

GEORGIA'S ANIMAL FEEDING OPERATION REGULATIONS

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Introduction

The past several years have brought many changes in the way animal feeding operations are regulated in Georgia. These changes are largely driven by an increasing focus on agriculture as a source of non-point source pollution. Since the U.S. Clean Water Act was passed in early 1970, we have put a tremendous amount of resources into cleaning up point source pollution from municipalities and industries through the National Pollution Discharge Elimination Permit (NPDES) system. Large confined animal feeding operations (CAFOs) are regulated under the NPDES system. Because the NPDES program has been successful in reducing much of the nation's point source pollution, attention has now turned to reducing pollution from non-point sources such as urban stormwater runoff and agricultural runoff.

As part of the focus on agricultural sources of pollution, the United States Environmental Protection Agency (EPA) and the United States Department of Agriculture (USDA) have developed a *Unified National Strategy for Animal Feeding Operations*. An Animal Feeding Operation (AFO) is defined as an operation that confines animals for feeding for 45 days or more during a year in an area that does not support vegetation and is smaller than 1000 animal units. At this time pastures are not considered part of an AFO. The unified strategy focuses on using Comprehensive Nutrient Management Plans to reduce the risk of excess nitrogen and phosphorus entering our surface and ground waters. The strategy also includes a plan to revise the regulations for CAFOs under the NPDES system.



The national focus on animal feeding operations (AFOs) increased pressure for Georgia to develop regulations for these operations. In Georgia, the NPDES program is administered by the Georgia Department of Natural Resources, Environmental Protection Division (EPD) and the state regulations must be at least as stringent as the federal regulations.

In 1999, the Georgia Department of Natural Resources proposed new regulations for the swine industry. These rules were finalized in April of 2000. Then, in December of 2000, new rules and regulations were proposed for non-swine animal feeding operations. These regulations were approved in January of 2001, and only apply to operations with liquid manure handling systems. Both the swine and non-swine regulations are amendments to Georgia's Rules for Water Quality Control, Chapter 391-3-6.

The federal and Georgia approach to regulating AFOs is designed to target the largest operations on the assumption that larger operations pose a greater pollution "risk". Consequently, operations are

regulated according to the number of “animal units”. An animal unit (A.U.) is the method that EPA uses to standardize the regulations across animal species. Different regulations apply for AFOs with 300 A.U. or less, 301 - 1,000 A.U., 1,001 - 3,000 A.U. and more than 3,000 A.U. Table 1 gives the number of animals of different species in these categories.

Table 1. Animal unit equivalents for different species.

Animal Type	300 A.U.	1,000 A.U.	3,000 A.U.
Beef cattle	300	1,000	3,000
Dairy cattle (milked or dry)	200	700	2,100
Horses	150	500	1,500
Swine (greater than 55 lbs)	750	2,500	7,500
Laying Hens or Broilers*	9,000	30,000	90,000

* Only if liquid manure handling system is used

Although small operations (<300 A.U.) are not subject to these state regulations, they are subject to the Clean Water Act and the Georgia Water Quality and Control Act. They are not allowed to have discharge to surface waters and should use nutrient management planning. Remember, if there is evidence of pollution, even a small operation can be designated a CAFO by EPD and would be subject to the Georgia animal waste regulations.

There are several things common to the swine and non-swine regulations. Both regulations focus on the operations developing and following a comprehensive nutrient management plan (CNMP) and having a Certified Operator. Smaller operations (301 to 1,000 A.U.) have to apply for a Land Application System Permit (LAS)

and larger operations have to obtain the more detailed NPDES permit. Both these permits must be obtained from EPD. A copy of the complete regulations can be obtained from the AWARE website - www.engr.uga.edu/service/aware/policy.html. A brief summary of the regulations follows.

Swine Feeding Operation Permit Requirements

Some of the important regulations and dates that an existing swine producer needs to be aware of are:

Operations with 750 to 2,500 head that are more than 55 lbs:

- C submit registration form (due-date past)
- C submit CNMP (due-date past)
- C train and certify an operator by October 31, 2002
- C implement CNMP by October 31, 2002.

Registration forms and NPDES permit forms are available from EPD. The NPDES forms (Form 1 and Form 2B) are also available from the EPA website - <http://www.epa.gov/owm/npdes.htm#forms>.

Requirements for existing swine operations with more than 2,500 head that are 55 lbs or more include all of the requirements above and an individual NPDES permit. This permit was required by October 31, 2000. If you are in this category and did not apply for the individual NPDES permit, you should do so immediately. As mentioned before, the individual NPDES permits are complicated to prepare.



One major difference is that these operations will have to develop a groundwater monitoring plan for lagoons.

Requirements for new operations are more stringent than existing operations. The swine regulations are summarized in Tables 2a and 2b.

Non-Swine Feeding Operations

The non-swine regulations are similar to the swine regulations. Important requirements for existing operations are:

Operations with 301 - 1,000 A.U.

- C apply for LAS permit (due-date past)
- C submit CNMP by October 31, 2002
- C implement CNMP by October 31, 2003
- C train and certify an operator by October 31, 2002

Operations greater than 1,000 A.U. must meet the requirements above and:

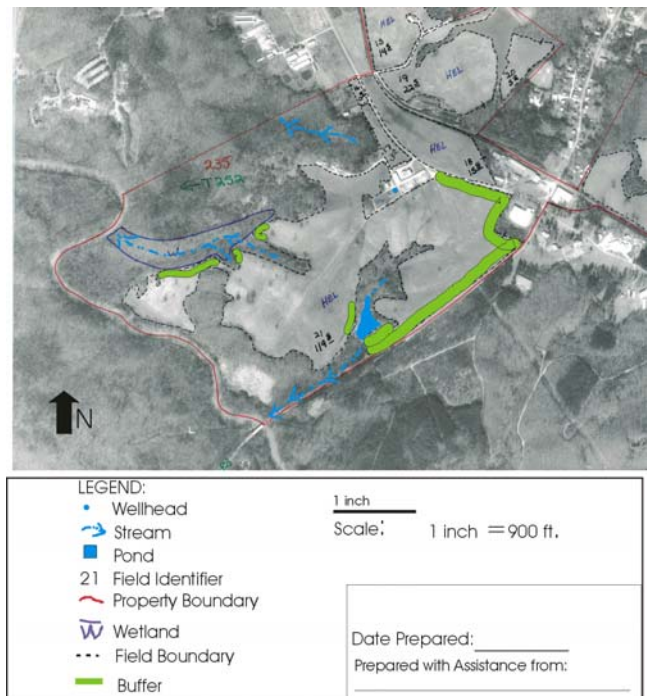
- C apply for NPDES permit that includes a public notification
- C install at least one downgradient well for each lagoon
- C monitor effluent and wells semi-annually
- C submit documentation of lagoon closure when it occurs

Again, requirements for new operations are more stringent. In addition to the above requirements new operations:

- C must have waste handling and storage facilities that meet Natural Resources Conservation Service (NRCS) design criteria
- C cannot locate in the 100-year flood plain
- C must maintain two feet of freeboard in the lagoon
- C must maintain buffers in the land application area
- C must meet all requirements and be approved *before* expansion or start up

The non-swine regulations are summarized in Table 3.

Figure 1. An example of a map for CNMP



Comprehensive Nutrient Management Plans

Comprehensive nutrient management plans are the keystone of all these regulations. A CNMP is a strategy to make wise use of the nutrients on the farm while protecting water quality. In Georgia, a CNMP must contain the following information:

- C a scaled map of the farm showing information such as property lines, land use, field boundaries, surface water, well locations, and buffers (Fig. 1). See the Extension publication - *Maps for Comprehensive Nutrient Management Plans* for details
- C nutrients produced from either site specific data or book values
- C nitrogen available for land application on an annual basis
- C details about the land application system such as the system type, frequency of irrigation, crops, and Best Management Practices used

- C nutrient balance (the amount of nutrients generated on the farm versus the amount of nutrients that can be used by crops on the farm)
- C a mortality management plan for typical annual mortalities and catastrophic mortalities.
- C a list of the records kept on the farm
- C an emergency response plan
- C a closure plan

CNMPs must be developed by Certified Planners. The Georgia Department of Agriculture will certify planners and maintain a list of certified individuals. The certified planners will include NRCS personnel, county agents, certified crop advisors, and other professionals who have attended the CNMP training and demonstrated they can develop an acceptable CNMP.

Certified Operators

In addition to the CNMPs, operations greater than 300 A.U. must have Certified Operators. A Certified Operator must attend training and pass an exam. They must also obtain continuing education. The Georgia Department of Agriculture oversees the training, certification and continuing education requirements.

Resources

Depending on the size of your operation, these plans can be complex. There are resources to help you develop your plan. You can obtain assistance from your county extension agent, NRCS personnel, and from various consultants. There are also various extension publications that can help. These are listed in the bibliography at the end of this publication. Many of these publications and other tools are available on the University of Georgia AWARE website.

Summary

The new regulations require changes in the way AFOs do business. The focus on management of nutrients can improve profitability by better use of nutrients produced on the farms and reduced need for fertilizer

purchase. There may also be opportunities for composting and selling manures for off-farm uses. Although the new regulations require more recordkeeping, the records may help improve farm management and productivity. While these regulations may appear complex, they are designed to protect both the farmer and the environment. Compliance with these regulations will provide the farmer documentation that they are making a reasonable effort to operate their farm in a safe and environmentally sound manner.

This document is intended to be an accurate outline of GA's Animal Waste Regulations at the time of publication, and is not a comprehensive citation. It is recommended that the complete regulations be consulted before making any decisions regarding the current management, future expansion or new construction of an agricultural operation.

Other Useful Publications

- Gaskin, J.W. and G. H. Harris. 1999. Nutrient Management. Georgia Farm*A*Syst System. Cooperative Extension Bulletin 1152-16. College of Agricultural & Environmental Sciences, University of Georgia, Athens, GA.
- Gaskin, J.W. and V. Jones. 2001. Maps for Comprehensive Nutrient Management Plans. Cooperative Extension Bulletin 1195. College of Agricultural & Environmental Sciences, University of Georgia, Athens, GA.
- Gould, M. C., L. Guthrie, and W.I. Segars. 1996. Developing a Nutrient Management Plan for the Dairy Farm. Cooperative Extension Circular 819-16. College of Agricultural & Environmental Sciences, University of Georgia, Athens, GA.
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- Nutrient Management Task Force. 1999. Nutrient Management for Georgia Agriculture. Cooperative Extension Bulletin 1185. College of Agricultural & Environmental Sciences, University of Georgia, Athens, GA.
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