards for Surface Waters of the State of Arkansas, as amended.
- C. Regulation No. 8, Administrative Procedures, as amended.
- D. Regulation No. 9, Fee System for Environmental Permits, as amended.
- E. USDA Natural Resources Conservation Service (NRCS) Publications:
 - (1) Field Office Technical Guide
 - (2) Animal Waste Management Field Manual
 - (3) Technical Note 716, Lining Requirements
 - (4) Technical Note 102 Supplementing Nutrient and Pest Management Practice Standards
- F. Act 165 of 1993, Public Notice Requirements
- G. ACT 472 of 1949, as amended, Arkansas Water and Air Pollution Control Act