BLUE RIBBON STUDY COMMISSION
ON
AGRICULTURAL WASTE

REPORT TO THE

1995 GENERAL ASSEMBLY

OF NORTH CAROLINA

1996 REGULAR SESSION

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May 16, 1996

TO THE MEMBERS OF THE 1995 GENERAL ASSEMBLY (REGULAR SESSION 1996):

The Blue Ribbon Study Commission on Agricultural Waste submits to you for your consideration its final report on agricultural waste. The report was prepared by the Blue Ribbon Study Commission on Agricultural Waste pursuant to Part IV of chapter 542 of the 1995 Session Laws.

Respectfully submitted,

Tim Valentine
The Honorable Tim Valentine

Ernest A. Carl
Dr. Ernest A. Carl

CoChairmen
The Blue Ribbon Study Commission on Agricultural Waste

PREFACE

The Blue Ribbon Study Commission on Agricultural Waste was authorized by Part IV of Chapter 542 of the 1995 Session Laws. The relevant portions of chapter 542 are included in Appendix A. The Commission Notebook Containing the Commission minutes and all information presented to the Commission in filed in the Legislative Library. The Commission was Chaired by the Honorable Tim Valentine and Dr. Ernest A. Carl. The Full membership of the Commission is filed in Appendix B of this report.

I. INTRODUCTION

The Blue Ribbon Study Commission on Agricultural Waste was created by the 1995 General Assembly to study "the effect of agriculture waste on groundwater, drinking water, and air quality". The driving force behind its formation was the rapid growth of swine farming in the State, particularly in Eastern North Carolina. The expansion of these farms has brought tremendous economic growth to areas of the State that have long suffered from stagnant economies and marginal job opportunities. As the numbers of intensive livestock operations have increased, however, so have concerns about their impact on water quality and on the quality of life for those living in close proximity to the farms. The Commission looked long and hard at these environmental and socioeconomic issues. To appreciate the context of the Commission's analysis, it is useful to consider several trends that have brought North Carolina agriculture to its present state.

Trends in Agriculture. The major trends evident in recent decades can be summed in three words: depopulation, capitalization, and consolidation. Since 1945 the population engaged in farming has continuously diminished, falling to less than two percent of the population. As the number of farms has fallen, acres of cultivated cropland also have declined. During this same period, farm operations have become more capital intensive, and productivity has increased dramatically. Average farm size has continued to grow, reaching 160 acres in 1995. By 1992, seventy-five percent of the value of North Carolina agricultural products were coming from ten percent of the farms. But many states have participated in these background trends. What distinguishes North Carolina's experience are the simultaneous changes in the composition of its agriculture. During the mid 1980s, animal agriculture surged past crop production to reverse the historic relationship of these two sectors. The growth in animal agriculture is owed to two subsectors: swine and poultry.

In contrast, dairy's share of agricultural production has continued a long-term decline, while beef has been a relatively stable performer in recent years. North Carolina broiler production, which has climbed steadily since the late 1950s, reached 644 million in 1994, when it surpassed tobacco sales to become the State's number one agricultural commodity.

Hog production expanded rapidly between 1991 and 1995, when the swine inventory rose from 2.7 million head to 7.5 million head: an average annual growth rate of nearly thirty percent. This record propelled North Carolina from a rank of sixth among the states to a number two ranking behind only Iowa. Production growth has been concentrated, both in the sense that a limited number of counties have been affected and in the sense that a limited number of producers have accounted for a lion's share of the increased production. During this period, the number of hog farms actually declined, while large, intensive operations raising thousands of animals in confined areas expanded. The economic effect in impacted areas was tremendous.

Sampson County raised its per capita income level from eighty-three percent of the State average to one hundred two percent (102%) of the State average in just the five years between 1988 and 1992. Duplin County went from seventy-eight percent to ninety-two percent over the same interval. The economic performance of the livestock and poultry sectors is cause for enthusiasm among beneficiaries. However, the increased animal inventory has been accompanied by a concomitant increase in animal waste. Complaints about the effects of increasing numbers of swine farms triggered the introduction of legislation in both the 1993 and 1995 Sessions of the General Assembly. A lagoon failure in June 1995 focused the public's attention on the attendant water quality issues.

Water Quality Regulations. Until recently, animal waste was a topic that occupied only a few paragraphs from the thousands of pages of State and federal environmental regulation. Federal rules specifically define large "concentrated animal feedlots" (inventories greater than 1,000 cattle; 2,500 swine; 10,000 sheep) as point sources, implying that they should be regulated under the same National Pollution Discharge Elimination System (NPDES) that issues permits for industrial and municipal wastewater discharges.

Beyond that specific mention, farms at a lesser scale are presumably prohibited along with all other enterprises from introducing pollutants to navigable waters through "discrete conveyances" that is, point sources, except under color of a permit. However, the environmental impact of farming is generally believed to be from runoff from pastures, fields, and feedlots, rather than from the point source discharge of pollutants.

Federal law largely leaves the regulation of these nonpoint sources to the states. Agriculture's potential impact was only recognized when states began to look seriously at "nonpoint source" pollution as a cause of persistent water quality problems.

Historically, animal waste management systems in North Carolina were "deemed permitted" so long as they were operating without discharging pollutants to surface waters. However, rapid expansion of the swine industry in Eastern North Carolina, together with water quality problems attributed to the dairy industry in the Piedmont and mountain areas, pointed to the need for additional regulatory control. In the early 1990s, North Carolina regulators deftly bypassed practical arguments about whether animal agriculture should be regulated as a point source or a nonpoint source or both, and legal arguments about the limits of federal law by including animal waste management as a category of activity requiring a "nondischarge permit".

The nondischarge program is a State government innovation. It requires State permission to handle or dispose of waste that cannot legally be discharged into a waterway on grounds that, if a discharge did occur, it would be injurious to water

quality. Farms raising livestock were made subject to State nondischarge rules (see 15A NCAC 2H. 0200, popularly known as the .0200 rules). Animal farming operations that have fewer than 100 head of cattle, 75 horses, 250 swine, 1,000 sheep, or 30,000 birds using wet waste management systems are simply deemed to be permitted without meeting any new requirements. Those operations with stocks above those thresholds are also deemed permitted, but only if they develop and follow approved waste management plans that incorporate best management practices promulgated by the North Carolina Soil and Water Conservation Commission or the United States Department of Agriculture.

To retain deemed permitted status after December 31, 1997, farmers must have supplied the Division of Environmental Management (DEM), a State agency, with a form assuring that their plan has been reviewed and certified. New or expanding livestock facilities must obtain certified animal waste management plans prior to stocking animals. Animal operations that were functioning prior to February 1, 1993, referred to as "existing operations", are treated differently than those that came on line after that date. Existing animal waste management systems must meet operating and maintenance standards. They are not required, however, to meet facilities design and construction standards.

Obviously, the animal waste management plan is the keystone in this regulatory system. The animal waste management plan includes four basic elements that are prepared on a site-specific basis. The elements are: (1) waste collection, (2) waste storage, (3) waste treatment, and (4) waste application. Each element of the plan requires the implementation of one or more agricultural "Best Management Practices" or "BMPs".

BMPs are a set of measures believed on the basis of field experience and scientific measurement to reduce nonpoint pollution. BMPs include such items as grassed waterways, filter strips, and terracing: traditional conservation techniques that have been subsidized by the State through some form of cost-sharing. Agricultural BMPs are not generally defined; however, the Soil and Water Conservation Commission has been charged with developing a list of acceptable BMPs that may be used in developing certifiable plans under the .0200 rules. It is worth noting that North Carolina has funded BMPs aggressively since 1984, when the Agriculture Cost Share Program for Nonpoint Source Pollution Control was created with a $2.0 million appropriation to encourage soil loss prevention and minimize sedimentation. By 1995 funding had grown to $8.2 million, and more than 2,000 farmers were receiving reimbursement of up to seventy-five percent of the cost of practices designed to protect soil and water, including improved animal waste management.

Qualified technical specialists designated by the Soil and Water Conservation Commission must certify that each element of the animal waste management plan meets standards set forth in the Technical Guide published by the Natural Resource

Conservation Service, United States Department of Agriculture. BMPs approved for use in the Agriculture Cost Share Program for Nonpoint Source Pollution Control are also approved for use. The standards cover both the design of facilities, like lagoons or storage pits, and the operating specifications, such as "agronomic" waste application rates that avoid overloading the absorptive capacity of spray fields. Buffers must separate both the spray fields and storage of treatment facilities from perennial streams.

The preparation and certification of animal waste management plans to meet the nondischarge rules has been a troublesome exercise. Technical specialists include representatives from the Soil and Water Conservation District Offices, Cooperative Extension agents, staff of the Natural Resources Conservation Service, and professional engineers. Interpretations of the rules and rule requirements vary among the agency representatives. The result has been confusion among the regulated community and delays, both by farmers in seeking assistance to obtain certification of animal waste management systems and by local technical specialists who are reluctant to certify that plans meet the no discharge standards.

Other Laws and Regulations. In addition to water quality regulations, there are other requirements scattered throughout the North Carolina General Statutes that impact on the operation of livestock facilities. During the 1995 Session, Senate Bill 974 was ratified, adding a new Part to Article 21 of Chapter 143 of the General Statutes. Senate Bill 974 requires the Division of Environmental Management, in cooperation with the Cooperative Extension Service, to develop and administer a training and certification program for animal waste management operators on swine farms. Each applicant is required to complete at least six hours training and pass an examination. As of January 1, 1998, only a certified operator may apply animal waste to the land.
As is indicated by the descriptions above, the livestock industry is regulated largely at the State level. Resources available to local governments to control the burgeoning livestock industry are limited. County public health departments may enact ordinances affecting the operation of livestock farms; however, such ordinances must have a public health basis. A few counties have imposed moratoriums on the construction of new swine farms. These moratoriums are grounded in the general police power delegated to the counties by the General Assembly.

One of the primary tools a county may use to plan for orderly growth within its limits is zoning. Bona fide farms, however, are exempt from county zoning authority. The General Assembly has attempted to deal with the issues spawned by the proliferation of swine farms by enacting legislation during the 1995 Session that provides statewide minimum setbacks for swine farms. The General Statutes now provide that swine houses and lagoons on farms sited after October 1, 1995, must be situated at least 1,500 feet from any residence, 2,500 feet from any church, school, or hospital, and 100 feet from any residential property line. The statutes further require a minimum

50-foot buffer for land application of wastes from the boundaries of residential property and perennial streams.

The North Carolina General Statutes also contain "right to farm" provisions. These statutes were enacted in recognition of the conflicts that arise when nonfarm uses extend into agricultural areas. Their intent is to reduce the loss of agricultural resources by limiting the circumstances under which they can be declared a nuisance. No agriculture or forestry operation that was not a nuisance at the time it was begun, may become a private or public nuisance by virtue of changed conditions in the area after it has been in operation for one year. The exception does not apply where nuisance results from the negligent operation of the facility.

Issues Addressed By the Commission. The Commission spent several months identifying and sorting issues that appeared most central to its charge. Generally, those issues fell into four categories. The first area of concern was **the adequacy of program management.** For example: Is there coordination and consistency among the several State and federal agencies that have roles in the regulation of animal agriculture? Are agencies dedicating sufficient manpower and other resources? Do they have realistic plans for completion of the certification process by the 1997 deadline?

The second broad issue was **the adequacy of the standards** that are being applied through the nondischarge program. For example: Do the specifications for lagoon design realistically address the potential for emergencies? Should land or buffer requirements be explicitly based on risk of environmental damage? Are there satisfactory safeguards against groundwater contamination from seeping storage pits? Should animal operations be subjected to local zoning control as well as State environmental regulations?

The third general category was **the adequacy of enforcement and compliance.** For example: Should the "deemed permitted" approach be replaced with a more aggressive regulatory design? Should animal waste management systems be inspected? If so, how often?

The last area of concern was the necessity for **future research initiatives.** As has been noted above, there is a serious lack of data on the impact of intensive livestock operations on groundwater supplies. Further information is also needed to identify nonpoint sources of nitrates and to direct regulatory efforts toward nutrient control in a cost-effective manner. Finally, it is clear that vigorous efforts need to be undertaken to develop new animal waste management technologies to protect the environment and improve the quality of life for those living in close proximity to livestock farms.

The findings and recommendations adopted by the Commission do not exhaust all of the issues that were taken up under the cited categories. In some cases, members felt that they had insufficient information to reach conclusions. In other cases, members became well informed but could not reach agreement. Responding to public opinion, members focused upon animal waste as opposed to the more general topic of agricultural waste, and discussion naturally gravitated toward swine farming because of the controversy attending their rapid growth during recent years.

II. FINDINGS AND RECOMMENDATIONS

As noted in the introduction, the Commission made extensive findings and recommendations in four areas: The adequacy of program management, the adequacy of standards, the adequacy of compliance and enforcement, and future research initiatives. The following contains a narrative of the findings made by the Commission on each issue, followed by the recommendations based upon those findings.

A. ADEQUACY OF PROGRAM MANAGEMENT

Through testimony received in public hearings and evidence presented by State and federal personnel, the Commission learned that issues of program management continue to plague government agencies involved in regulation of intensive livestock operations. Many of the problems are routine travails of bureaucracy that would be overlooked in other circumstances, however, the urgency and scale of public concern about agricultural waste policy magnifies administrative weaknesses. Unless steps are taken to address these weaknesses, confidence will erode both among interested citizens and among members of the regulated community.

Agencies from all three levels of government have some hand in the regulatory system. From the federal level, the Natural Resource Conservation Service (NRCS) within the Department of Agriculture (USDA) has a direct role as a provider of technical assistance to farmers, while the Environmental Protection Agency (EPA) has an indirect role as administrator of federal environmental programs. At the State level, the Division of Environmental Management (DEM) and the Division of Soil and Water Conservation (DSWC), both agencies within the Department of Environment, Health, and Natural Resources (DEHNR), have direct roles: the first as an environmental regulatory agency and the second as a provider of both technical and financial assistance to farmers.

The North Carolina Department of Agriculture (NCDA) and the North Carolina State University Cooperative Extension Service (CES) are State-level agencies that provide technical assistance, training, and laboratory services to farmers. At the local level, Soil and Water Conservation Districts (SWCDs) allocate cost-sharing resources and provide technical assistance to farmers.

At present there is no single deliberative or authoritative body that represents the combined efforts of these agencies. Attempts to harmonize policy information being distributed to farmers have been partially successful, however, contradictions remain. Obvious confusion and disagreement over the meaning of such key concepts as "no discharge of pollutants" gives the regulations a tentative quality not encouraging to

farm operators, for whom compliance may mean a long-term investment in equipment or land.

A-1. "ZERO DISCHARGE" STANDARD

The interpretation of the zero discharge requirement under the .0200 rules is significant and has important implications. "No discharge of pollutants" is often confused with and used interchangeably with "no discharge of water". "Animal waste management system" is defined under the .0200 rules as "a combination of structural and nonstructural practices which will properly collect, treat, store, or apply animal waste to the land such that no discharge of pollutants occurs to surface waters of the State by any means except as a result of a storm event more severe than the 25-year, 24-hour storm".[1] This language is interpreted by some technical specialists as establishing a performance standard rather than a technology standard. Technical specialists justifiably are reluctant to sign the certification statement for an animal waste management plan because of the lack of clarity regarding the interpretation of the zero discharge requirement and their concern regarding potential legal liability. The current slow pace of certification of animal waste management plans is in part caused by the confusion surrounding the meaning of "no discharge".

Recommendations

1. The "no discharge" requirement under the .0200 rules should be clarified by the Environmental Management Commission as to whether it is a performance standard or a technology standard so that technical specialists can determine what discharge limitation the animal waste management plans they certify must satisfy.

2. The Environmental Management Commission should amend the definition of animal waste management system under the .0200 rules as necessary to give "no discharge" a meaning that is economically practical and technologically achievable.

A-2. REGULATORY CONSISTENCY

An animal waste management plan must be certified by a technical specialist. Some technical specialists are employees of the Soil and Water Conservation Districts (SWCD), some are employees of the Natural Resources Conservation Service (NRCS), some are employees of the Agronomic Division of the North Carolina

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1 15 NCAC 2H.0203(3).

Department of Agriculture (AgrD). and others work for the North Carolina State Cooperative Extension Services (CES). (Private professional engineers also can serve as technical specialists.) AgrD also provides technical assistance to farmers in developing waste utilization plans.

Involvement by these various agencies can easily lead to uncertainty and confusion within the regulated community. Currently, personnel from NRCS, DSWC, AgrD, and CES do not provide uniform interpretation of the .0200 requirements for certification of animal waste management plans. A single reliable source of information and assistance is vital. Operators and technical specialists need to be kept informed of new interpretations and revised procedures that affect the certification process. Interagency training is needed in some instances.

Further, interagency teams are needed to provide uniform strategies for operators to meed the certification deadline. Communication among operators, technical specialists, NRCS, DSWC, CES, AgrD, and DEM is often inadequate to facilitate the certification process. Industry can and should assist the education and communication processes.

Recommendations

1. This Commission endorses the interagency group formed in February 1996, which consists of two representatives from each of four agencies: NRCS, DEM, DSWC, and CES. Two representatives from the North Carolina Department of Agriculture should be added to that group. The interagency group should address questions from technical specialists, publish its decision on a regular basis, and remain in existence until such time after December 31, 1997, that the Secretary of Environment, Health, and Natural Resources determines the interagency group is no longer needed to resolve issues related to certification of animal waste management plans.

2. Establish a county team in each Soil and Water Conservation District (SWCD). Each team should consist of a technical specialist from each of three agencies: NRCS, DSWC, and CES.

3. Establish regional animal waste teams that include representatives from the following agencies: NRCS, DSWC, CES, and NCDA. The regional teams should analyze county needs and coordinate whatever assistance regarding the .0200 rules is needed.

4. The Natural Resource Conservation Service, the Division of Environmental Management, the Division of Soil and Water Conservation, the Agronomic Division, NCDA, and the Cooperative Extension Service should update the Guidance Document, a memorandum from NRCS, DEM, DSWC, and CES, and

circulate the updated version to all technical specialists, including private and industry technical specialists.

5. Before June 1, 1996, NRCS, DSWC, CES, and the NCDA should conduct joint on-site animal waste training for all technical specialists to ensure consistent, quality work. Leadership for NRCS, DEM, DSWC, CES, and NCDA should be present to explain what is expected of the technical specialists and to empower them to use their best judgment in designing animal waste management systems without fear of being second guessed or overruled.

A-3. .0200 CERTIFICATION DEADLINE

Many operators subject to the .0200 rules are unsure that the December 31, 1997, deadline to have an approved animal waste management plan will be enforced. A perception exists among operators that public pressure will force more changes that will render today's certification invalid. If a large number of operators wait until shortly before the December 31, 1997 deadline to initiate the certification process, Natural Resources Conservation Service, Division of Soil and Water Conservation, and Cooperative Extension Service will be unable to provide adequate or timely technical assistance. Lack of engineering assistance is a particular concern of operators. There is little incentive to encourage operators to initiate the certification process well before the deadline.

Current funding for technical support for design, inspection of construction, and testing of animal waste management systems is adequate.

Current funding for the Agriculture Cost Share Program for Nonpoint Source Pollution Control is inadequate to accomplish the certification of animal waste management plans by December 31, 1997. The current limitation on the disbursement of agriculture cost-share funds is not justified and hinders the certification process.

Recommendations

1. Do not relax the .0200 rules by postponing the December 31, 1997 certification deadline. Communicate this position to all operators of intensive livestock operations.

2. All operators should be advised to contact their SWCD by September 1, 1996, and initiate the certification process. Those who meet this deadline should be given high priority to receive technical assistance; those who do not should not be assured technical assistance by the December 31, 1997 deadline. The Environmental Management Commission should be authorized to enter into

special agreements or special orders so that operators who register by the September 1, 1996 deadline and make a good faith effort to meet the certification requirements by December 31, 1997 will not be held in violation of the .0200 rules. The special agreement should set forth an enforceable schedule that would bring the operator into compliance. The Environmental Management Commission should strictly enforce the penalties available against those operators who fail to sign up or otherwise fail to make a good faith effort to be certified by the deadline.

3. The assigned technical specialist should present the operator with a timetable to accomplish the steps of certification. This timetable should be specific to the circumstances of each operator. The timetable should include a deadline for the technical specialists to arrive at design alternatives for that operation and a deadline for the operator to make a design decision. The same process should follow until implementation is complete.

4. Appropriate funds to the Division of Soil and Water Conservation for technical support to producers. These funds should be used for design, inspection of construction, or testing of animal waste management systems that are needed for certification under the .0200 rules.

5. The animal agriculture industry should be more aggressive in education and coordination efforts on certification under the .0200 rules.

6. Appropriate $3,800,000 to DEHNR for the Agriculture Cost Share Program for Nonpoint Source Pollution Control and remove the current $15,000 annual cap and substitute a $75,000 total cap for funds received by a recipient under this program. Consider other incentives, including tax incentives, that will encourage farmers to adopt environmentally sound animal waste management practices. Funds for animal waste management should be allocated to projects in river basins in order that the funds will have the greatest impact on improving water quality.

7. The Natural Resources Conservation Service and Cooperative Extension Service should allocate resources such that tasks related to the certification process under the .0200 rules are given priority.

A-4. LOCAL ZONING/PUBLIC NOTICE

Counties may enact ordinances that affect swine operations under the counties' authority to regulate conditions detrimental to the health, safety, or welfare of its

citizens.[2] Also, local boards of health may adopt rules necessary to protect the public health.[3] However, counties are prevented from enacting zoning ordinances that affect bona fide farms.[4]

Senate Bill 1080,[5] enacted in the 1995 Session, placed restrictions on the siting of intensive livestock operations. Intensive analysis of data from Pitt County, which is representative of a swine-producing area of North Carolina with respect to its population, population density, land area, and geography, shows that the impact of Senate Bill 1080 is substantial. Senate Bill 1080 essentially operates as a statewide land-use planning law. It is in the best interest of the State that siting limitations be uniform throughout the State and that siting limitations be established by the General Assembly rather than by local governments.

Adjoining property owners should be informed of plans to construct a new swine farm, or expansion of an existing swine farm beyond the capacity of its current animal waste management system, before a permit is issued by the Division of Environmental Management. Adjoining property owners should not be able to block the siting of a swine operation that otherwise complies with all applicable laws and rules. Neighbors should have an opportunity to bring to the Division's attention any reasons known to the neighbors that the proposed operation would violate an applicable law or rule. The intent of the notice requirement is to establish a dialogue between swine farmers and their neighbors and to assure that neighbors will have an opportunity to have written input to the permit process.

Recommendation:

1. Do not extend the authority of counties to adopt zoning ordinances that affect intensive livestock operations.

2. After completing the site evaluation and before the farm site is modified, a person who intends to construct a swine operation shall attempt to notify all adjoining property owners and all property owners who own property located across a public road, street, or highway from the swine farm that the person intends to construct the operation. This notification shall be by certified letter sent to the addresses on record at the property tax office. The letter shall include:

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2 153A-121

3 130A-39

4 G.S. 153A-340

5 Article 67, Chapter 106 of NC General Statutes

(1) The name and address of the person intending to site the swine operation.

(2) The type of swine operation and the design capacity of the animal waste management system.

(3) The name and address of the technical specialist preparing the animal waste management plan.

(4) The address of the local Soil and Water Conservation District Office.

(5) Information informing the adjoining property owners and all property owners who own property located across a public road, street, or highway from the swine farm that they may submit written comments to the Division of Environmental Management.

This recommendation applies to new swine operations and to those operations expanded beyond the design capacity of the existing animal waste management system.

A-5. SITING LIMITATIONS FOR SWINE FARMS

The interpretation of the language in Senate Bill 1080[6] is not consistent with the original intent of the legislation due to the use of ambiguous language. Senate Bill 1080 was intended to apply to the siting of swine houses or lagoons that are located only on new swine farms, that is, farms for which a site evaluation is completed on or after October 1, 1995. It was intended to affect new swine operations and certain expansions of swine farms that had swine houses or lagoons constructed before October 1, 1995. Senate Bill 1080 was not intended to apply to expansions that were anticipated before October 1, 1995. The registration or the approved waste management plan indicated whether the expansion was anticipated before October 1, 1995. Further, Senate Bill 1080 was not intended to apply to expansions that are necessary for compliance with the animal waste management rules but are not for the purpose of increasing the animal population.

As the agency that issues permits for intensive livestock operations, DEM is the appropriate agency to enforce Senate bill 1080. The enforcement mechanism for Senate Bill 1080 should be explicitly stated in the legislation.

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6 Ibid

Recommendation

Amend the Swine Farm Siting Act to clarify ambiguous language and to add an enforcement mechanism as provided in the Commission's legislative proposal.

A-6. BASINWIDE PLANNING

Basinwide planning is a systems approach to planning. Basinwide plans consider all point sources and nonpoint sources of pollutants in surface water and groundwater. The extent of the contribution of animal waste to nonpoint sources of pollution, if any, cannot be calculated at this time. The Department of Environment, Health, and Natural Resources already has the authority to develop basinwide management plans for the 17 river basins in the State. The basinwide management approach to protecting the waters of the State is a desirable approach.

Recommendation

The Commission endorses the basinwide approach to water quality protection and encourages the accelerated development of basinwide management plans.

B. THE ADEQUACY OF STANDARDS

A second broad group of concerns heard by the Commission revolves around the standards and requirements being applied to intensive livestock operations through the regulatory processes. The Commission concluded that requirements being imposed through the .0200 rules are adequate to protect the environment. The Commission was apprized that the current standards in the NRCS Technical Guide were in the process of being revised by a group consisting of three subcommittees, charged to revise the technical standards related to animal waste. Problems may exist now, testimony suggested, but they will disappear as the rules are implemented. This opinion was offered by both the Department of Environment, Health, and Natural Resources and by representatives of the swine industry. The set of recommendations that follows represent what the Commission considered to be improvements to the .0200 rules.

B-1. POULTRY DRY WASTE

Although poultry farms are currently subjected to the nondischarge rules, they are also required by those rules to prepare waste management plans only in those rare cases where the flock exceeds 30,000 birds and wet litter disposal systems are employed. Dry litter poultry operators retain a deemed permitted status that continues so long as three conditions are satisfied. These conditions include: (1) spreading dry litter on the land at no greater than agronomic rates, (2) retaining litter disposal records for one year, and (3) siting litter stockpiles more than 100 feet from perennial streams.

Poultry litter is particularly high in such conservative elements as copper and zinc, and the cumulative effect of many years of land application may be soil toxicity. The Commission observed that the current level of regulation does not acknowledge the potential long-term damage to the environment that may occur due to metals buildup. The only practical way to avoid this result is application at carefully computed agronomic rates, coupled with regular analysis of soil and litter samples to monitor soils concentrations.

Recommendations

1. No sooner than December 31, 1997, and no later than December 31, 1999, all poultry operations utilizing dry litter should have an animal waste management plan that includes a soil test to be performed at least annually and a waste analysis as close to the time of application as possible and at least within 60 days of the date of the waste's application. These records should be maintained for no less than three years.

2. Effective as soon as possible, extend the dry litter application records retention period from one year to three years.

B-2. ODOR CONTROL

Odor control is a legitimate public policy issue, even though uncertainty about health effects, the variability observed with odor measurement techniques, and the unpredictable nature of odor causation make reasonable regulation difficult. Commission members reviewed the Swine Odor Task Force report and heard further public testimony confirming the significance of odor as a nuisance factor associated with intensive swine operations. Farmers argue that some odor is a natural and inevitable by-product of animal-raising activity. However, odor can be minimized by using a variety of recognized best management practices that range from air scrubbing systems to simple housekeeping. These practices are not now required as an element of waste management planning nor are they eligible for reimbursement under the State's Agriculture Cost Share Program for Nonpoint Source Pollution Control.

Recommendations

1. Animal waste management plans submitted under the .0200 rules should include a checklist of potential odor sources and a choice of site-specific, cost-effective practices that will minimize those sources. The Soil and Water Conservation Commission should adopt odor control best management practices. These practices should be an enforceable element of the approved plan.

2. Odor management practices should be made eligible for agriculture cost-share funds.

3. Research into economically feasible odor control technology should be accelerated, anticipating that new methods will be developed and that these new methods may be considered for inclusion as a regulatory requirement as they are proven effective. This research should be jointly funded through private and public sources.

4. Odor Best Management Practices requirements should become effective September 1, 1996 and apply to animal waste management systems for which an approved animal waste management plan is obtained on or after that date. The requirements should apply to all other animal waste management systems as of January 1, 1998.

B-3. DEAD ANIMAL DISPOSAL

Representative poultry mortality rates are 10% for turkeys and 5% for chickens. At these rates, given current North Carolina production, operators must dispose of some

45 million poultry carcasses annually. Annual swine mortality, based on similar calculations, is approximately 3.6 million. Although mortality can be regarded as part of the waste stream generated by livestock farms, carcass disposal is not covered in the animal waste management planning requirements of the .0200 rules. Instead, disposal of dead animals is governed by law and regulation aimed at preventing the spread of livestock diseases. North Carolina statutes require that animals be buried at three feet beneath the ground or otherwise disposed of in a manner approved by the State Veterinarian.[7] The Veterinary Division of the Department of Agriculture has issued rules accepting as alternative methods incineration, rendering at a rendering plant, and, in the case of poultry only, composting or placement in a disposal pit.

The problems associated with improper carcass disposal include threats to human health, spread of animal disease, odor, and water contamination. The latter risk is addressed to a degree in the statute allowing burial, inasmuch as that option is not allowed within 300 feet of a flowing stream or public water body. The Commission concluded that the potential for harm has weight sufficient to merit regulatory action.

Recommendation

Provisions for dead animal disposal, setting forth legally acceptable methods whereby mortality will be addressed, should be required as a component of an approved animal waste management plan. These provisions should become effective September 1, 1996 and apply to animal waste management systems for which an approved animal waste management plan is obtained on or after that date and to all other animal waste management systems as of January 1, 1998.

B-4. RIPARIAN BUFFERS

Riparian buffers are cost-effective measures that protect State waters from animal waste runoff. They are thought to reduce nitrogen levels in such runoff by as much as seventy percent. Buffers are one of a few available means to effectively control runoff for dairies.

The width and type of riparian buffer needed varies according to the particular conditions presented. Therefore, buffer requirements should apply site specific standards. The interagency group recommended in A-2 above includes persons with sufficient expertise to determine an appropriate and reasonable standard for mandatory buffers and to decide whether to make this standard site specific, uniform for each river basin, or uniform statewide.

Recommendations

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7 G.S. 106-403; see also G.S. 106-549.70

1. Direct the interagency group to develop a standard for the use of riparian buffers or equivalent controls as a best management practice, particularly along streams designated as "perennial streams" on the United States Geological Survey quadrangle sheets. The interagency group must decide whether a uniform State standard, a basinwide standard, or a site specific standard would best protect water quality.

2. Requirements for riparian buffer best management practices or equivalent controls should become effective September 1, 1996 and apply to animal waste management systems that are constructed or expanded beyond their design capacity on or after that date. Other systems should implement these practices or equivalent controls to the extent that land is available.

B-5. EMERGENCY MANAGEMENT

The .0200 rules consider a 25-year, 24-hour storm event the only emergency sufficient to suspend the no discharge requirement. Frequent heavy rains for an extended period of time, or chronic rainfall as was experienced in eastern North Carolina the summer of 1995 preceding the lagoon spill at Oceanview Farms, can lead to emergency conditions that threaten the environment as much as those created by the 25-year, 24-hour storm event. The environment cannot be protected adequately without requiring the development of emergency procedures that must be followed during emergency conditions, including emergencies caused by chronic rainfall. Likewise, animal waste management plans do not adequately address the potential for emergency conditions nor explicitly set forth steps to minimize environmental damage under such conditions.

Recommendations

1. Require emergency spillways for all new and expanding lagoon facilities. Allow existing facilities to use agriculture cost share funds to add optional spillways.

2. Include site-specific emergency management elements in all animal waste management plans, detailing operating procedures that must be followed in times of emergency situations in order to minimize the environmental damage of catastrophic events.

3. Amend the definition of "animal waste management system", which currently appears in the .0200 rules, so that chronic rainfall is treated the same as the 25-year, 24-hour storm event.

4. Emergency spillway requirements should become effective September 1, 1996 and apply to animal waste management systems that are constructed or expanded beyond their design capacity on or after that date.

B-6. WASTE UTILIZATION PLANS/RECORD KEEPING

Balancing nitrogen produced by intensive livestock operations with the nitrogen utilized by the crops to which the waste is applied is critical to avoiding runoff of nutrients. A waste utilization plan that is site specific and based on actual nutrient uptake is the best way to assure nitrogen balance. Waste utilization plans are critical for the protection of water quality. Current agronomic rates for application of wastes onto land are based on nitrogen as the limiting factor. Monitoring waste products and soils for heavy metals and phosphorous in addition to nitrogen is advisable. Currently, testing of waste products and testing of soils are not required under the .0200 rules.

Record keeping plays an essential role both in best management practices and in compliance monitoring. Although the existing .0200 rules provide that animal waste be applied to the land at agronomic rates,[8] no records are required to be kept to demonstrate adherence to the rule. While the NRCS and DSWC have forms to guide farmers in preparation of waste utilization plans, a standard set of forms would provide certainty as to what is required and assist DEM inspectors with their work.

Recommendations

1. Require record keeping as a component of animal waste management plans under the .0200 rules.

2. Record-keeping requirements should be established by the Environmental Management Commission, Natural Resource Conservation Service, and the Soil and Water Conservation Commission, with technical assistance from the Cooperative Extension Service.

3. For both wet and dry systems, require periodic testing of soils at crop sites and of waste products that will be used as nutrient sources. Soils should be tested annually. Lime should be applied to maintain pH in the optimum range for crop production. Waste products should be tested as close to the time of application as possible and at least within 60 days before or after the date of waste application. Nitrogen should be used as the rate determining element, but buildup of zinc and copper in the soils should be monitored and alternative sites used when these elements approach excessive levels.

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8 15A NCAC 2H.0217(a)(1)(H)(iv).

4. Require waste utilization plans to assure a balance of nitrogen application rates and crop requirements for nitrogen. Yield data and plant analysis should serve as the mechanism for maintaining this balance of nitrogen.

5. Testing and recordkeeping requirements should become effective September 1, 1996 and apply to animal waste management systems for which an approved animal waste management plan is obtained on or after that date. The requirements should apply to all other animal waste management systems as of January 1, 1998..

B-7. INSECT CONTROL

The Commission considered complaints from the public related to the impact of intensive animal farming on insect populations in the local area, and observed that a potential for nuisance conditions does exist. Like odor, fly infestation can be decreased by recognized site management practices. Many of these can be applied at minimal cost.

Recommendations

1. A list of insect control best management practices should be adopted by the Soil and Water Conservation Commission.

2. Insect control best management practices should be made eligible for agriculture cost share funds.

3. Animal waste management plans should include a checklist of potential insect sources and a choice of site-specific, cost-effective practices that will minimize the sources. These practices should be an enforceable element of an approved animal waste management plan.

4. Insect control best management practices should become effective September 1, 1996 and apply to animal waste management systems for an approved animal waste management plan is obtained on or after that date and to all other animal waste management systems as of January 1, 1998.

B-8. APPLICATOR TRAINING REQUIREMENTS

During the 1995 Session, the General Assembly enacted legislation requiring all persons operating animal waste management systems for swine farms to be certified by DEM.[9] To be certified, each operator must take six hours of instruction and pass

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9 Part 9A, Article 21 of Chapter 143 of the General Statutes.

a test. DEM and CES were directed to develop the program of instruction. The law requires each operator to pay an initial fee of $10 and an annual renewal fee of $10 for certification.

During its review of the applicator training program, DEM brought to the Commission's attention the fact that the Water Pollution Control Systems Operators Certification Commission, established pursuant to Chapter 90A of the General Statutes, might be a more appropriate commission under which to place the certification program. The Certification Commission is charged with the training and certification of operators of systems that collect, treat, or dispose of waste for which a permit is required under rules adopted by the Environmental Management Commission or the Commission for Health Services.[10] All other livestock waste management operators would be certified under this Commission if they were to be regulated. The new law makes swine an exception to the existing statutory scheme.

DEM also indicated that six hours instruction was insufficient to adequately cover the materials that needed to be presented. Moreover, in addition to classroom instruction, some hands-on-training in the field is advisable. To arbitrarily limit the amount of time for training to less than required would likely thwart the overall goal of enhanced water quality protection through use of properly trained waste system operators.

Questions about the potential impact of requiring each producer to pass a test as a certified operator were raised by several Commission members. The Commission concluded that farmers should have the option to hire a certified operator to oversee the farmer's waste management operations and that alternative testing procedures be available to farmers with learning difficulties.

Recommendations

1. Part 9A, Article 21 of Chapter 143 of the General Statutes should be repealed.

2. The program of certification of swine waste management system operators should be placed under the Water Pollution Control Systems Operators Certification Commission.

3. Two persons representing the animal agriculture industry should be added to the Certification Commission.

4. Farmers should have the option to hire a certified operator to manage their waste systems.

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10 G.S. 90A-39

5. The number of hours of required training for certification should be limited to eight hours of classroom instruction and four hours of field training.

6. Upon request, alternate methods of instruction shall be provided for persons with reading or learning difficulties.

7. Make all operator training materials user friendly, taking into account the educational level of the applicant.

C. ADEQUACY OF ENFORCEMENT AND COMPLIANCE

One of the questions placed squarely before the Commission by those seeking enhanced restraints upon the growth of the livestock industry was "Why should agriculture be treated differently from other waste-generating industries?" To address this question, the Commission reviewed the existing exemptions for agriculture or animal operations in the water quality statutes and the basis for granting each exemption. The Commission learned that changes in production techniques and farm size, coupled with the advent of corporate and contract farming, have changed the nature of agriculture. Nowhere is this more clear than in intensive livestock production. The bucolic picture of pastured livestock has given way to a technically advanced system of raising thousands of animals in confined facilities. Typically, millions of gallons of waste produced by each intensive livestock operation are treated and stored in lagoons and disposed of by land application of the waste. Such methods of agriculture are proving extremely efficient and profitable, but they also have created an increased potential for serious water quality problems. It is worth noting that lagoon and land application of waste is a preferred method of waste treatment. The State's nondischarge program has been in effect for at least 20 years. Nondischarge systems, however, must obtain permits under the nondischarge rules and their operators must be certified by the Water Pollution Control System Operators Certification Commission. Not until 1992, however, were the waste management systems for animal agriculture operations formally addressed in the rules and they currently hold a deemed permitted status.

In the past two decades environmental efforts have focused primarily on eliminating point source pollution. Recently, however, there has been an increasing awareness of the role of nonpoint source pollution in the State's water quality problems. Animal waste management systems utilized by intensive livestock operations are both potential point sources of pollution as well as contributors of nonpoint source pollution. Failure to properly construct and manage lagoons and related storage and treatment structures can result in point source pollution as was seen by the failure of several lagoons in eastern North Carolina during the summer of 1995. Failure to properly manage the land application of wastes may result in excess nutrients reaching surface water through means such as runoff.

Based upon the recognition of the increased potential for environmental harm and the increasing industrialization of animal agriculture, the Commission found that many of agriculture's exemptions from the operations of the environmental statutes are no longer warranted. The Commission recommends that differential treatment for agriculture be eliminated where it cannot be justified. The specific recommendations, set forth below, cover a wide range of issues and include replacing the "deemed permitted" status of intensive livestock facilities with a standardized, or "general" permit, setting penalties for errant farming operations equivalent to those

for other environmental violators, requiring annual inspection of intensive livestock facilities and their waste handling operations and the payment of fees for general permit applications.

C-1. PERMITS AND PERMITTING

Under the existing rules, animal waste management systems that meet the appropriate criteria are "deemed permitted" and it is not necessary that owners of these systems apply for and obtain an individual permit.[11] At the suggestion of the Division of Environmental Management, the Commission considered replacing the "deemed permitted" approach to regulation with a general permit model.

The current "deemed permitted" system is based upon each facility obtaining a certified site specific animal waste management plan that incorporates best management practices for waste collection, treatment, storage, and disposal. Other criteria a facility must meet include maintaining minimum riparian buffers and setbacks, and providing adequate land to accommodate the application of animal waste at agronomic rates. The Commission found that the concept of using site specific waste management planning incorporating best management practices is an efficient and effective method of providing protection for the State's surface waters.

There have been difficulties, however, in implementing the current system under the .0200 rules. Under the current rules, all facilities subject to the rules must have obtained an approved animal waste management plan that is certified by a technical specialist by December 31, 1997. As has been noted in detail in A-3 above, many of the producers have not initiated efforts to obtain plan approval. This has been due in part to the confusion among the agencies charged with providing technical assistance and certification. Varying interpretations abound as to what is necessary for certification as well as to what standards apply.

DEM does not participate in the creation of the animal waste management plans but only receives notification that a certified plan has been obtained. Its role in the current certification process is reactive, limited to enforcing the waste management plans. DEM does not review an animal waste management plan except when investigating in response to a complaint.

A shift in regulatory approach to a general permit model would have several significant advantages to the current system. Notably, it would centralize the authority for the permitting, inspection, and enforcement process within DEM. Interpretation of the requirements of the rules would come from a single source. Further, DEM would have a greater level of scrutiny over the waste management

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11 15A NCAC 2H .0217

plans being submitted. DEM would receive the permit application and either approve or disapprove its conformance with the general permit.

As envisioned by the Commission, the general permit model would retain the positive features of the deemed permitted rule. It would allow DEM to issue a permit to a class of activity, here an animal waste management system, based upon compliance with a general set of requirements. The core of the general permit requirement would be the site specific animal waste management plan based upon best management practices determined to be most suitable for that operation. Thus the implementation of a general permit could be accomplished without disturbing the ongoing process of certification. Finally, the issuance of a general permit would have the advantage of placing in the producer's hands a document that spelled out clearly the regulatory requirements applicable to that facility.

Recommendations

1. The deemed permitted approach should remain in place for livestock operations beneath the .0200 thresholds: less than 100 cattle, 250 swine, 75 horses, 1,000 sheep, and 30,000 birds with a liquid waste system.

2. General permits, one for each species of livestock, should replace the deemed permitted status for all animal waste operations equal to or above the .0200 thresholds. (Sample general permits may be found in the appendices to this report.)

3. The animal waste management plans now required under the .0200 rules should be a central component of the general permit.

4. Individual permits may be required for noncompliant facilities and for facilities proposing to use alternative animal waste treatment systems.

C-2. SPECIAL ORDERS

North Carolina's water quality statutes provide the Environmental Management Commission authority to issue special orders compelling persons found to be causing or contributing to water pollution to take or refrain from taking action to eliminate the pollution.[12] This statute also provides the Commission the authority to enter into special consent orders and assurances of voluntary compliance with persons responsible for causing water pollution. This particular compliance "tool" provides needed flexibility in fostering compliance with environmental rules. It allows DEM to provide violators with a schedule of actions to bring their activities into

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12 G.S. 143-215.2

compliance within a specified time frame, with specific stipulated fines for nonperformance. Except in extreme cases, the public interest is served when those in violation of environmental standards are required to correct deficiencies in compliance with a reasonable schedule. Agricultural operations, however, currently are excluded from the operation of these statutes.

As has been noted throughout this report, agriculture has come under increasing regulatory scrutiny and control due to its potential contribution to both point and nonpoint source pollution. As the regulatory burden has grown, the costs of acquiring pollution control technology and implementing environmentally sound management practices have placed an economic burden on agriculture that cannot be shifted to consumers as can be done in other industries. The Commission believes that the use of special orders and special consent orders would benefit the agricultural community by allowing DEM, where necessary, to set a reasonable schedule to obtain compliance with the water quality rules. The Commission also found that the inability to use special orders has hampered the certification process under the .0200 rules, particularly in the case of the dairy industry, by limiting the Department's ability to work with farmers who are attempting to implement best management practices but are limited by time and financial constraints and weather.

Recommendation

Amend the statutes to give the Environmental Management Commission authority to enter into special orders and special consent orders with agricultural operations in violation of the water quality statutes.

C-3. PENALTIES

Current law provides that fines and penalties for the construction of conveyances, such as pipes or ditches, on livestock or poultry farms for the willful discharge of wastes to the waters of the State may not exceed $5,000 for the first offense.[13] Other environmental violations, however, may carry civil penalties of up to $10,000.[14] The Commission could find no compelling reason for limiting the penalties that may be imposed upon livestock and poultry producers for willful violation of the water quality statutes.

Recommendation

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13 G.S. 143-215(e)

14 G.S. 143-215.6A

Penalties for constructing conveyances on livestock and poultry farms for the purpose of willfully discharging pollutants to the waters of the State should be set at $10,000, consistent with the civil penalties imposed for other environmental violations.

C-4. INSPECTION AND ENFORCEMENT

Inspections are a part of the everyday compliance monitoring done by the Division of Environmental Management and a fact of everyday life for the regulated community. Major permitted facilities are usually subject to annual inspection, while smaller operations may be inspected as infrequently as every five years. Animal waste management systems, however, have never been subject to routine inspections. Historically, the Division of Environmental Management has inspected such facilities only in response to complaints.

Recommendations

1. A systemic monitoring and inspection program should be applied to intensive livestock operations. The program should involve technical assistance from the Division of Soil and Water Conservation, the Natural Resources Conservation Service, the Agronomic Division of NCDA, and the Cooperative Extension Service. Regulatory inspections should be conducted by the Division of Environmental Management.

2. Each intensive livestock operation may be subjected to an annual operations review to assure full compliance with applicable laws and regulations. This review may be carried out by qualified staff from Soil and Water Conservation Districts. Operators should be advised of minor deficiencies found during the review and should be given reasonable opportunity to correct those deficiencies before enforcement action is taken. In the event of major deficiencies posing an immediate threat to the environment or in cases of operator intransigence, Division of Environmental Management enforcement personnel should be directly and immediately involved.

3. Each intensive livestock operation and its animal waste management system that is required to obtain an approved animal waste management plan should be inspected annually. Additional inspections should be scheduled for facilities found to be noncompliant.

C-5. FEES FOR PERMITTING AND INSPECTION OF ANIMAL WASTE MANAGEMENT SYSTEMS

The collection of fees from regulated industries to offset the costs of implementing environmental programs is established policy in North Carolina. As agriculture becomes increasingly subject to environmental regulation, the question arises whether

agriculture should also pay a like share for the programs required to ensure their compliance with water quality statutes and rules. After considerable debate, the Commission agreed that the animal agriculture industry should contribute to the cost of implementing the permitting and inspection program recommended in this report. The fee would be imposed upon each swine, cattle, and poultry operations required to obtain a permit for its animal waste management system from DEM. As recommended by the Commission, this fee would be tiered and assessed on a live weight basis. No fee would be assessed on those facilities that operate on a deemed permitted basis. The total amount of the fees collected by DEM should not exceed 40% of the total cost of the regulatory program. This is consistent with the limitations on fees that may be assessed other industries that are required to obtain water quality permits.

Recommendations

1. DEM should be authorized to collect an annual fee to cover up to 40% of the cost of its permitting and inspection program for animal waste management systems.

2. The fees shall be structured on a tiered basis as follows:
    a. For each animal waste management system with a design capacity of at least 38,500 pounds steady state live weight and less than 100,000 pounds steady state live weight, the annual fee shall be $50.
    b. For each animal waste management system with a design capacity of at least 100,000 pounds steady state live weight and less than 800,000 pounds steady state live weight, the annual fee shall be $100.
    c. For each animal waste management system with a design capacity of 800,000 pounds or greater steady state live weight, the annual fee shall be $200.

3. The fees recommended in this section should be assessed on swine, cattle, and poultry facilities meeting the size thresholds for obtaining a general or individual permit. No fee should be assessed on animal agricultural operations that fall within the "deemed permitted" category.

D. FUTURE RESEARCH INITIATIVES

From the evidence presented to the Commission, it was obvious that additional research is needed in several critical areas in order to develop a regulatory approach based upon scientific fact. The impacts of older lagoons on groundwater quality is not yet known. Sources of nonpoint nitrate pollution in our surface waters have not been specifically identified. Alternate innovative technologies must be pursued and made available to the livestock industry to supplement lagoon and sprayfield technology as part of the overall effort to ensure that their impact upon the environment is minimized.

D-1. ALTERNATIVE TREATMENT METHODS

In the intermediate to long run, exclusive reliance upon lagoon technology as the permitted method of animal waste disposal is not prudent. New and innovative waste management technologies that are proven to be viable should be encouraged. When adequate data exists to indicate the reliability of the technology, backup waste management systems should not be required.

At present, State government does not appear to be actively encouraging the development and use of alternative technologies. A major reason for the failure to accept alternative technologies is the absence of a satisfactory institutional arrangement for testing such technologies.

Recommendations

1. As a matter of State policy, encourage the development of alternative treatment and disposal technologies. Provide incentives to producers to participate in the evaluation of new and innovative animal waste management technologies. Direct the Division of Environmental Management to ensure that the regulatory process is not limiting the use of innovative technologies and that the evaluation of technologies is made in a timely manner.

2. Appropriate funds to the North Carolina Agricultural Research Service for a collaborative venture between the Service and DEHNR, that would serve as a focal point for experimentation with and testing of alternative animal waste disposal technologies for use in agriculture.

3. Encourage the N.C. State University Animal and Poultry Waste Management Center to increase their current efforts to establish and monitor farms for demonstrating alternative technologies.

D-2. GROUNDWATER QUALITY

Some lagoons constructed prior to February 1, 1993, were not required to satisfy Natural Resources Conservation Service design and construction criteria that went into effect February 1, 1993, for all lagoons pursuant to the .0200 rules.

Seepage of wastewater beyond 200 feet of the lagoon as occurred in some instances, in most cases for "old lagoons". According to testing conducted by the Fayetteville Regional Office of Division of Environmental Management pursuant to the Governor's free drinking water well testing program for persons who reside in close proximity to hog farms, of 109 wells sampled, 30 have had nitrate levels in excess of 10 parts per million and 29 have had nitrate levels between 1 and 10 parts per million. To date, it is the opinion of the Division of Environmental Management that at least one hog farm is the cause of the contamination of nearby drinking water wells. The results of the drinking water wells tests to date are a reason for concern and warrant close monitoring.

Groundwater studies currently being conducted include only lagoons constructed according to current Natural Resource Conservation Service standards. More data concerning groundwater quality in the area surrounding hog farms is needed. Additional data regarding the quality of groundwater is needed. A groundwater study should be carefully designed to assure that the best scientific approach is taken in order to provide reliable results.

Recommendations

1. Direct a research institution to design and implement a scientifically based study for the purpose of determining the extent to which lagoons pose a threat, if any, to the groundwater of this State. Select for study lagoons that are representative of soil types and hydrologic conditions in North Carolina.

2. For purposes of this study, a lagoon is posing a threat to groundwater if nitrate levels exceed 10 parts per million outside the compliance boundary of 250 feet.

3. An environmental interest group, a regulatory agency, and a commodity group representing the pork industry should participate in the study.

D-3. WATER QUALITY

Water quality can be degraded by a number of point sources and nonpoint sources of contaminants. Nonpoint sources of nitrates are diverse and potentially include municipal wastewater treatment systems, industrial systems, golf courses, commercial residential lawns, fertilizers, pesticides, animal waste and the natural ecosystem. The nonpoint sources of nitrates should be identified so that operators of intensive livestock operations know the contribution their industry makes to the degradation of

water quality. The technology exists to determine the nonpoint sources of nitrates in the waters of the State.

Recommendation

Fund research designed to identify sources of nitrogen in the surface and groundwaters of the State.

III. PROCEEDINGS

The Blue Ribbon Study Commission on Agricultural Waste met 14 times on the following dates: October 11, 1995; October 25, 1995; November 8 and 9, 1995; November 30 and December 1, 1995; December 13 and 14, 1995; January 10, 1996; January 24, 1996; February 7 and 8 1996; February 20, 1996; March 6, 1996; April 10, 1996; April 24, 1996; May 1, 1996; and May 8, 1996. For a complete record of the Commission proceedings, including minutes for each meeting, refer to the Commission notebooks on file in the Legislative Library in the Legislative Building. A brief summary of the Commission meetings follows:

October 11, 1996

After opening remarks by the Cochairmen Dr. Ernest Carl and The Honorable Tim Valentine and introductory remarks by each on the Commission members, Kelly Zering, Ph.D. Department of Agriculture and Resource Economics, College of Agriculture and Life Sciences, North Carolina State University, provided the Commission with information regarding the historical and economic background of agriculture in North Carolina, emphasizing the poultry and swine industries. Historically, the main North Carolina crop was tobacco, a high value crop that requires relatively small acreage. According to one report, twenty-eight percent of the economy in North Carolina is dependent on agribusiness. In the last seven years, the number of farms in North Carolina that sell at least $1,000,000 in agricultural commodities has dropped from 70,000 to 58,000. In the 1980s the average size farm in this State grew significantly to approximately 150 acres by 1987 and to 160 acres by 1994. Now the average size farm in North Carolina is about one-quarter the average size farm in the Midwest. Like tobacco farms, poultry and hog farms do not require large amounts of acreage. Production contracts are unique to North Carolina and provide a small farmer with a low-risk way to become profitable. On the one hand, poultry production and swine production have provided some small farmers with an economically viable alternative to raising tobacco and a way to stay on the farm and earn a livelihood. On the other hand, increased farm size and increased specialization lower production costs and increase efficiency. Accordingly, the number of hog farms in North Carolina has decreased since 1988, while the number of hogs produced has increased over the same period.

Dr. Zering estimated the total economic impact of the swine industry in North Carolina, including the multiplier effect, at more than $3 billion dollars, over $1 billion dollars of which stays in the pockets of North Carolinians. At present, Iowa is the largest pork producing state with approximately 14,000,000 hogs. North Carolina is second with approximately 8,100,000 hogs. Packing capacity limits the growth of the industry.

Dewey Botts, Director, Division of Soil and Water Conservation, DEHNR, informed the Commission of the Division's role with respect to the regulation of intensive livestock operations and the role of the federal Natural Resources and Conservation Service (NRCS) in both implementing the .0200 rules and providing technical assistance to operators. The N.C. State Cooperative Extension Service and the North Carolina Department of Agriculture (NCDA) also provide technical assistance. Through the Agriculture Cost Share Program for Nonpoint Source Pollution Control, as provided in Part 9 of Article 21 of Chapter 143 of the General Statutes, funding may be provided to assist farmers in implementing certain best management practices or for certain other expenditures that lead to the reduction of agricultural nonpoint source pollution in the waters of the State. The State contributes seventy-five percent of these funds; the farmer is required to provide twenty-five percent. Between now and December 31, 1997, 2,400 to 2,600 intensive livestock operations have to be brought into compliance with the .0200 rules. The dairy operations in the western part of the State have the greatest and most costly problems to address before they are in compliance. It is anticipated that one-fourth to one-third of the dairy operations will have to go out of business due to their inability to afford the cost of coming into compliance.

Mr. Steve Tedder, Chief, Water Quality Section, Division of Environmental Management (DEM), DEHNR and David Harding, staff for the Water Quality Section, spoke of the division's role in enforcing the animal waste management plans required under the .0200 rules and the requirement that operators register with DEM by December 31, 1993. Because intensive livestock operations are deemed permitted pursuant to the .0200 rules, the Division finds itself in a reactive position with respect to enforcement. It responds to complaints brought to its attention. Following the various lagoon spills that occurred beginning in June 1995, the Governor issued an Executive Order that required, in part, that DEM inspect all of the approximately 4, 600 animal waste lagoons in the State. When the final report of the inspections is complete, it will be presented to the Commission.

Susan Iddings, Commission Counsel, informed the Commission of legislation enacted by the 1995 General Assembly regarding intensive livestock operations.

<u>October 25, 1995</u>

This meeting provided an opportunity for various interest groups to express their positions regarding the recent rapid growth of intensive livestock operations in North Carolina. The following persons spoke before the Commission: Walter Cherry, Director, North Carolina Pork Producers' Association (he noted that the major hog counties are in the eastern part of the State, Duplin County is the number one hog-producing county in the nation and the number one turkey-producing county in the nation, and Sampson county is the number two hog-producing county in the nation); Kristin Rowles, Executive Director, Pamlico-Tar River Foundation (she expressed the

Foundation's concern of the adverse environmental impacts of large-scale hog production and recommended a moratorium on the I.B.P. processing plant being considered in the Pamlico-Tar River Basin); Bill Moser, P.E., Law Engineering and Environmental Services (he stated that his firm had submitted a proposal to the North Carolina Pork Producers' Association to produce a report containing their recommendations for any changes to current regulations of the industry); Rick Dove, Neuse Riverkeeper, Neuse River Foundation) he gave a slide presentation to illustrate his assertion that the Neuse Rive is one of the twenty most threatened rivers in all of North America); Roger Bone, Lobbyist, North Carolina Pork Producers' Association (he appeared in lieu of Marion Howard, who was scheduled to speak at this place in the agenda); Bill Holman, Lobbyist, North Carolina Conservation Council and the North Carolina Chapter of the Sierra Club (he acknowledged the contribution of other sources of water pollution in addition to the swine and poultry industries and presented a number of recommendations to the Commission); Jimmy Vincent, Environmental Resources Manager, Browns of Carolina (he assured the Commission that producers are eager to protect the environment and willing to comply with the .0200 rules); Don Webb, President, Alliance For A Responsible Swine Industry (he stated that his citizens' organization seeks to stop the odor associated with swine operations and to stop the pollution of air and water resources).

Michael Williams, Ph.D., Commission member, spoke in his capacity as Director of the Animal and Poultry Waste Management Center, North Carolina State University. The Center is conducting research to determine a means by which animal waste can be used as a valuable resource. Members of the public made remarks from the floor.

November 8 and 9, 1995

The Commission traveled to Duplin County for its next meeting. On November 8, guided by Michael Suggs, District Conservationist, NRCS, the Commission toured the following facilities: Oceanview Farms, the site of the June 21, 1995, lagoon failure; the Joey Carter Farm, site of an experimental waste treatment system that is designed to eliminate the need for a typical waste treatment lagoon; the Gerald Knowles Farm, site of a constructed wetland used to treat animal waste; the David Summerlin Farm, site of a turkey mortality composting facility; and the Circle Q Farms, site of a well-managed, conventional waste treatment lagoon and spray irrigation system for a 4,000 sow farrow to wean facility. At 7:00 p.m. the evening of November 8, the Commission conducted a public hearing at the James C. Sprunt Community College in Kenansville, North Carolina. Approximately 400 people attended this hearing.

On November 9, 1995, the Commission held a meeting in the Board Room of the James C. Sprunt Community College Administration Building. The meeting consisted of discussion among the members of the Commission. No formal presentations were given; members of the public made remarks from the floor.

November 30 and December 1, 1995

This two-day meeting in Raleigh was devoted to water quality issues and focused on the receipt of scientific evidence presented by scientists recognized as experts in their respective fields of study. First, Steve Tedder, Chief, Water Quality Section, DEM, DEHNR, explained the complex issues associated with animal waste management for the swine industry and reported the results of the inspections of animal waste lagoons that were ordered by the Governor after the June 21 lagoon spill at Oceanview Farms. The .0200 rules were adopted by the Environmental Management Commission on December 10, 1992, and became effective February 1, 1993. Pursuant to these rules, all animal operations having equal to or more than the threshold numbers of animals are required to have an approved animal waste management plan by December 31, 1997. At this time, only eight to ten percent of the operations affected by this requirement have an approved plan in place. Mr. Tedder characterized current record-keeping requirements as "woefully inadequate" to protect water quality. Agriculture cost share funds are available to farmers for certain costs associated with coming into compliance with the .0200 rules (G.S. 143-215.74(b)(5) provides that funding may be provided to assist certain practices and for grade control structures, water control structures, and animal waste management systems and application to farmers who volunteer to participate in the program). Mr. Tedder is concerned that farmers who wait will find these funds no longer available.

By November 28, 1995, 4,619 intensive livestock operations had been inspected by DEM staff. Most are located east of Raleigh. Of the total inspected: fifteen percent had inadequate freeboard, four percent exhibited seepage from lagoons, six percent had inadequate cover crops, twenty-six percent kept inadequate records, three percent had inadequate acreage set aside for irrigation with wastewater. Mr. Tedder concluded that the inspections had been extremely informative; previously DEM staff had not been available to conduct inspections. He expressed concern regarding operations that had gone out of business. Closure plans are needed. As a result of the inspections, DEM had initiated a number of enforcement actions. Enforcement options are: the imposition of civil penalties, injunctions filed by the Attorney General's Office, loss of an operator's deemed permit status, or a criminal action. Mr. Tedder made a number of recommendations to the Commission. Dewey Botts, Director, Division of Soil and Water conservation, DEHNR, added that the .0200 rules are inadequate with respect to resources, recordkeeping, and training requirements for applicators of wastewater.

Dr. J. Wendell Gilliam, Professor of Soil Science, NCSU, explained how nutrients leave the soil and get into water. Run off from an individual's house, garden, or from agricultural land contains some nutrients, mainly nitrogen (N) and phosphorus (P). Those nutrients are necessary for life in the water; however, excess nutrients cause problems. If harvested, coastal Burmuda grass removes N from the farm site, but if the grass is used for grazing by livestock, high concentrations of N will be left

at the farm as waste deposited by the grazing animals, and the N eventually gets into shallow groundwater. Phosphorous reacts with soil; therefore, phosphorous stays in surface soil. When used correctly and according to recommendations, animal waste is just as good a fertilizer as inorganic fertilizer. However, it is more difficult to correctly use animal waste as inorganic fertilizer. However, it is more difficult to correctly use animal waste as a fertilizer than it is to correctly use commercial, inorganic fertilizer. The amount of N and P can be adjusted in commercial fertilizer. More P has been added to Coastal Plain soils over the years. Coastal Plain soils are generally higher in P than Piedmont soils. But, when Piedmont soils do become high in P, there is potentially a larger problem with regard to water quality. More N is lost to surface waters from Coastal Plain soils than from Piedmont soils.

Senator Albertson urged the increased use of riparian buffers. Dr. Gilliam stated that at the coast, buffers of 30-50 feet are sufficient; 100 foot buffers consisting of ½ grass and ½ trees are ideal.

Dr. Frank J. Humenik, Professor and Associate Head and Departmental Extension Leader, Biological and Agricultural Engineering, NCSU, assessed animal waste treatment systems. He has been working with these systems in North Carolina since 1969. Dr. Humenik stated that lagoons with land irrigation systems provide cost-effective treatment. The key to that is that they must be properly designed, constructed, operated, and maintained. There are many cost-effective lagoon irrigation systems in North Carolina. The .0200 rules need to address chronic rainfalls in addition to the catastrophic rainfalls that are currently recognized as being outside the "zero discharge" requirement. Dr. Humenik said that he would like to see the Commission direct its attention to how to best handle discharges resulting from catastrophic and chronic rainfall beyond the .0200 rules, either through an emergency spillway or by irrigating onto land, depending upon the site.

Dr. Hans W. Paerl, Kenan Professor of Marine and Environmental Sciences, Institute of Marine Science, Morehead City, UNC-Chapel Hill, gave a detailed slide presentation on issues and problems of waste generated and treated by land application, specifically the atmospheric deposition of N in estuaries and coastal waters. Animal waste contains a variety of N compounds which can be used by algae. Nitrogen is very mobile and can move in a variety of ways to end up in our estuaries and coastal zones. Obvious sources of discharge to surface waters are via pipelines, runoff, and groundwater, but the atmospheric deposition of nitrogen is still another way N gets into estuaries. The atmospheric deposition of N has been the focus of Dr. Paerl's research. The atmospheric deposition of N constitutes about ¼ to 1/3 of N loading.

Dr. Paerl said that a certain amount of N is needed to sustain a healthy food chain, but the problem with excessive N loading is that too many algae are grown for the

rest of the food chain to be able to use. Algae blooms take up oxygen in the water that fish need, leading to fish kills.

Dr. Bill Showers, Associate Professor of Marine, Earth, and Atmospheric Sciences, NCSU, provided a slide presentation regarding a scientific technology that is available now in the State. This technology is able to determine the source of N nutrients found in water. Dr. Showers and Dr. Paerl did a study of the Neuse River in 1980 using a mass spectrometer. This study concluded that there is a difference over time in the source of nitrates. Based on data from the Neuse from 1986-1989, during years of excessive rain, nonpoint sources dominate as the source of nitrates. In dry years, point sources dominate as the source of nitrates. The sources can be discriminated, because the isotopes can be discriminated. Then the isotopic signals for cattle, poultry, and swine waste are determined, the contribution of each of these sources to the N in the surface waters of our State can be determined. This technology, for the first time, provides a means of allocating each sector's contribution to the nutrient loading of our waters.

Dr. Joe Zublena, Assistant State Program Leader, Agriculture, Natural Resources, and Community and Rural Development at NCSU, began the second day. His activities at NCSU have been primarily in the Soil Science Department, with responsibilities in agronomy and waste management. To properly manage nutrients, we must find the balance between nutrients generated from the animal waste and nutrients taken up by the plants being grown in the soil where the waste is applied. A positive balance indicates there are more nutrients used by crops than nutrients generated from manure. A potential problem is indicated by a surplus of nutrients generated by animal waste. Fifty-seven percent of the manure generated in the State can be collected and utilized by the crops that receive the manure. Too much N in the soil can get into wellwater and cause "blue baby" syndrome. Excess N can result in algae blooms, which in turn leads to fish kills. Phosphorous build up is a long-term problem. Other concerns arise when copper or zinc reach unacceptable levels in the soils. Crop needs for these heavy metals are very low; excess levels can cause long-term plant toxicity. A potential solution to avoiding excess nutrients in the future is diet manipulation, involving enzymes that can be fed to the animals. A longer term solution is the export of manure.

Dr. R. Wayne Skaggs, William Neal Reynolds Professor and Distinguished University Professor, and Dr. Robert O. Evans, Jr., Extension Assistant Professor, Biological and Agricultural Engineering at NCSU, provided a slide presentation on the hydrology of the land application of wastewater, specifically swine wastewater. The application of wastewater to land is a final treatment process of many different kinds of wastewaters: municipal wastewater, industrial wastewater, as well as agricultural wastewater. Using computer simulated modeling methods, the amount of N lost in runoff was followed. The properties and disposition of the soil affects the ability of the wastewater to be treated by application to that soil.

Dr. R. L. Huffman, Associate Professor, Biological and Agricultural Engineering at NCSU. Dr. Huffman's field of study is wastewater seepage from animal waste lagoons. For the past six years he had been involved in site investigations at lagoons. If lagoons are constructed according NRCS standards, there should be little or no seepage. Some to the approximately 4,600 lagoons were not constructed according to these standards. It is documented that a drinking well in Robeson County contains excess nitrates caused by an old lagoon nearby. Dr. Huffman said that old lagoons need to be assessed, but that monitoring wells do not provide the most direct or cost-effective assessment. He advocated the use of emergency spillways to avoid lagoon failures, such as the one at Oceanview Farms in June 1995.

Dr. Patrick G. Hunt, Research Leader with the Coastal Plain, Soil, Water, and Plant Center, Agricultural Research Service of the USDA, spoke about the multiagency water quality demonstration project in Duplin County that was initiated as part of the Presidential Water Quality Initiative. The purpose of the project was to demonstrate improvements in water quality that could be made through the voluntary actions of the landowners, such as the use of nutrient management plans, fencing, and riparian borders. Approximately 100 monitoring wells were installed in one subwatershed on farms that were willing to participate. Seventy-seven percent of the wells did not contain excessive nitrates. One project used a constructed wetland to treat wastewater.

Mr. M. Carl Bailey, Assistant Chief for Planning, Groundwater Section, DEM, DEHNR, spoke about a study that the Groundwater Section is performing related to potential groundwater contamination around animal waste lagoons. Data is not available at this time.

Dr. Kenneth H. Reckhow, Assistant professor, School of the Environment, Department of Civil and Environmental Engineering, Institute of Statistics and Decision Science, Duke University, urged the Commission to use a methodology called decision analysis in trying to solve complex environment management problems. Decision analysis is a method that is historically used more in the private sector than in the public sector. Decision analysis provides a logical structure for study and analysis, beginning with the complete identification of management objectives and attributes.

Members of the public made remarks from the floor.

December 13 and 14, 1995

The Commission members met in Statesville, North Carolina on December 13 to tour dairy facilities in Iredell County. Mr. Kenneth Vaughn, Agricultural Extension Agent in Iredell County, and Representative Frank Mitchell guided the tour of the following

facilities: the Jeff Maness Farm, a dairy farm that employs a lagoon waste management system; the Holland farm, a land-locked farm in need of extensive renovation due to its location and the presence of streams and valleys surrounding the property; the Robertson Farm, which employs a lagoon for waste treatment and, after the waste has formed a crust on the lagoon, the waste is piled to dry and subsequently used as a dry fertilizer; the Hill Farm, which was in the process of constructing a waste lagoon; and the Leamon Farm, a dairy farm that is using the "dry stack" method of treating its animal waste. That evening at 7:00 p.m., the Commission held its second public hearing at the Iredell County Agricultural Center in Statesville. Approximately 250 persons attended and 28 spoke of the problems particular to the dairy industry.

On December 14 at 9:00 a.m. at the Holiday Inn in Statesville, the Commission held a meeting. The Commission discussed the tour of the previous day. The Commission voted to create a working group consisting of Commission members: Dick Gallo, Dr. Wohlegant, Dr. Barker, Dennis Loflin, and David Harris to consider the current slow pace of certification of animal waste management systems under the .0200 rules and to report its recommendations for corrective action to the full Commission. Steve Levitas, Deputy Secretary, DEHNR submitted a letter containing a list of Department recommendations to the Commission for its consideration.

January 10, 1996

The Commission reviewed and adopted a report prepared by Commission staff summarizing and categorizing issues to be considered by the Commission. This list was based upon the lists of issues that each member of the Commission had prepared and submitted to staff at the Statesville meeting in December. Discussion during the morning session centered on these issues. The Commission recognized the importance of the operators expediting certification of intensive livestock operations pursuant to the .0200 rules. To send a clear message on this point, the Commission, by motion, concluded that the basic thrust of the .0200 rules is to establish an appropriate set of requirements for animal waste management systems, and this Commission will recommend that the December 31, 1997, deadline for compliance with these rules not be extended.

Steve Levitas, Deputy Secretary, DEHNR, reviewed Department recommendations on animal waste issues that are in addition to those recommendations submitted to the Commission at the Statesville meeting. He made the following statements: DEHNR supports addressing water quality problems with a site-specific basin wide systems approach; good scientific evidence supports the conclusion that there is thirty percent more nitrogen in the Neuse river than the river can assimilate. The excess nitrogen comes from all sources, but a substantial portion comes from nonpoint sources of which a large portion is animal waste; other sources of nitrogen include

municipal wastewater treatment plants, industrial wastewater, gold courses, residential lawns, and agriculture fertilizers.

Dr. Barker stated that farms in existence at the time the .0200 rules went into effect February 1, 1993, have to comply with the operation and maintenance requirements of those rules, but not the design and construction requirements, so long as DEM has not found these operations discharging pollutants to the waters of the State. The agronomic rates that had to be followed before 1992 were based on the amount of nutrients associated with maximum yield capacity for certain crops. The soil capacity and the soil type of the soil at a particular site were not taken into account to establish these earlier agronomic rates. If an operation is fond in violation of the .0200 rules, the operator is required to upgrade his waste management plan to one that is based on the agronomic rates that do take soil capacity and soil type into account.

Dr. Wohlegant pointed out that the animal agriculture industries are price takers, that is, industries whose products cannot be priced higher and passed on to consumers in order to absorb any increased costs of doing business. Mr. Bodley added that animal products, such as pork and dairy products, are commodity products whose prices are set at the national and international levels. Mr. Weaver pointed out that producers' profits go down when the cost of seed grains increases. The cost of feed corn in April 1995 was $2.67/bushel; today it is $4.06/bushel. Mr. Gallo said that the special economics of the agriculture industry is the justification for the voluntary Agriculture Cost Share Program, whereby the public provides seventy-five percent of the cost of certain expenses incurred by the farmer, who must provide the remaining twenty-five percent of the costs.

Members of the public made remarks from the floor.

January 24, 1996

The Commission voted to establish four subcommittees and to assign each subcommittee a set of issues to address during today's Session and again in February and to report back to the full Commission on the second day of the next meeting, February 8, 1996. The Cochairman assigned issues to each subcommittee based on the list of issues adopted by the Commission at its meeting January 10, 1996. The membership of the four subcommittees is as follows: Subcommittee I: Sen. Charlie Albertson (Chair), Jeff Turner, Dr. Robert Cook, and Dr. Michael Williams; Subcommittee II: Dr. James Barker (Chair), David Harris, Nick Weaver, Dr. Michael Wohlgenant; Subcommittee III: Dick Gallo (Chair), John Adams, Rep. John Brown, and Loyd Godley; Subcommittee IV: Robert Ivey (Chair), Cleveland Simpson, Dennis Loflin, and Dr. William Caviness. The Commission discussed the benefits of requiring general permits for intensive livestock operations. The Commission reached a consensus on the desirability of a general permit regulatory structure as

preferable to the current regulatory structure whereby operations are deemed permitted until found to be in serious violation of the .0200 rules. Before breaking up for subcommittee meetings, the Commission discussed the desirability of authorizing local governments to regulate intensive livestock operations and the desirability of imposing a moratorium on new swine operations. Both discussions were lively, but resulted in no formal action by the Commission. The Commission appeared to be in agreement that a moratorium was not justified at this time.

The afternoon session was devoted to presentations by the following: Dr. Steve Hoard, Edgecombe County Commissioner, and Jim Bayless, Edgecombe County Health Director, both of whom spoke in favor of local governments having the authority to regulate intensive livestock operations; Marvin Horton from Nashville, North Carolina, who spoke against locating an I.B.P. slaughterhouse in Edgecombe County; Frank Tyndall, a consulting engineer for Kimley-Horn and Associates, Inc., who presented the report on the swine industry requested and paid for by Murphy Family Farms; and William Mosher, Chief Engineer and Assistant Vice President for Law Engineering and Environmental Services, Inc., who presented the Law Engineering Report requested and paid for by the North Carolina Pork Producers' Association.

Members of the public made remarks from the floor.

February 7 and February 8, 1996

The full day, February 7, was spent in separate meetings by each of the four subcommittees designated by the Cochairmen at the last meeting. On February 8, the full Commission met, and the Chair of each subcommittee presented its report to the full Commission. In its report, a subcommittee addressed each issue it had been assigned. A subcommittee had been directed to take some action on each issue as follows: (1) make a recommendation (2) decide to take no action, or (3) decide more information was needed and defer action until the information was obtained. The Commission took up one recommendation at a time. A recommendation was presented for discussion by the Commission. The Commission then voted on whether to adopt a recommendation for approval by the Commission. Cochairman Tim Valentine emphasized that a vote of approval by the Commission was not a final action on any recommendation. The Commission approved some recommendations as presented, approved several as amended by the full Commission, and tabled others for later action by the subcommittee that had considered the issue. Senator Albertson's Subcommittee I deferred action on two issues: local zoning and a rewrite of Senate Bill 1080 of the 1995 Session (enacted as Chapter 420 of the 1995 Session Laws) until more data was obtained. Dr. Barker's Subcommittee II decided it needed more information before it could address the role of local health departments in regulating intensive livestock operations. The Commission approved a recommendation made by Subcommittee IV chaired by Robert Ivey to replace the

deemed permitted approach to regulation of intensive livestock operations with a system of general permits based on the animal waste management plans currently required under the .0200 rules, but tabled the following recommendations of that same Subcommittee: that the costs of the inspection and enforcement program should be borne by the State, all recommendation's concerning changes to the application training requirements, the issue of integrator liability, and that a public comment period should be incorporated into the permit process for intensive livestock operations. The later recommendation was the recommendation contained in a minority report from the Ivey Subcommittee.

Members of the public made remarks from the floor.

February 20, 1996

Steve Tedder, Chief, Water Quality Section, DEM, DEHNR, presented the Draft Interim Plan for the Neuse River Basin. The document has been presented to the Environmental Management Commission (EMC) at its February meeting, is subject to written comments, and provides the basis for proposed rules. The interim plan establishes a thirty percent reduction of the nitrogen levels in the Neuse River over a five-year period as a goal, requires cities to elicit a connections program for stormwater sewers, recommends a tiered permit program for intensive livestock operations, and requires 50 feet buffers for intermittent and perennial streams.

Dennis Loflin, Commission member and member of the EMC, expressed his objections to the interim plan, saying that, in his opinion, the buffer requirements represent a flagrant violation of private property rights.

Mr. Tedder reminded the Commission that DEM is flexible and presents the interim plan as embodying a concept that is subject to refinement. DEM staff considers that the most important component of the plan for the Neuse is general permits.

Dick Gallo, Commission member appearing in his capacity as State Director, Natural Resources Conservation Service (NRCS), introduced the report to the Commission regarding the revision of NRCS standards as related to animal waste. Jim Canterberry, State Resource Conservationist, NRCS, gave the Commission background information. NRCS is a federal agency under the United States Department of Agriculture that was created in 1935 to provide on site technical assistance to farmers. NRCS works with local Soil and Water Conservation Districts through a memorandum of agreement. NRCS contends the main problem with respect to intensive livestock operations is improper management. Starting November 1995, NRCS convened a series of three subcommittees consisting of a broad range of interested parties to improve the NRCS technical standards and to attempt to strengthen lagoon technology. Harry Gibson, State Engineer, NRCS, related the key revisions to the waste treatment lagoon technical standards. A new

standard addresses closure of abandoned lagoons or ponds. Emergency action plans will be required for every lagoon. Approximately 15 years' worth of sludge storage is now required rather than the five years worth currently required. Odor control measures will be required, which include precharging lagoons with water before loading, the use of inlet pipes, and installation of windbreaks, if applicable. Emergency spillways are mandated to allow effluent to escape. More comprehensive site evaluations will be required pursuant to the revised standards. Liners will be required where conditions may present limestone deposits. The lagoon bottom and site must be scarified and compacted to standard.

Bill Harrell, Resource Conservationist, NRCS, presented the key revisions with respect to waste utilization standards. The major revisions address the nutrient management standards. The object of the nutrient management plan is to assure that the nutrients, including nitrogen, are removed through crop harvest. Nitrogen is the limiting nutrient. Phosphorous is immobile in the soil; phosphorous leaves through erosion. Erosion is controlled through the use of best management practices. Nitrogen goes into solution readily and leaves through runoff or volatilization. Copper and zinc are toxic to plants. Crops vary in sensitivity to these heavy metals. The revised nutrient management plans will inform farmers of concerns regarding heavy metal loading. Irrigation plans will be a required component of a waste utilization plan. For five years, operators will be required to maintain records indicating the date and amount of waste applied to crops. Soils where waste is applied must be tested every two years. Agronomic rates will be based on realistic yield expectations rather than maximum yields used previously. Agronomic rates for grasslands are based upon an assumption of a fifty percent N reduction, whereas the previous assumption was for a twenty-five percent N reduction. The direct result of these revisions is that more land will be needed on which to land apply animal waste. The revised NRCS technical standards become effective March 1, 1996.

During the afternoon session, Dick Gallo, speaking in his capacity as Chair of the Commission subcommittee established in Statesville at the December 14, 1995 Commission meeting, gave the subcommittee's report. That subcommittee was charged to consider the current slow pace of certification of animal waste management systems under the .0200 rules. The Commission took up each recommendation in turn for discussion and voted on whether to adopt the recommendation.

Members of the public made remarks from the floor.

March 6, 1996

Sen. Albertson, Chair of Subcommittee I, reported progress by that group on the two issues remaining before it. The subcommittee had met on three occasions to review GIS maps of portions of certain counties for the purpose of determining the impact of

the siting limitations enacted by the 1995 General Assembly under Senate Bill 1080. On the first two occasions, sufficient gaps in the data existed to make any judgments on the potential impact of Senate Bill 1080 inconclusive. Sufficient data was available for only Pitt County and, on the third occasion, the subcommittee studied maps for Pitt County. Tim Johnson, Technical Services Manager, and Jeff Brown, Project Developer, both with the Center for Geographic information and Analysis, Office of the Governor, brought these maps of Pitt County to the full Commission. The first sets of maps showed all of Pitt County, and the second showed a southeastern portion of Pitt County. Areas restricted for siting new swine farms pursuant to the siting limitations contained in enacted Senate Bill 1080 (Chapter 420 of the 1995 Session Laws) were shaded. Property boundaries were shown as well. The subcommittee concluded that Senate Bill 1080 substantially limited the siting of new swine farms and, accordingly, operated as a statewide zoning law. The subcommittee's recommendations to not broaden the authority of counties to adopt ordinances that affect swine operations and to rewrite Senate Bill 1080 to clarify ambiguous language and add an enforcement provision were adopted by the Commission. A working group to consist of representatives for the Farm Bureau, DEHNR, NCDA, the Attorney General's Office, and an environmental group was appointed the task of working with Commission staff and providing a draft rewrite of Senate Bill 1080.

The Commission broke into its Subcommittees I - IV, which met to review a compilation of the tentative recommendations of the Commission and to consider any issues before them. The Commission reconvened after lunch to receive further reports from the subcommittees. Robert Ivey's Subcommittee IV presented its recommendations on their issues remaining before it. As to the issue of applicator training, the subcommittee recommended placing a 16-hour cap on the required training class. Current law (G.S. 143-215.74E) enacted by the 1995 General Assembly, Chapter 544 of the 1995 Session Laws, requires a person who performs the land application of animal waste from swine production to be certified and, in order to be certified, that person must have a six-hour training program and pass an examination. Ron Ferrell, DEM, DEHNR, explained that a training manual had been developed since August 1995, following the enactment of Senate Bill 974 of the 1995 Session (enacted as Chapter 544 of the 1995 Session Laws), the legislation requiring swine waste applications to be certified. The training manual was developed with input from NRCS, N. C. State Cooperative Extension Service, the Farm Bureau, the New River Foundation, the North Carolina Pork Producers' Association, and others. It is a good and thorough manual. Applicators must be able to perform certain mathematical calculations to complete the training and pass the examination. In order to protect water quality, it is critical that the land application of waste is performed correctly. Sen. Albertson pointed out that farmers who apply their own pesticides are only required to take a three-hour course or pass an examination, not both. After full discussion, the Commission voted to raise the current training cap of six hours to twelve hours. Eight hours of training is to be in

the classroom; four hours is to be in the field. The Commission voted to amend the recommendation to add that alternate instruction and testing methods will be made available for those with reading or learning difficulties. The subcommittee's recommendation that the fees for certification be $75.00 for the examination and certification and $30.00 for an annual renewal fee failed. The other recommendations of the subcommittee were approved, including the recommendations that the costs of the inspection and enforcement program be borne by the State and that responsibility for violations of environmental statutes and rules should remain with the permittee.

Members of the public made remarks from the floor.

April 10, 1996

Dr. Carl brought up the issue of public notice for reconsideration for the Commission. Dr. Carl stated that the previous vote by the Commission against requiring operators to give public notice of a new operation was addressed as a requirement for a public hearing. The Commission discussed providing notice by publishing notice in a newspaper of general circulation. After voting against a notice requirement in concept, Dr. Carl appointed a subcommittee consisting of Representative John Brown (Chairman), Jeff Turner, Cleveland Simpson, and David Harris to discuss a notice requirement.

The Commission considered for the first time the issue of insect control and voted to include in the final report a requirement to establish odor control best management practices which would be a mandatory component of an animal waste management plan.

The Commission turned its attention to a thorough review of the draft and final report to the General Assembly, proceeding page by page. The Commission directed the rewrite of the introduction to the report and voted to modify several recommendations as they appeared in the draft report.

The Cochairmen directed the Division of Environmental Management, DEHNR, to present the Commission with its proposals in writing for a general permit system for animal operations, one general permit for each species of animals: swine, dairy, cattle, and poultry.

The Commission received comments from the public.

April 24, 1996

Dick Gallo, Commission member and State Director, NRCS, updated the Commission regarding the revision of the NRCS technical standards related to

animal waste. After receiving comments, the group working on revising the standards made a number of changes to the revisions. The next stop in the process is to submit the revised NRCS standards to the Soil and Water Conservation Commission for adoption. If the Soil and Water Conservation Commission takes no action, the standards are adopted automatically. The effective date for the revised standards was changed from March 1 to June 1, 1996.

The Commission broke into subcommittees so that the subcommittees could address any outstanding issues and later reconvened with subcommittee reports. The newest subcommittee consisting of Representative Brown (Chair), Jeff Turner, Cleveland Simpson, and David Harris returned with a motion regarding public notice to post a sign at the property on which an animal operation is proposed, stating pertinent information whereby the public could submit written comments to DEHNR. After full discussion and amendments to the motion the Commission voted to adopt the motion.

Senator Albertson's subcommittee and Dr. Barker's subcommittee jointly recommended a rewriting of the Commission's Recommendation B-6 in the draft report on waste utilization plan and record keeping. The commission adopted alternate language, which states the recommended requirements for waste and soils testing with fuller, more accurate scientific language.

After lunch, the Commission reconsidered its motion regarding public notice and passed a motion in lieu of that motion. The Commission adopted a form of notice whereby the person intending to site a new swine farm or to expand an animal waste management system beyond its design capacity is required to attempt to notify all adjoining property owners by certified mail at the address for the adjoining property owner on file at the property tax office. The motion specified the contents of the notice, including information that the adjoining property owners may submit written comments to DEM. Adjoining property owners will not be able to block the siting of an operation that complies with all applicable laws and rules; however, the adjoining property owners may inform DEM of information that indicates the proposed operation fails to comply with an applicable law or rule. The Commission seemed in accord on wanting to establish a dialogue between operators and neighbors and to remove the possibility of neighbors being caught unaware that a hog farm was coming next door or substantially increasing its size.

The Commission turned its attention to reviewing and revising three proposed types of general permits for animal waste management systems prepared by DEM: one for swine, one for dairy cattle, and one for poultry. Then the Commission considered and adopted additional language submitted by David Harris regarding recommendation C-4 in the draft report regarding annual inspections of animal waste management systems by DEM. Noting the success of cooperative efforts of staff from various agencies in the Sedimentation Control Program in DEHNR, the Commission

considered a similar approach with respect to monitoring and reviewing animal waste management systems. David Harris stated it was his intent to spread the work among the agencies, all of whom have trained, qualified staff to do the work so that the work gets done. Dr. Barker and Mr. Gallo urged the Commission to preserve the nature of the relationship between Cooperative Extension agents and NRCS staff with farmers. After modifying the language to the satisfaction of Dr. Barker and Mr. Gallo, the new language was adopted.

The Commission discussed imposing fees on the operators for the cost of an inspection and enforcement program for animal waste management systems. Unable to ascertain the projected cost of such a program from DEHNR, the Commission delayed discussion on this subject.

The Commission sought comments from members of the public.

May 1, 1996

Senator Albertson's subcommittee gave its final report on the rewriting of Senate Bill 1080, the Swine Farm Siting Act, and submitted a draft bill to be included in the Commission's final report as part of an omnibus legislative proposal. The Commission adopted the draft bill, then turned its attention to the last issue outstanding before the Commission: What level of funding is needed for permitting, inspections, and enforcement programs within DEM and how to fund these programs, through the General Fund or by imposing fees upon producers or a combination of the two. DEHNR provided the members of the Commission with a chart indicating the Department's proposal on funding. Steve Tedder, Chief, Water Quality Section, DEM, DEHNR, reviewed these figures and responded to questions. According to Mr. Tedder, the cost of permitting inspections, compliance inspections, and enforcement activities is one million one hundred eighty-three thousand twenty-three dollars ($1,183,023) for the 1996-97 fiscal year. This would provide for 18 new staff positions. The cost of permit application analysis, compliance and enforcement activities, and training, certification, and technical assistance is six hundred thirty-three thousand one hundred fourteen dollars ($633,114) for the 1996-97 fiscal year. This total includes funding for 10 new staff positions. The total for both the permitting program and the inspection and enforcement program is one million eight hundred sixteen thousand one hundred thirty-seven dollars ($1,816,137) for 28 other positions. DEHNR proposed imposing fees to raise at least thirty percent (30%) of the total costs to DEHNR of the water quality programs with the balance to come from appropriations from the General Fund. Under G.S. 143-215.3, water quality programs are funded in this way. EMC develops a fee schedule, which goes through the rule-making process. These figures do not take inspections of dry poultry litter operations, as recommended by the Commission, into account. Dr. Cook reminded the Commission that DEM had received funding for the 1995-96 fiscal year for eight new positions. Mr. Tedder stated that before last session, DEM had had no

inspectors and currently has four dedicated to animal operations funded last summer, all of whom are located in the regional offices. Steve Levitas, Deputy Secretary, DEHNR, noted that when the General Assembly recognized the need to have fees for air permits, it imposed an interim fee to get the program up and running until a permanent fee structure could be developed. He suggested a similar approach for animal waste management system fees. The Commission noted that Lynn Muchmore, fiscal staff to the Commission, estimated the cost of the total program of permitting, inspection, and enforcement to be eight hundred forty-four thousand dollars ($844,000) and called for 10 new positions to conduct inspections. The Commission appeared to reach a consensus that the program had to be adequately funded but wanted to hear an explanation regarding the discrepancies in the projected cost of the total program.

Robert Ivey's subcommittee convened to attempt to reconcile the two projections for the cost of the program.

After lunch, the Commission reviewed the latest draft final report of the Commission.

The Robert Ivey subcommittee reported to the full Commission and explained the differences between the two cost projections. DEM estimated one inspection per day for 150 working days per year. Lynn Muchmore, fiscal staff, estimated three inspections per day for 150 working days. DEM took into account additional time for writing up a report of the inspection, travel time, and time for follow-up compliance. DEM relied on 4,434 as the number of lagoons; Lynn Muchmore used 3,800 for the total number of lagoons. The subcommittee recommended imposing one combined annual fee for both the inspections' and permit applications' fees, that this fee be tiered for different sizes of operations based on the steady state live weight of animals, that the fees generate fifty percent (50%) or less of the cost of the combined programs. The Commission voted to recommend one annual fee for both the permitting and inspection programs and estimated the cost of the program to be one million four hundred fifty thousand dollars ($1,450,000), voted to recommend imposing fees to raise forty percent (40%) of the total cost of the combined programs, and voted to recommend a three-tiered fee structure based on steady state live weight such that the fees for the lowest tier would not be less than fifty dollars ($50.00) and the fees for the highest tier would not exceed two hundred dollars ($200.00). The Commission directed the Robert Ivey's subcommittee to present specifics next week.

The Commission reviewed the omnibus draft bill containing most of the Commission's recommendations. The Commission voted to raise the cap further for agriculture cost-share funds to recipients to seventy-five thousand dollars ($75,000) and to allow these funds to be used for insect control best management practices. The Commission adopted the bill in concept pending further review by members prior to the next meeting. The Commission began to review the second draft bill that contains all the Commission's recommendations regarding appropriations.

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The only new business remaining before the Commission was to agree upon a specific fee structure for annual animal waste management systems. Robert Ivey reported to the Commission that he had contacted the Veterinary Division, Department of Agriculture, whose database indicated that there are 3,313 swine, poultry, and cattle operations in the State. He stated that this figure is more reliable than the count of lagoons provided by DEM, because, according to the Veterinary Division, DEM's data had some duplication and errors. Further, 1,600 of the 2,743 swine farms were under contract with the five major producers in the State. Mr. Ivey estimated that five or more of these 1,600 operations could be inspected in one day. Accordingly, the original estimate for the cost of a permitting and inspection program of eight hundred forty-four thousand dollars ($844,000) was a better estimate than the one million four hundred fifty thousand dollars ($1,450,000) estimate and a fifty dollar ($50.00) annual fee for farms with at least 38,500 and less than 100,000 pounds steady state live weight, a one hundred dollar ($100.00) annual fee for farms with at least 100,000 and less than 800,000 pounds steady state live weight, and a two hundred dollar ($200.00) annual fee for farms with at least 800,000 pounds steady state live weight would generate approximately three hundred sixty thousand dollars ($360,000) or roughly forty percent (40%) of the cost of the combined program. The Commission adopted this fee schedule for inclusion in its recommendations and legislative proposals. This fee schedule assumes each inspection will take an average of two hours to conduct.

After discussing, further reviewing, and amending the two draft pieces of legislation, the Commission voted to include the bills in its final report to the Governor and the General Assembly. This concluded the work of the Commission. Cochairman Ernie Carl thanked the Commission for moving swiftly and for setting the industry up for growth in an environmentally sound manner. Cochairman Tim Valentine extended his personal appreciation to a group of men that had done an outstanding job.

IV. FISCAL CONSIDERATIONS

The Commission reviewed fiscal information presented by State and federal agencies to estimate the cost of improving system performance to meet the .0200 certification deadline. Three items account for the bulk of these costs. They are (1) the cost of expanding DEM operations to perform additional inspections, issue additional permits, and train animal waste management system operators (2) the cost of increasing technical assistance services from NRCS, the Cooperative Extension Service, and Soil and Water Conservation, and (3) the cost of expanded Agricultural Cost Share funding.

Estimates rely heavily upon a survey of Soil and Water Districts completed in January 1996. The surveyors counted livestock operations subject to .0200 rules and classified those operations based upon progress toward the certification that is to be completed December 31, 1997. Of the 3,832 operations enumerated, 3,375 are expected to remain in business. Of those, roughly 2,600 remain uncertified. Thus the Division of Environmental Management must accommodate a permanent increase in regulated clientele of 3,375. This will occasion ongoing enforcement costs as well as certain start-up expenses. Programs geared to help farmers with compliance, either through technical assistance or cost-sharing, will face nonrecurring outlays to serve some 2,600 operators. These costs will be spread across all or portions of three fiscal years.

The research budget, unrelated to certification, supports four specific research tasks. There are (1) odor control research (2) studies to determine nitrogen source profiles in watersheds (3) evaluation of alternative treatment technologies (4) assessment of the potential for groundwater contamination in areas around lagoons. All of these are to be administered by the Department of Environment, Health, and Natural Resources, though the actual research may be carried out under contract between that department and other parties. The Commission noted that, contrary to public perception, very little of the animal waste research currently being conducted by North Carolina universities is underwritten by agricultural industry.

APPENDIX A

PART IV.-----BLUE RIBBON STUDY COMMISSION ON AGRICULTURAL WASTE (S.B. 695 - Albertson; H.B. 524 - H. Hunter).

Sec. 4.1. The Blue Ribbon Study Commission on Agriculture Waste is created in the General Assembly. The Commission shall study the following issues:

(1) The effect of agriculture waste on groundwater, drinking water, and air quality and any other environmental impacts of agriculture waste.

(2) Methods of disposing of and managing agriculture waste currently in use in this State.

(3) Methods of disposing of and managing agriculture waste that have fewer adverse impacts than those methods currently in use in this State, including positive commercial and noncommercial uses of agriculture waste.

(4) The economic impact of agriculture waste in areas in this State where there is a high concentration of agriculture waste, including, but not limited to, the impact on property values of land adjacent to agriculture sites and on water treatment costs.

(5) Implementation of the recommendations contained in the Swine Odor Task Force reports by the Swine Farm Odor Abatement Study authorized by Section 45 of Chapter 561 of the 1993 Session Laws and any recommendations that result from the federally funded study of the potential for groundwater contamination from animal waste lagoons currently being conducted by the Groundwater Section of the Department of Environment, Health, and Natural Resources.

(6) General economic impact of agriculture industries on areas of the State with a high concentration of agriculture waste.

(7) Coordination of regulatory activities and any other activities between federal, State, and local government agencies with jurisdiction over any aspect of agriculture industries.

(8) Identification of beneficial uses of agriculture waste.

Sec. 4.2. The Blue Ribbon Study Commission on Agriculture Waste shall consist of 18 members to be appointed as follows:

(1) Six members appointed by the President Pro Tempore of the Senate.

(2) Six members appointed by the Governor.

(3) Six members appointed by the Speaker of the House of Representatives.

The President Pro Tempore of the Senate and the Speaker of the House of Representatives each shall select a cochair. A majority of the Commission shall constitute a quorum for the transaction of business.

Sec. 4.3. The Commission shall submit a final report of its findings and recommendations to the 1996 Regular Session of the 1995 General Assembly by filing the report with the President Pro Tempore of the Senate and the Speaker of the House of Representatives prior to the convening of the 1996 Regular Session of the 1995 General Assembly. The final report shall contain the findings, recommendations, and any legislative proposals of the Commission. The final report shall identify areas in the State where there is a significant concentration of agriculture waste; include recommendations on reducing agriculture waste in areas where there is an identified and significant harmful impact on groundwater or drinking water; and include recommendations on implementing any of the recommendations contained in the Swine Odor Study or the Groundwater Study considered by the Commission under this Part. If at any time during its deliberations, the Commission identifies a recommendation that can be implemented through the Administrative Procedure Act, Chapter 150B of the General Statutes, the Commission shall forward that recommendation with the proposed rule change to the responsible State agency for immediate consideration.

Sec. 4.4. Members appointed to the Commission shall serve until the Commission makes its final report. Vacancies on the Commission shall be filled by the same appointing officer who made the original appointments. The Commission shall terminate upon the filing of its final report.

Sec. 4.5. The Commission may contract for consultant services as provided by G.S. 120-32.02. The Commission may obtain assistance from North Carolina State University, particularly from those university resources associated with the ongoing studies conducted by the Swine Odor Task Force. Upon approval of the Legislative Services Commission, the Legislative Administrative Officer shall assign professional and clerical staff to assist in the work of the Commission. Clerical staff shall be furnished to the Commission through the offices of House and Senate supervisors of clerks. The Commission may meet in the Legislative Building or the Legislative Office Building upon the approval of the Legislative Services Commission. The Commission, while in the discharge of official duties, may exercise all the powers provided under the provisions of G.S. 120-19 through G.S. 120-19.4.

Sec. 4.6. Members of the Commission shall receive per diem, subsistence, and travel allowances as follows:

(1) Commission members who are also General Assembly members, at the rate established in G.S. 120-3.1.

(2) Commission members who are officials or employees of the State or local government agencies, at the rate established in G.S. 138-6.

(3) All other Commission members, at the rate established in G.S. 138-5.

Sec. 4.7. From funds appropriated to the General Assembly, the Legislative Services Commission may allocate funds for the expenses of the Commission under this Part.

APPENDIX B

BLUE RIBBON STUDY COMMISSION ON AGRICULTURAL WASTE MEMBERSHIP

1995-1996

Governor's Appointments

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Mr. Jeffery B. Turner
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APPENDIX C

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

S D

SENATE DRS6657*-LDZ225F(4.17)

Short Title: Animal Waste Csmn. Recommendations. (Public)

Sponsors: Senator Albertson.

Referred to:

A BILL TO BE ENTITLED

AN ACT TO IMPLEMENT RECOMMENDATIONS OF THE BLUE RIBBON STUDY COMMISSION ON AGRICULTURAL WASTE.

The General Assembly of North Carolina enacts:

PART I. PERMITS/INSPECTIONS/FEES FOR ANIMAL WASTE MANAGEMENT SYSTEMS.

Section 1. G.S. 143-215.1(a) reads as rewritten:

"(a) Activities for Which Permits Required. -- No person shall do any of the following things or carry out any of the following activities ~~until or~~ unless ~~such~~ that person ~~shall have applied for and shall have~~ has received a permit from the Commission ~~a permit therefor and shall have~~ and has complied with ~~such conditions, if any, as are prescribed by such~~ all conditions set forth in the permit:

(1) Make any outlets into the waters of the ~~State;~~ State.

(2) Construct or operate any sewer system, treatment works, or disposal system within the ~~State;~~ State.

(3) Alter, extend, or change the construction or method of operation of any sewer system, treatment works, or disposal system within the ~~State;~~ State.

(4) Increase the quantity of waste discharged through any outlet or processed in any treatment works or disposal system to any extent ~~which~~ that would result in any violation of the effluent standards or limitations established for any point source or ~~which~~ that would adversely affect the condition of the receiving waters to the extent of violating any ~~of the standards applicable to such water;~~ applicable standards.

(5) Change the nature of the waste discharged through any disposal system in any way ~~which~~ that would exceed the effluent standards or limitations established for any point source or ~~which~~ that would adversely affect the condition of the receiving waters in relation to any ~~of the standards applicable to such waters;~~ applicable standards.

(6) Cause or permit any waste, directly or indirectly, to be discharged to or in any manner intermixed with the waters of the State in violation of the water quality standards applicable to the assigned classifications or in violation of any effluent standards or limitations established for any point source, unless allowed as a condition of any permit, special order or other appropriate instrument issued or entered into by the Commission under the provisions of this ~~Article;~~ Article.

(7) Cause or permit any wastes for which pretreatment is required by pretreatment standards to be discharged, directly or indirectly, from a pretreatment facility to any disposal system or to alter, extend or change the construction or method of operation or increase the quantity or change the nature of the waste discharged from or processed in ~~such facility;~~ that facility.

(8) Enter into a contract for the construction and installation of any outlet, sewer system, treatment works, pretreatment facility or disposal system or for the alteration or extension of any such ~~facilities;~~ facilities.

(9) Dispose of sludge resulting from the operation of a treatment works, including the removal of in-place sewage sludge from one location and its deposit at another location, consistent with the requirement of the Resource Conservation and Recovery Act and regulations promulgated pursuant ~~thereto;~~ thereto.

(10) Cause or permit any pollutant to enter into a defined managed area of the State's waters for the maintenance or production of harvestable freshwater, estuarine, or marine plants or ~~animals;~~ animals.

(11) Cause or permit discharges regulated under G.S. 143-214.7 ~~which~~ that result in water pollution.

(12) Subject to the provisions of G.S. 143-215.1B, construct or operate an animal waste management system.

In the event that both effluent standards or limitations and classifications and water quality standards are applicable to any point source or sources and to the waters to which they discharge, the more stringent among the standards established by the Commission shall be applicable and controlling.

In connection with the above, no such permit shall be granted for the disposal of waste in waters classified as sources of public water supply where the head of the agency which administers the public water supply program pursuant to Article 10 of

Chapter 130A of the General Statutes, after review of the plans and specifications for the proposed disposal facility, determines and advises the Commission that such disposal is sufficiently close to the intake works or proposed intake works of a public water supply as to have an adverse effect on the public health.

In any case where the Commission denies a permit, it shall state in writing the reason for such denial and shall also state the Commission's estimate of the changes in the applicant's proposed activities or plans which will be required in order that the applicant may obtain a permit."

Sec. 2. (a) Part 1 of Article 21 of Chapter 143 of the General Statutes is amended by adding two new sections to read:

"**§ 143-215.1B. Animal waste management systems; permit requirements.**

(a) No person shall construct or operate an animal waste management system that satisfies any one of the following unless that person has applied for and obtained a permit from the Department:

(1) The system is designed for or actually serves at least 100 head of cattle.

(2) The system is designed for or actually serves at least 75 horses.

(3) The system is designed for or actually serves at least 250 swine.

(4) The system is designed for or actually serves at least 1,000 sheep.

(5) The system is designed for or actually serves at least 30,000 birds with a liquid animal waste management system.

(b) The Department shall not issue a permit for an animal waste management system under subsection (a) of this section unless the applicant has obtained an animal waste management plan that a technical specialist has certified meets the applicable minimum standards and specifications.

(c) Animal waste management plans shall include all of the following components:

(1) A checklist of potential odor sources and a choice of site-specific, cost-effective remedial best management practices to minimize those sources.

(2) A checklist of potential insect sources and a choice of site-specific, cost-effective best management practices to minimize insect problems.

(3) Provisions that set forth acceptable methods of disposing of mortalities.

(4) Provisions regarding best management practices for riparian buffers or equivalent controls, particularly along perennial streams.

(5) Provisions regarding the use of emergency spillways and site-specific emergency management plans that set forth operating procedures to follow during emergencies in order to minimize the risk of environmental damage.

(6) Provisions regarding periodic testing of waste products used as nutrient sources as close to the time of application as practical and at least within 60 days of the date of application and periodic testing, at least annually, of soils at crop sites where the waste

products are applied. Nitrogen shall be the rate-determining element. Zinc and copper levels in the soils shall be monitored, and alternative crop sites shall be used when these metals approach excess levels.

(7) Provisions regarding waste utilization plans that assure a balance between nitrogen application rates and nitrogen crop requirements, that assure that lime is applied to maintain pH in the optimum range for crop production, and that include corrective action, including revisions to the waste utilization plan based on data of crop yields and crops analysis, that will be taken if this balance is not achieved as determined by testing conducted pursuant to subdivision (6) of this subsection.

(8) Provisions regarding the completion and maintenance of records on forms developed by the Department, which records shall include information addressed in subdivisions (6) and (7) of this subsection, including the dates and rates that waste products are applied to soils at crop sites, and shall be made available upon request by the Department.

(d) Except as provided in subsection (e) of this section, animal waste management systems that are designed for and actually serve less than the numbers of animals listed in subdivisions (1) through (4) of subsection (a) of this section and all other animal waste management systems shall be deemed permitted and are not required to have an animal waste management plan.

(e) Dry litter animal waste management systems that are designed or actually serve at least 30,000 birds shall be deemed permitted. No later than December 31, 1999, any operator of this type of system shall obtain an animal waste management plan that complies with the testing and record-keeping requirements under subdivisions (6) through (8) of subsection (c) of this section. Any operator of this type of system shall retain records required under this section and by the Department on-site for three years.

(f) The Department may enforce the animal waste management plan under subsection (c) of this section in the same manner as it enforces a condition of a permit.

(g) The Department shall conduct inspections of all animal waste management systems that are subject to a permit under subsection (a) of this section at least annually to determine whether the system is in violation of water quality standards or is not in compliance with its animal waste management plan or any other condition of the permit. The Department may conduct additional inspections of animal waste management systems that are in violation of water quality standards or not in compliance with its animal waste management plan or any other condition of the permit. No later than October 1, 1996, and annually thereafter, the Department shall report the results of its inspections under this subsection to the Environmental Review Commission.

(h) As used in this section:

(1) 'Animal waste' means livestock or poultry excreta or a mixture of excreta with feed, bedding, litter, or other materials.
(2) 'Animal waste management system' means a combination of structural and nonstructural practices that provide for the proper collection, treatment, storage, or application of animal waste to the land such that no discharge of pollutants occurs to surface waters of the State by any means except as a result of chronic rainfall or a storm event more severe than the 25-year, 24-hour storm.
(3) 'Deemed permitted' means that a facility is considered as having a permit under this section and being in compliance with the permitting requirements of G.S. 143-215.1(a) even though it has not received a general or an individual permit for its construction or operation.
(4) 'Technical specialist' means an individual designated by the Soil and Water Conservation Commission, pursuant to rules adopted by that Commission, to certify animal waste management plans.

"**§ 143-215.1C. Written notice of swine farms.**

(a) Any person who intends to construct a swine farm whose animal waste management system is subject to a permit under G.S. 143-215.1B(a) shall, after completing a site evaluation and before the farm site is modified, attempt to notify all adjoining property owners and all property owners who own property located across a public road, street, or highway from the swine farm of that person's intent to construct the swine farm. This notice shall be by certified mail sent to the address on record at the property tax office in the county in which the land is located. The written notice shall include all of the following:

(1) The name and address of the person intending to construct a swine farm.
(2) The type of swine farm and the design capacity of the animal waste management system.
(3) The name and address of the technical specialist preparing the waste management plan.
(4) The address of the local Soil and Water Conservation District office.
(5) Information informing the adjoining property owners and the property owners who own property located across a public road, street, or highway from the swine farm that they may submit written comments to the Division of Environmental Management, Department of Environment, Health, and Natural Resources.

(b) As used in this section, 'site evaluation' is defined in G.S. 106-802."

(b) Subsection (a) of this section does not repeal any rules that do not conflict with the provisions of that section.

Sec. 3. Part 1 of Article 21 of Chapter 143 of the General Statutes is amended by adding a new section to read:

"**§ 143-215.3D. Fees for animal waste management systems.**

(a) The Department shall impose fees for the costs of permitting and inspecting animal waste management systems as follows:

(1) For each animal waste management system with a design capacity of at least 38,500 pounds steady state live weight and less than 100,000 pounds steady state live weight, an annual fee of fifty dollars ($50.00).

(2) For each animal waste management system with a design capacity of at least 100,000 pounds steady state live weight and less than 800,000 pounds steady state live weight, an annual fee of one hundred dollars ($100.00).

(3) For each animal waste management system with a design capacity of greater than or equal to 800,000 pounds steady state live weight, an annual fee of two hundred dollars ($200.00).

(b) The total monies collected each year from fees under this section shall not exceed forty percent (40%) of the total budgets from all sources of permitting and compliance programs for animal waste management systems within the Department."

PART II. DUTIES OF STATE AGENCIES.

Sec. 4. (a) The Department of Environment, Health, and Natural Resources shall design and, no later than October 1, 1996, begin to implement a system of permits for animal waste management systems, as defined in G.S. 143-215.1B, as enacted by Section 2 of this act. This system of permits shall be consistent with the provisions of Section 2 of this act. This system of permits shall provide for the issuance of one type of general permit for each type of species: swine, dairy cattle, poultry.

(b) The Department of Environment, Health, and Natural Resources shall develop a systematic monitoring and inspection program for animal waste management systems. This program shall include technical assistance provided by the Division of Soil and Water Conservation, Department of Environment, Health, and Natural Resources; the Agronomic Division, Department of Agriculture; and the Cooperative Extension Service, with the Division of Environmental Management, Department of Environment, Health, and Natural Resources, providing inspections required by G.S. 143-215.1B(g), as enacted by Section 2 of this act. The Natural Resources Conservation Service is encouraged to provide technical assistance to this monitoring and inspection program. Each animal waste management system shall be subjected to an annual operations review to assure full compliance with applicable laws and rules. Qualified staff from Soil and Water Conservation Districts may conduct the annual operations review, shall inform operators of animal waste management systems of any deficiency determined by the staff to be minor so that the operator has a reasonable opportunity to correct the deficiency before enforcement action is initiated, and shall inform the Division of Environmental Management of any deficiency determined by the staff to be a major deficiency that poses a threat to the environment or of any less serious deficiency that the operator exhibits an unwillingness to correct.

Sec. 5. No later than October 1, 1996, the Environmental Management Commission shall implement the provisions of G.S. 143-215.1B(c)(1) through (8), as enacted by Section 2 of this act and define the term "chronic rainfall" as used in G.S. 143-215.1B(h)(2), as enacted by Section 2 of this act. No later than October 1, 1996, the Environmental Management Commission shall review the meaning of "no discharge of pollutants" as used in G.S. 143-215.1B(h)(2), as enacted by Section 2 of this act; determine whether this no discharge requirement is a performance standard or a technology standard; and clarify the meaning of "no discharge" such that the no discharge requirement for animal waste management systems is economically practical and technologically achieveable.

Sec. 6. No later than September 1, 1996, the Soil and Water Conservation Commission shall specify odor control best management practices, insect control best management practices, and best management practices for riparian buffers or equivalent controls consistent with the provisions of G.S. 143-215.1B(c)(1), (2), and (4), as enacted by Section 2 of this act.

Sec. 7. No later than October 1, 1996, the Environmental Management Commission and the Soil and Water Conservation Commission, with technical assistance from the Cooperative Extension Service, shall establish the record-keeping requirements under G.S. 143-215.1B(c)(8), as enacted by Section 2 of this act. The Natural Resources Conservation Service is encouraged to cooperate fully with establishing these requirements.

Sec. 8. (a) An interagency group is created to:

(1) Address questions from technical specialists and provide uniform interpretations to technical specialists regarding the requirements of the animal waste management rules.

(2) Publish its decisions on these questions on a regular and recurring basis.

(3) Provide uniform strategies for operators of intensive livestock operations to meet the December 31, 1997, deadline to obtain an approved animal waste management plan.

(4) Develop, no later than August 1, 1996, a standard for the use of riparian buffers or equivalent controls as best management practices, particularly along perennial streams; decide whether a uniform State standard, a uniform basinwide standard, or a site-specific standard best protects water quality; and submit the standard that the group decides upon to the Soil and Water Conservation Commission for adoption in developing best management practices for riparian buffers and equivalent controls under Section 6 of this act.

(b) The interagency group shall consist of two representatives from each of the following State agencies: the Division of Soil and Water Conservation, Department of Environment, Health, and Natural Resources; the Division of Environmental Management, Department of Environment, Health, and Natural Resources; the Department of Agriculture; and the Cooperative Extension Service.

The General Assembly encourages the Natural Resources Conservation Service, United States Department of Agriculture, to provide two representatives from its agency to participate fully as members of the interagency group. The interagency group shall remain in existence until such time after December 31, 1997, that the Secretary of Environment, Health, and Natural Resources determines the interagency group is no longer needed to resolve issues related to certifying animal waste management plans.

PART III. ADDITIONAL ENFORCEMENT PROVISIONS.

Sec. 9. G.S. 143-215.2(a) reads as rewritten:

"(a) Issuance. -- The Commission is hereby empowered, after the effective date of classifications, standards and limitations adopted pursuant to G.S. 143-214.1 or G.S. 143-215, or a water supply watershed management requirement adopted pursuant to G.S. 143-214.5, to issue (and from time to time to modify or revoke) a special order, or other appropriate instrument, to any person whom it finds responsible for causing or contributing to any pollution of the waters of the State within the area for which standards have been established. Such an order or instrument may direct such person to take, or refrain from taking such action, or to achieve such results, within a period of time specified by such special order, as the Commission deems necessary and feasible in order to alleviate or eliminate such pollution. The Commission is authorized to enter into consent special orders, assurances of voluntary compliance or other similar documents by agreement with the person responsible for pollution of the water, subject to the provisions of subsection (a1) of this section regarding proposed orders, and such consent order, when entered into by the Commission after public review, shall have the same force and effect as a special order of the Commission issued pursuant to hearing. ~~Provided, however, that the provisions of this section shall not apply to any agricultural operation, such as the use or preparation of any land for the purposes of planting, growing, or harvesting plants, crops, trees or other agricultural products, or raising livestock or poultry.~~"

Sec. 10. G.S. 143-215(e) reads as rewritten:

"(e) Except as required by federal law or regulations, the Commission may not adopt effluent standards or limitations applicable to animal and poultry feeding operations. Notwithstanding the foregoing, where manmade pipes, ditches, or other conveyances have been constructed for the purpose of willfully discharging pollutants to the waters of the State, the Secretary shall have the authority to assess fines and penalties not to exceed ~~five thousand dollars ($5,000)~~ ten thousand dollars ($10,000) for the first offense. The definitions and provisions of 40 Code of Federal Regulations § 122.23 (July 1, 1990 Edition) shall apply to this subsection."

PART IV. TRAINING REQUIREMENTS FOR THE LAND APPLICATION OF WASTE.

Sec. 11. Part 9A of Article 21 of Chapter 143 of the General Statutes is repealed.

Sec. 12. G.S. 143B-301(a) reads as rewritten:

"(a) The Water Pollution Control System Operators Certification Commission shall consist of 11 members. Two members shall be from the animal agriculture

industry and shall be appointed by the Commissioner of Agriculture. ~~nine~~ Nine members shall be appointed by the Secretary of Environment, Health, and Natural Resources with the approval of the Environmental Management Commission with the following qualifications:

(1) Two members shall be currently employed as water pollution control facility operators, water pollution control system superintendents or directors, water and sewer superintendents or directors, or equivalent positions with a North Carolina municipality;

(2) One member shall be manager of a North Carolina municipality having a population of more than 10,000 as of the most recent federal census;

(3) One member shall be manager of a North Carolina municipality having a population of less than 10,000 as of the most recent federal census;

(4) One member shall be employed by a private industry and shall be responsible for supervising the treatment or pretreatment of industrial wastewater;

(5) One member who is a faculty member of a four-year college or university and whose major field is related to wastewater treatment;

(6) One member who is employed by the Department of Environment, Health, and Natural Resources and works in the field of water pollution control, who shall serve as Chairman of the Commission;

(7) One member who is employed by a commercial water pollution control system operating firm; and

(8) One member shall be currently employed as a water pollution control system collection operator, superintendent, director, or equivalent position with a North Carolina municipality."

Sec. 13. Existing Article 3 of Chapter 90A of the General Statutes shall be designated Part 1 of that Article, to be entitled "Certification of Water Pollution Control System Operators", and is amended by adding a new Part 2 to read:

"Part 2. Certification of Animal Waste Management System Operators.

"§ 90A-47. Purpose.

The purpose of this Part is to reduce nonpoint source pollution in order to protect the public health and to conserve and protect the quality of the State's water resources, to encourage the development and improvement of the State's agricultural land for the production of food and other agricultural products, and to require the examination of animal waste management system operators and certification of their competency to operate or supervise the operation of those systems.

"§ 90A-47.1. Definitions.

As used in this Part:

(1) 'Animal waste' means liquid residuals resulting from the raising of swine that are collected, treated, stored, or applied to the land through an animal waste management system.
(2) 'Animal waste management system' is defined in G.S. 143-215.1B.
(3) 'Application' means laying, spreading on, irrigating, or injecting animal waste onto land.
(4) 'Owner' means the person who owns or controls the land used for agricultural purposes or the person's lessee or designee.
(5) 'Operator in charge' means a person who holds a currently valid certificate to operate an animal waste management system and who has primary responsibility for the operation of the system.
(6) 'Swine production facility' means a facility for the housing and raising of swine designed to serve, and actually serving, more than 250 swine.

"§ 90A-47.2. Certified operator required; qualifications for certification.

(a) After December 31, 1997, no owner or other person in control of a swine production facility having an animal waste management system shall allow the system to be operated by a person who does not hold a valid certificate as an animal waste management system operator issued by the Commission. After December 31, 1997, no person shall perform the duties of an animal waste management system operator without being certified under the provisions of this Part. Certifications that were issued for animal waste management system operators under Part 9A of Article 21 of Chapter 143 of the General Statutes shall, subject to the provisions of this Part, continue in full force and effect.

(b) The owner or other person in control of a swine production facility may contract with a certified animal waste management system operator to provide for the operation of the animal waste management system at that facility. The Commission may adopt rules requiring that any certified animal waste management system operator contracting with one or more owners or other persons in control of a swine production facility file an annual report with the Commission as to the operations of each system at which the operator's services are provided.

"§ 90A-47.3. Qualifications for certification; training; examination.

(a) The Commission, in cooperation with the Division of Environmental Management, Department of Environment, Health, and Natural Resources, and the Cooperative Extension Service, shall develop and administer a program of training for animal waste management system operators. The educational program shall not exceed eight hours of classroom instruction and four hours of instruction in the field. Training materials shall be user-friendly and shall take into account the educational level of the applicants.

(b) The Commission shall develop procedures for the receipt of applications for certification, conduct of examinations, and investigation of the qualifications of applicants. In developing the examination, provisions shall be made for those persons with reading or learning difficulties and alternate testing methods provided upon request of the applicant.

(c) The Commission shall issue a certificate as an operator in charge for each person who completes the training program established in subsection (a) of this section and demonstrates the operator's competence in the operation of animal waste management systems by passing an appropriate exam.

"**§ 90A-47.4. Fees; certificate renewals.**

(a) An applicant for certification under this Part shall pay a fee of ten dollars ($10.00) for the examination and the certificate.

(b) The certificate shall be renewed annually upon payment of a renewal fee of ten dollars ($10.00). A certificate holder who fails to renew the certificate and pay the renewal fee within 30 days of its expiration shall be required to take and pass the examination for certification in order to renew the certificate.

"**§ 90A-47.5. Suspension; revocation of certificate.**

The Commission, in accordance with the provisions of Chapter 150B of the General Statutes, may suspend or revoke the certificate of any operator found to:

(1) Have practiced fraud or deception in obtaining certification;

(2) Have failed to exercise reasonable care, judgement, or the application of the operator's knowledge and ability in the performance of the duties of an operator in charge; or

(3) Is incompetent or otherwise unable to properly perform the duties of an operator in charge.

In addition to revocation of a certificate, the Commission may levy a civil penalty, not to exceed one thousand dollars ($1,000) per violation, for willful violation of the requirements of this Part.

"**§ 90A-47.6. Rules.**

The Commission shall adopt rules to implement the provisions of this Part."

Sec. 14. The title of Article 3 of Chapter 90A of the General Statutes reads as rewritten:

"~~Certification of Water Pollution Control System Operators.~~ Certifications Issued by the Water Pollution Control System Operators Certification Commission."

PART V. CLARIFICATION OF THE SWINE FARM SITING ACT.

Sec. 15. Article 67 of Chapter 106 of the General Statutes reads as rewritten:

"ARTICLE 67.

"Swine Farms.

"**§ 106-800. Title.**

This Article shall be known as the 'Swine Farm Siting Act'.

"**§ 106-801. Purpose.**

The General Assembly finds that certain limitations on the siting of swine houses and lagoons for ~~larger~~ swine farms can assist in the development of pork ~~production to contribute~~ production, which contributes to the economic development of the ~~State while minimizing any~~ State, by lessening the interference with the use and enjoyment of adjoining property.

"**§ 106-802. Definitions.**

As used in this Article, unless the context clearly requires otherwise:

(1) 'Lagoon' means a confined body of water to hold animal byproducts including bodily waste from animals or a mixture of waste with feed, bedding, litter or other agricultural ~~materials without discharge to surface waters of the State except in the event of a storm more severe than the 25-year, 24-hour storm.~~ materials.

(2) ~~'New swine farm' means any swine farm whose operations were sited on or after October 1, 1995. Renovation and reconstruction of existing farms does not constitute a 'new swine farm'.~~

(3) 'Occupied residence' means a dwelling actually inhabited by a person on a continuous basis as exemplified by a person living in his or her home.

(4) ~~'Siting' or 'site~~ 'Site evaluation' means an investigation to determine if a site meets all federal and State standards as evidenced by the Waste Management Facility Site Evaluation Report on file with the ~~Natural Resources Conservation Service~~ Soil and Water Conservation District office or a comparable report certified by a professional engineer or a comparable report certified by a technical specialist approved by the North Carolina Soil and Water Conservation ~~Commission and either of which report provides the basis for certification by the Division of Environmental Management pursuant to the rules appearing in the North Carolina Administrative Code governing waste not discharged to surface waters.~~ Commission.

(5) 'Swine farm' means a tract of land devoted to raising 250 or more animals of the porcine species.

(6) 'Swine house' means a building that shelters porcine animals on a continuous basis.

"**§ 106-803. ~~Requirements~~ Siting requirements for ~~siting~~ swine ~~houses and lagoons.~~ houses, lagoons, and land areas onto which waste is applied at swine farms.**

(a) A swine house or a lagoon that is a component of a swine farm shall be located at least 1,500 feet from any occupied residence; at least 2,500 feet from any school, hospital, or church; and at least 100 feet from any property boundary. 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~~ boundary of property on which an occupied residence is located and from any perennial stream or river, other than an irrigation ditch or canal.

(b) A swine house or a lagoon that is a component of a swine farm may be ~~sited~~ located closer to a residence, school, hospital, church, or a property boundary than is allowed under subsection (a) of this section if written permission is given by the owner of the property and recorded with the Register of Deeds.

"**§ 106-804. Enforcement.**

(a) Any person owning property directly affected by the siting requirements of G.S. 106-803 pursuant to subsection (b) of this section may bring a civil action against

a swine farmer who has violated G.S. 106-803 and may seek any one or more of the following:

(1) Injunctive relief.

(2) An order enforcing the siting requirements under G.S. 106-803.

(3) Damages caused by the violation.

(b) A person is directly affected by the siting requirements of G.S. 106-803 only if the person owns:

(1) An occupied residence located less than 1,500 feet from a swine house or lagoon in violation of G.S. 106-803.

(2) A school, hospital, or church located less than 2,500 feet from a swine house or lagoon in violation of G.S. 106-803.

(3) Property whose boundary is located less than 100 feet from a swine house or lagoon in violation of G.S. 106-803.

(4) Property on which an occupied residence is located and whose boundary is less than 50 feet from the outer perimeter of the land area onto which waste is applied from a lagoon that is a component of a swine farm in violation of G.S. 106-803.

(5) Property that abuts a perennial stream or river, or on which a perennial stream or river is located, and that property and that perennial stream or river are less than 50 feet from the outer perimeter of the land area onto which waste is applied from a lagoon that is a component of a swine farm in violation of G.S. 106-803.

(c) If the court determines it is appropriate, the court may award court costs, including reasonable attorneys' fees and expert witness' fees, to any party. If a temporary restraining order or preliminary injunction is sought, the court may require the filing of a bond or equivalent security. The court shall determine the amount of the bond or security.

(d) Nothing in this section shall restrict any other right that any person may have under any statute or common law to seek injunctive or other relief."

Sec. 16. Section 2 of Chapter 420 of the 1995 Session Laws reads as rewritten:

"Sec. 2. This act becomes effective October 1, ~~1995, and applies to any new swine farm for which a site evaluation is conducted on or after that date.~~ 1995. This act applies to the construction or enlargement, on or after October 1, 1995, of swine houses, lagoons, and land areas onto which waste is applied from a lagoon that are components of a swine farm. This act does not apply under each of the following circumstances:

(1) When the construction or enlargement occurs on or after October 1, 1995, for the purpose of increasing the swine population to that set forth as the projected population in a registration of the swine operation filed with the Department of Environment, Health, and Natural Resources before October 1, 1995.

(2) When the construction or enlargement occurs on or after October 1, 1995, for the purpose of increasing the swine population to the population that the animal waste management system is designed to accommodate as that system is set forth in a registration of the swine operation filed with the Department of Environment, Health, and Natural Resources before October 1, 1995, or as that system is set forth in an animal waste management plan approved before October 1, 1995.

(3) When the construction or enlargement occurs on or after October 1, 1995, for the purpose of complying with applicable animal waste management rules and not for the purpose of increasing the swine population."

Sec. 17. It is the intent of the General Assembly that Sections 15 and 16 of this act, other than new G.S. 106-804, as enacted in Section 15 of this act, clarify ambiguous language in the Swine Farm Siting Act, as enacted by Chapter 420 of the 1995 Session Laws, and do not change the intent of that act.

PART VI. MISCELLANEOUS PROVISIONS.

Sec. 18. G.S. 143-215.74(b)(5) reads as rewritten:

"(5) Funding may be provided to assist practices including conservation tillage, diversions, filter strips, field borders, critical area plantings, sediment control structures, sod-based rotations, grassed waterways, strip-cropping, terraces, cropland conversion to permanent vegetation, grade control structures, water control structures, emergency spillways, riparian buffers or equivalent controls, odor control best management practices, insect control best management practices, and animal waste managements systems and application. Funding for animal waste management shall be allocated for practices in river basins such that the funds will have the greatest impact in improving water quality."

Sec. 19. G.S. 143-215.74(b)(6) reads as rewritten:

"(6) State funding shall be limited to seventy-five percent (75%) of the average cost for each practice with the assisted farmer providing twenty-five percent (25%) of the cost (which may include in-kind support) with a maximum of ~~fifteen thousand dollars ($15,000) per year~~ seventy-five thousand dollars ($75,000) total to each applicant."

Sec. 20. (a) By September 1, 1996, all operators of animal waste management systems, as defined in G.S. 143-215.1B(h), as enacted by Section 2 of this act, shall contact their local Soil and Water Conservation District office and initiate the process to obtain an approved animal waste management plan pursuant to 15A N.C.A.C. 2H.0217. Operators who meet this September 1, 1996, deadline shall be placed on a list to receive high priority for technical assistance. Operators who do not meet this deadline are not assured of receiving technical assistance before December 31, 1997.

(b) The Environmental Management Commission may enter into special agreements or contracts with operators who register by the September 1, 1996 deadline under subsection (a) of this section and make a good faith effort to obtain an approved animal waste management plan by December 31, 1997. The Environmental Management Commission shall not issue a notice of violation of 15A N.C.A.C. 2H.0217 to these operators. The special agreement or contract shall set forth a schedule for an operator to follow to obtain an approved animal waste management plan by December 31, 1997.

(c) The Environmental Management Commission shall strictly enforce the penalties available against those operators who fail to comply with subsection (a) of this section or otherwise fail to make a good faith effort to obtain an approved animal waste management plan by December 31, 1997.

(d) The board of each Soil and Water Conservation District shall develop a strategy to help the operators of animal waste management systems in its district obtain approved animal waste management plans by December 31, 1997.

Sec. 21. The Division of Environmental Management, Department of Environment, Health, and Natural Resources, shall, as a matter of State policy, encourage the development of alternative animal waste treatment and disposal technologies, shall provide incentives to operators of animal waste management systems to participate in the evaluation of new and innovative waste management technologies, and shall ensure that the regulatory process does not limit the use of innovative technologies and that the evaluation of these technologies is made in a timely manner.

PART VII. EFFECTIVE DATES.

Sec. 22. (a) Section 1 of this act becomes effective January 1, 1998.

(b) G.S. 143-215.1B(h), as enacted by Section 2 of this act, is effective upon ratification. G.S. 143-215.1B(c)(1), (2), (3), (6), (7), and (8), as enacted by Section 2 of this act, become effective September 1, 1996, and apply to all animal waste management systems for which an approved animal waste management plan is obtained on or after that date and apply to all other animal waste management systems as of January 1, 1998. G.S. 143-215.1B(c)(4) and (5), as enacted by Section 2 of this act, become effective September 1, 1996, and apply to all animal waste management systems that are constructed or expanded beyond their design capacity on or after that date. G.S. 143-215.1B(e), as enacted by Section 2 of this act, becomes effective December 31, 1997, except the last sentence of that subsection becomes effective October 1, 1996. G.S. 143-215.1B(g) and G.S. 143-215.1C, as enacted by Section 2 of this act, and Section 3 of this act become effective October 1, 1996, and G.S. 143-215.1C applies to any new swine farm constructed on or after that date and to any existing swine farm that expands its animal waste management system beyond design capacity on or after that date. The remainder of Section 2 of this act becomes effective January 1, 1998, and applies to all animal waste management systems.

(c) Section 18 of this act becomes effective July 1, 1996. The remaining sections of this act are effective upon ratification. Sections 9 and 10 of this act apply to violations that occur on or after the date of ratification.

APPENDIX D

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1995

H **D**

HOUSE DRH5219-LDZ226C(5.15)

Short Title: Animal Waste Funds. (Public)

Sponsors: Representative J. Brown.

Referred to:

A BILL TO BE ENTITLED

AN ACT TO APPROPRIATE FUNDS TO SUPPORT CERTAIN RECOMMENDATIONS OF THE BLUE RIBBON STUDY COMMISSION ON AGRICULTURAL WASTE.

The General Assembly of North Carolina enacts:

Section 1. (a) There is appropriated from the General Fund to the Division of Soil and Water Conservation, Department of Environment, Health, and Natural Resources, the sum of three million eight hundred thousand dollars ($3,800,000) for the 1996-97 fiscal year for the Agriculture Cost Share Program for Nonpoint Source Pollution Control to be used for the costs associated with obtaining an approved animal waste management plan.

(b) G.S. 143-215.74(b)(5) reads as rewritten:

"(5) Funding may be provided to assist practices including conservation tillage, diversions, filter strips, field borders, critical area plantings, sediment control structures, sod-based rotations, grassed waterways, strip-cropping, terraces, cropland conversion to permanent vegetation, grade control structures, water control structures, emergency spillways, riparian buffers or equivalent controls, odor control best management practices, insect control best management practices, and animal waste managements systems and application. Funding for animal waste management shall be allocated for projects in river basins such that the funds will have the greatest impact in improving water quality."

(c) G.S. 143-215.74(b)(6) reads as rewritten:

"(6) State funding shall be limited to seventy-five percent (75%) of the average cost for each practice with the assisted farmer providing twenty-five percent (25%) of the cost (which may include in-kind support) with a maximum of ~~fifteen thousand dollars ($15,000) per year~~ seventy-five thousand dollars ($75,000) total to each applicant."

Sec. 2. There is appropriated from the General Fund to the Division of Soil and Water Conservation, Department of Environment, Health, and Natural Resources, the sum of one million four hundred seventeen thousand five hundred dollars ($1,417,500) for the 1996-97 fiscal year to support the Division to provide technical assistance to operators of animal operations that are in the process of obtaining an approved animal waste management plan pursuant to the animal waste management rules.

Sec. 3. There is appropriated from the General Fund to the Division of Environmental Management, Department of Environment, Health, and Natural Resources, the sum of four hundred eighty-four thousand dollars ($484,000) for the 1996-97 fiscal year to establish and support positions in the Division to conduct permitting, inspection, and enforcement activities for animal waste management systems.

Sec. 4. There is appropriated from the General Fund to the Department of Agriculture the sum of six hundred seventy-two thousand eight hundred dollars ($672,800) for the 1996-97 fiscal year to establish and support seven positions in the Department to conduct tests of animal waste and of soils of crops onto which the waste has been applied at animal operations.

Sec. 5. There is appropriated from the General Fund to the Department of Environment, Health, and Natural Resources the sum of two hundred eighty-six thousand dollars ($286,000) for the 1996-97 fiscal year for the Department to enter into a contract with a research institution to design and implement a scientifically valid study that uses available technology for the purpose of identifying the nonpoint sources of nitrogen in the surface waters of the State. The results of this study shall be reported to the Department and to the Environmental Review Commission no later than January 1, 1999.

Sec. 6. (a) There is appropriated from the General Fund to the Department of Environment, Health, and Natural Resources the sum of four hundred thousand dollars ($400,000) for the 1996-97 fiscal year for the Department to enter into a contract with a research institution to design and implement a scientifically based study for the purpose of determining the extent to which lagoons pose a threat, if any, to the groundwater of this State. Lagoons that are representative of soil types and hydrologic conditions in North Carolina shall be selected for this study.

(b) For purposes of this study, a lagoon is posing a threat to groundwater if nitrate levels exceed 10 parts per million in a location beyond 250 feet of the boundary of the lagoon.

(c) An environmental interest group, a regulatory agency, and a commodity group representing the pork industry shall participate in this study.

(d) The results of this study shall be reported to the Department and to the Environmental Review Commission no later than January 1, 1999.

Sec. 7. There is appropriated from the General Fund to the Board of Governors of The University of North Carolina the sum of five hundred thousand dollars ($500,000) for the 1996-97 fiscal year for the North Carolina Agricultural Research Service at North Carolina State University to serve as a focal point for experimentation with and testing of alternative animal waste disposal technologies for use in agriculture.

Sec. 8. There is appropriated from the General Fund to the Division of Soil and Water Conservation, Department of Environment, Health, and Natural Resources, the sum of six hundred thousand dollars ($600,000) for the 1996-97 fiscal year to enter into a contract to conduct research into economically feasible odor control technology and to provide detailed economic analysis of odor management alternatives; provided these funds are matched with an equal sum from private sources. Accurate information regarding the identity of research funding sources under this section shall be published and made available to the general public.

Sec. 9. This act becomes effective July 1, 1996.

APPENDIX E

NONDISCHARGE RULE FOR ANIMAL WASTE MANAGEMENT SYSTEMS
(15A NCAC 2H .0217)

PROCEDURES AND GUIDELINES TO IMPLEMENT THE NONDISCHARGE RULES FOR ANIMAL WASTE MANAGEMENT SYSTEMS
(15A NCAC 6F)

demonstrates that the DEM approved site has adequate capacity to accept the residuals.

(9) A construction sequence plan must be submitted with applications for an Authorization to Construct for modification of existing wastewater treatment facilities. The plan must outline the construction sequence to ensure continuous operation of the treatment system.

(c) Fees for Authorization to Construct Permits

(1) For every application for a new or modified construction permit, for facilities with a permitted flow of greater than 100,000 gallons per day, a nonrefundable application processing fee of two hundred dollars ($200.00) must be submitted.

(2) For every application for a new or modified construction permit, for facilities with a permitted flow of equal to or less than 100,000 gallons per day but greater than 1,000 gallons per day, a nonrefundable application processing fee of one hundred and fifty dollars ($150.00) must be submitted.

(3) For every application for a new or modified construction permit, for facilities with a permitted flow of equal to or less than 1,000 gallons per day, a nonrefundable application processing fee of one hundred dollars ($100.00) must be submitted.

HISTORY NOTE

Statutory Authority G.S. 143–215.1(c)(1);
Eff. October 1, 1987;
Amended Eff. March 1, 1993; August 3, 1992.

.0139 MINIMUM DESIGN REQUIREMENTS

All facilities requiring a permit pursuant to this Section shall be designed following good engineering practice and comply with the minimum design requirements specified in Rule 2H .0219 of this Subchapter. The plans and specifications must be stamped and sealed by a Professional Engineer licensed in North Carolina unless all three of the following conditions are met:

(1) the plans and specifications are for domestic waste from a single family dwelling with flows of 1000 gallons per day or less, and

(2) the plans and specifications are prepared by the homeowner, and contain complete information needed to evaluate the proposed facility, and

(3) the effluent limitations are for secondary treatment.

HISTORY NOTE

Statutory Authority G.S. 143–215.1(c)(1);
Eff. October 1, 1987.

.0140 CERTIFICATION OF COMPLETION

Prior to operation of any treatment works or disposal system permitted in accordance with this Section, a certification must be received from a professional engineer certifying that the treatment works or disposal system has been installed in accordance with the approved plans and specifications. For facilities with phased construction or where there is a need to operate certain equipment under actual operating conditions prior to certification, additional certification may be needed as follow–ups to the initial, pre–operation, certification. In cases where the treatment works or disposal system was designed by a homeowner rather than a professional engineer, either the permittee or a professional engineer must submit this certification.

HISTORY NOTE

Statutory Authority G.S. 143–215.1(c)(1);
Eff. October 1, 1987.

.0141 OPERATIONAL AGREEMENTS

Prior to issuance or reissuance of a permit pursuant to this Section for a wastewater facility as specified in G.S. 143–215.1(d1), the applicant must either provide evidence to show that the applicant has been designated as a public utility by the State Utilities Commission or enter into a properly executed operational agreement with the Division of Environmental Management. The requirement for assurance of financial solvency will be made on a case by case determination.

HISTORY NOTE

Statutory Authority G.S. 143–215.1(d1);
Eff. October 1, 1987.

.0142 USE/WASTEWATER TRTMT WORKS EMGCY MAIN: OPER/REPAIR FUND

(a) In cases in which water quality standards are violated or an environmental health threat exists, monies from the Wastewater Treatment Works Emergency Maintenance, Operation and Repair Fund may be used at the discretion of the Director to correct the cause of such conditions.

(b) In this, the Director shall:

(1) Ensure the fiscal integrity of the fund;

(2) Use the fund only as a measure of last resort to protect water quality or public health when all other compliance and enforcement procedures have failed;

(3) Limit the use of the fund to wastewater treatment works with design flow capacities of less than or equal to one hundred thousand gallons per day (100,000 GPD);

(4) Notify the permittee by certified mail of the intention to take emergency corrective action and to recoup monies spent;

(5) Make every effort to recoup fund expenditures, including collection costs, from the parties responsible;

(6) Coordinate use of the fund with the program of the Public Utilities Commission when a permittee is also a regulated utility; and

(7) Provide a quarterly accounting of the fund to the Commission.

HISTORY NOTE

Statutory Authority G.S. 143–215.3(a); 143–215.3B(c); 143–215.3B(e);
Eff. August 1, 1988.

SECTION .0200 – WASTE NOT DISCHARGED TO SURFACE WATERS

.0201 PURPOSE

The rules in this Section set forth the requirements and procedures for application and issuance of permits for the following systems which do not discharge to surface waters of the state:

(1) sewer systems;
(2) disposal systems;
(3) treatment works; and
(4) residual and residue disposal/utilization systems;
(5) animal waste management systems;
(6) treatment of petroleum contaminated soils; and
(7) stormwater management systems pursuant to 15A NCAC 2H .1000.

HISTORY NOTE

Statutory Authority G.S. 143–215.3(a)(1); 143–215.1;
Eff. February 1, 1976;
Amended Eff. September 1, 1995; February 1, 1993; November 1, 1987.

.0202 SCOPE

The rules in this Section apply to all persons proposing to construct, alter, extend, or operate any sewer system, treatment works, disposal system, petroleum contaminates soil treatment system, animal waste management system, stormwater management system or residual disposal/utilization system which does not discharge to surface waters of the state, including systems which discharge waste onto or below land surface. However, these Rules do not apply to sanitary sewage systems or solid waste management facilities which are permitted under the

authority of the Commission for Health Services. The provisions for stormwater management systems can be found in 15A NCAC 2H .1000.

HISTORY NOTE

Statutory Authority G.S. 130A-335; 143-215.1; 143-215.3(a)(1);
Eff. February 1, 1976;
Amended Eff. September 1, 1995; February 1, 1993; November 1, 1987.

.0203 DEFINITION OF TERMS

The terms used in this Section shall be as defined in G.S. 143-213 except for G.S. 143-213(15) and (18)a. and as follows:

(1) "Agronomist" means an individual who is a Certified Professional Agronomist by ARCPACS (American Registry of Certified Professionals in Agronomy, Crops and Soil) or an individual with a demonstrated knowledge in agronomy.

(2) "Animal waste" means livestock or poultry excreta or a mixture of excreta with feed, bedding, litter or other materials.

(3) "Animal waste management system" means a combination of structural and non-structural practices which will properly collect, treat, store or apply animal waste to the land such that no discharge of pollutants occurs to surface waters of the state by any means except as a result of a storm event more severe than the 25-year, 24-hour storm.

(4) "Approved animal waste management plan" means a plan to properly collect, store, treat or apply animal waste to the land in an environmentally safe manner and approved according to the procedures established in 15A NCAC 2H .0217(a)(1)(H).

(5) "Bedrock" means any consolidated or coherent and relatively hard, naturally-formed mass of mineral matter which cannot be readily excavated without the use of explosives or power equipment.

(6) "Building" means any structure or part of a structure built for the separate shelter or enclosure of persons, animals, chattels, or property of any kind and which has enclosing walls for at least 50 percent of its perimeter. Each unit separated from other units by a four hour fire wall shall be considered as a separate building.

(7) "Building drain" means that part of the lowest piping of a drainage system which receives waste from inside the building and conveys it to the building sewer which begins 10 feet outside the building wall.

(8) "Building sewer" means that part of the horizontal piping of a drainage system which receives the discharge from a single building drain and conveys it directly to a public sewer, private sewer, or on-site sewage disposal system. Pipelines or conduits, pumping stations and appliances appurtenant thereto will not be considered to be building sewers if they traverse adjoining property under separate ownership or travel along any highway right of way.

(9) "C horizon" means the unconsolidated material underlying the soil solum, which may or may not be the same as the parent material from which the solum is formed but is below the zones of major biological activity and exhibits characteristics more similar to rock than to soil.

(10) "Director" means the Director of the Division of Environmental Management, Department of Environment, Health, and Natural Resources or his delegate.

(11) "Dedicated site" means a site:

(a) to which residuals are applied at rates or frequencies greater than agronomically justifiable, or where the primary use of the land is for residual disposal and crop or ground cover production is of secondary importance,

(b) any residual disposal site designated by the Director, or

(c) where the primary use of the land is for the repetitive treatment of soils containing petroleum products or petroleum contaminated residues and crop or ground cover production is of secondary importance.

(12) "Deemed permitted" means that a facility is considered as having a needed permit and being compliant with the permitting requirements of G.S. 143-215.1(a) even though it has not received an individual permit for its construction or operation.

(13) "Division" or "(DEM)" means the Division of Environmental Management, Department of Environment, Health, and Natural Resources.

(14) "Existing animal waste management system" means any animal waste management system which:

(a) was completed and was being operated on the effective date of this Rule,

(b) serves a feedlot stocked with animals after the effective date of this Rule and has been deemed permitted pursuant to 15A NCAC 2H .0217(a)(1), or

(c) serves a feedlot that has been abandoned or unused for a period of less than four years.

(15) "Expanded animal waste management system" means animal waste treatment and storage facilities which require an increase over the existing animal waste design treatment and storage capacity due to an increase in animal population at the feedlot.

(16) "Feedlot" means a lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising or holding of animals and specifically designed as a confinement area in which animal waste may accumulate or where the concentration of animals is such that an established vegetative cover cannot be maintained. The confinement period must be for at least 45 days out of a 12 month period and not necessarily consecutive days. Pastures shall not be considered feedlots under this Rule.

(17) "General Permit" means a permit issued under G.S. 143-215.1(b)(3) and (4).

(18) "Groundwaters" means those waters in the saturated zone of the earth as defined in 15A NCAC 2L.

(19) "Industrial wastewater" means all wastewater other than sewage and includes:

(a) wastewater resulting from any process of industry or manufacture, or from the development of any natural resource;

(b) wastewater resulting from processes of trade or business, including wastewater from laundromats and vehicle/equipment washes, but not wastewater from restaurants;

(c) stormwater will not be considered to be an industrial wastewater unless it is contaminated with an industrial wastewater;

(d) any combination of sewage and industrial wastewater;

(e) municipal wastewater will be considered to be industrial wastewater unless it can be demonstrated to the satisfaction of the Division that the wastewater contains no industrial wastewater;

(f) Petroleum contaminated groundwater extracted as part of an approved groundwater remediation system.

(20) "Infiltration Systems" means a subsurface ground absorption system expressly designed for the introduction of previously treated petroleum contaminated water into the subsurface environment.

(21) "New animal waste management system" means animal waste management systems which are constructed and operated at a site where no feedlot existed previously or where a system serving a feedlot has been abandoned or unused for a period of four years or more and is then put back into service.

(22) "Process to Further Reduce Pathogens" or "PFRP" means a residuals stabilization process that reduces pathogens to below detection levels. The procedures that may be utilized to meet this requirement are contained in 40 CFR 257, Appendix II which is hereby incorporated by reference including any subsequent amendments and editions. Copies of this publication are available from the Government Institutes, Inc., 4 Research Place, Suite 200, Rockville, MD 20850-1714 for a cost of thirty-six dollars ($36.00) each plus four dollars ($4.00) shipping and handling. Copies are also available for review at the Division of Environmental Management, Archdale Building, 512 N. Salisbury Street, P. O. Box 29535, Raleigh, North Carolina 27626-0535.

(23) "Process to Significantly Reduce Pathogens" or "PSRP" means a residuals stabilization process that provides the minimal acceptable lever of pathogen and vector attraction reduction prior to land application. The procedures that may be utilized to meet this requirement are contained in 40 CFR 257, Appendix II which is hereby incorporated by reference including any subsequent amendments and editions. Copies of this publication are available from the Government Institutes, Inc., 4

Research Place, Suite 200, Rockville, MD 20850–1714 for a cost of thirty–six dollars ($36.00) each plus four dollars ($4.00) shipping and handling. Copies are also available for review at the Division of Environmental Management, Archdale Building, 512 N. Salisbury Street, P.O. Box 29535, Raleigh, North Carolina 27626–0535.

(24) "Petroleum contaminated soil" or "Soil containing petroleum products" shall mean any soil that has been exposed to petroleum products because of any emission, spillage, leakage, pumping, pouring, emptying, or dumping of petroleum products onto or beneath the land surface and that exhibits characteristics or concentrations of typical petroleum product constituents in sufficient quantities as to be detectable by compatible laboratory analytical procedures.

(25) "Petroleum product" means all petroleum products as defined by G.S. 143–215.94A(7) and includes motor gasoline, aviation gasoline, gasohol, jet fuels, kerosene, diesel fuel, fuel oils (#1–#6), and motor oils (new and used).

(26) "Pollutant" means waste as defined in G.S. 143–213(18).

(27) "Private sewer" means any part of a sewer system which collects wastewater from more than one building, is privately owned and is not directly controlled by a public authority.

(28) "Professional engineer" means a person who is presently registered and licensed as a professional engineer by the North Carolina State Board of Registration For Professional Engineers and Land Surveyors.

(29) "Public or community sewage system" means a single system of sewage collection, treatment, or disposal owned and operated by a sanitary district, a metropolitan sewage district, a water and sewer authority, a county, a municipality, or a public utility.

(30) "Public sewer" means a sewer located in a dedicated public street, roadway, or dedicated public right–of–way or easement which is owned or operated by any municipality, county, water or sewer district, or any other political subdivision of the state authorized to construct or operate a sewer system.

(31) "Rapid infiltration system" means rotary distributor systems or other similar systems that dispose of tertiary treated waste at high surface area loading rates of greater than 1.5 gpd/ft^2.

(32) "Residuals" means any solid or semisolid waste, other than residues from agricultural products and processing generated from a wastewater treatment facility, water supply treatment facility or air pollution control facility permitted under the authority of the Environmental Management Commission.

(33) "Residues from agricultural products and processing" means solids, semi–solids or liquid residues from food and beverage processing and handling; silviculture; agriculture; and aquaculture operations permitted under the authority of the Environmental Management Commission that are non–toxic, non–hazardous and contain no domestic wastewater.

(34) "Sewage" means the liquid and solid human waste, and liquid waste generated by domestic water–using fixtures and appliances, from any residence, place of business, or place of public assembly. Sewage does not include wastewater that is totally or partially industrial wastewater, or any other wastewater not considered to be domestic waste.

(35) "Sewer system" means pipelines or conduits, pumping stations, specialized mode of conveyance and appliances appurtenant thereto, used for conducting wastes to a point of ultimate disposal.

(36) "Soil remediation at conventional rates" means the utilization of soils containing petroleum products by land application methods, at an evenly distributed thickness not to exceed six inches.

(37) "Soil remediation at minimum rates" means the treatment of soils containing petroleum products by land application methods, at an evenly distributed application thickness not to exceed an average of one inch.

(38) "Soil scientist" means an individual who is a Certified Professional in Soils through the NCRCPS (N.C. Registry of Certified Professionals in Soils) or a Certified Professional Soil Scientist or Soil Specialist by ARCPACS (American Registry of Certified Professionals in Agronomy, Crops and Soils) or a Registered Professional Soil Scientist by NSCSS (the National Society of Consulting Soil Scientist) or can provide documentation that he/she meets the minimum education and experience requirements for certification or registration by one or more of the organizations named in this Subparagraph or upon approval by the Director, an individual with a demonstrated knowledge of Soil Science.

(39) "Staff" means the staff of the Division of Environmental Management, Department of Environment, Health, and Natural Resources.

(40) "Stormwater" is defined in G.S. 143, Article 21.

(41) "Subsurface ground absorption sewage disposal system" means a waste disposal method which distributes waste beneath the ground surface and relies primarily on the soil for leaching and removal of dissolved and suspended organic or mineral wastes. Included are systems for public or community sewage systems and systems which are designed for the disposal of industrial wastes. Land application systems utilizing subsurface residual injection are not included.

(42) "Surface waters" means all waters of the state as defined in G.S. 143–212 except underground waters.

(43) "Toxicity test" means a test for toxicity conducted using the procedures contained in 40 CFR 261, Appendix II which is hereby incorporated by reference including any subsequent amendments and editions. Copies of this publication are available from the Government Institutes, Inc., 4 Research Place, Suite 200, Rockville, MD 20850–1714 for a cost of thirty–six dollars ($36.00) each plus four dollars ($4.00) shipping and handling. Copies are also available for review at the Division of Environmental Management, Archdale Building, 512 N. Salisbury Street, P.O. Box 29535, Raleigh, North Carolina 27626–0535.

(44) "Treatment works or disposal system which does not discharge to surface waters" means any treatment works, facility or disposal system which is designed to:

(a) operate as closed system with no discharge to waters of the state, or

(b) dispose/utilize of wastes, including residuals, residues, contaminated soils and animal waste, to the surface of the land, or

(c) dispose of wastes through a subsurface absorption system.

(45) "Waste oil" means any used nonhazardous petroleum product other than crankcase oil. Crankcase oil mixed with other used nonhazardous petroleum products will be considered as waste oil.

HISTORY NOTE

Statutory Authority G.S. 130A–335; 143–213; 143–215.3(a)(1);
Eff. February 1, 1976;
Amended Eff. September 1, 1995; February 1, 1993; August 1, 1988; November 1, 1987.

.0204 ACTIVITIES WHICH REQUIRE A PERMIT

No person shall do any of the things or carry out any of the activities contained in N.C.G.S. 143–215.1(a)(1) thru (11) until or unless the person shall have applied for and received a permit from the Director (or if appropriate an approved local sewer system program) and shall have complied with the conditions prescribed in the permit.

HISTORY NOTE

Statutory Authority G.S. 130A–335; 143–215.1; 143–215.3(a)(1);
Eff. February 1, 1976;
Amended Eff. September 1, 1995; October 1, 1987; February 1, 1986.

.0205 APPLICATION: FEES: SUPPORTING INFORMATION: REQUIREMENTS

(a) Jurisdiction. Applications for sewer system extensions under the jurisdiction of a local sewer system program shall be made in accordance with applicable local laws and ordinances. Applications for permits from the Division shall be made in accordance with this Rule as follows.

(b) Applications. Application for a permit must be made in triplicate on official forms completely filled out, where applicable, and fully executed in the manner set forth in Rule .0206 of this Section. A processing fee as described herein must be submitted with each application in the form of a check or money order made payable to N.C. Department of Environment, Health, and Natural Resources. Applications may be

.0213 MODIFICATION AND REVOCATION OF PERMITS

Any permit issued by the Division pursuant to these Rules is subject to revocation, or modification upon 60 days notice by the Director in whole or part for good cause including but not limited to:

(1) violation of any terms or conditions of the permit;

(2) obtaining a permit by misrepresentation or failure to disclose fully all relevant facts;

(3) refusal of the permittee to allow authorized employees of the Department of Environment, Health, and Natural Resources upon presentation of credentials:

(a) to enter upon permittee's premises on which a system is located in which any records are required to be kept under terms and conditions of the permit;

(b) to have access to any copy and records required to be kept under terms and conditions of the permit;

(c) to inspect any monitoring equipment or method required in the permit; or

(d) to sample any discharge of pollutants.

(4) failure to pay the annual fee for administering and compliance monitoring.

HISTORY NOTE

Statutory Authority G.S. 143–215.3(a)(1); 143–215.1(b)(2);
Eff. February 1, 1976;
Amended Eff. February 1, 1993; August 1, 1988; October 1, 1987; November 1, 1978.

.0214 INVESTIGATIONS: MONITORING AND REPORTING

HISTORY NOTE

Statutory Authority G.S. 143–215.3(a); 143–215.1(b);
Eff. February 1, 1976;
Amended Eff. November 1, 1978;
Repealed Eff. October 1, 1987.

.0215 DELEGATION OF AUTHORITY

For permits issued by the Division, the Director is authorized to delegate any or all of the functions contained in these Rules except the following:

(1) denial of a permit application;

(2) revocation of a permit not requested by the permittee;

(3) modification of a permit not requested by the permittee.

HISTORY NOTE

Statutory Authority G.S. 143–215.3(a)(1); 143–215.3(a)(4);
Eff. February 1, 1976;
Amended Eff. February 1, 1993; October 1, 1987; February 1, 1986.

.0216 LIMITATION ON DELEGATION

HISTORY NOTE

Statutory Authority G.S. 143–215.3(a)(1); 143–215.9(d); 143–215.3(a)(4);
Eff. February 1, 1976;
Repealed Eff. February 1, 1986.

.0217 PERMITTING BY REGULATION

(a) The following nondischarge facilities are deemed to be permitted pursuant to G.S. 143–215.1(d) and it shall not be necessary for the Division to issue individual permits for construction or operation of the following facilities:

(1) Animal waste management systems for which waste does not reach the surface waters by runoff, drift, direct application or direct discharge during operation or land application and which meet the following criteria:

(A) Systems which are designed for, and actually serve, less than the following number of animals and all other systems not specifically mentioned in this Rule:

100 head of cattle

75 horses

250 swine

1,000 sheep

30,000 birds with a liquid waste system

Although these systems are not required to obtain an approved animal waste management plan, animal waste treatment and storage facilities such as, but not limited to, lagoons, ponds, and drystacks which are designed and constructed to serve new, upgraded or expanded facilities under these size criteria are encouraged to meet the same minimum standards and specifications as required for an approved animal waste management plan. Systems that are determined to have an adverse impact on water quality may be required to obtain an approved animal waste management plan or to apply for and receive an individual nondischarge permit from DEM.

(B) Poultry operations which use a dry litter system if records are maintained for one year which include the dates the litter was removed, the estimated amount of litter removed and the location of the sites where the litter was land applied by the poultry operation, the waste is applied at no greater than agronomic rates and if litter is stockpiled not closed than 100 feet from perennial waters as indicated on the most recent published version of U.S.G.S. 1:24.000 (7.5 minute) scale topographic maps and other waters as determined by the local soil and water conservation district. If a third party applicators is used, records must be maintained of the name, address and phone number of the third party applicator.

(C) Land application sites under separate ownership from the waste generator, receiving animal waste from feedlots which is applied by either the generator or a third party applicator, when all the following conditions are met:

(i) the waste is applied at no greater than agronomic rates;

(ii) a vegetative buffer (separation) of at least 25 feet is maintained from perennial waters as indicated on the most recent published version of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps and other waters as determined by the local soil and water conservation district, if a wet waste application system is used.

(D) Existing animal waste management systems serving equal to or greater than the number of animals as listed in Part (a)(1)(A) of this Rule until December 31, 1997. In addition, a registration form for the system must be submitted to DEM on forms supplied or approved by DEM pursuant to Paragraph (c) of this Rule. Systems that are determined to have an adverse impact on water quality may be required to obtain an approved animal waste management plan or to apply for and receive an individual nondischarge permit from DEM.

(E) Existing animal waste management systems serving equal to or greater than the number of animal as listed in Part (a)(1)(A) of this Rule, which have an approved animal waste management plan by December 31, 1997. Systems that do not have an approved animal waste management plan or are determined to have an adverse impact on water quality may be required to apply for and receive an individual nondischarge permit from DEM.

(F) New and expanded animal waste management systems serving equal to or greater than the number of animals listed in Part (a)(1)(A) of this Rule which are placed in operation during the period from the effective date of this Rule through December 31, 1993 and which submitted a registration form for the system to DEM on forms supplied or approved by DEM. Systems that are determined to have an adverse impact on water quality may be required to obtain an approved animal waste management plan or to apply for and receive an individual nondischarge permit]from DEM.

(G) New and expanded animal waste management systems serving equal to or greater than the number of animals listed in Part (a)(1)(A) of this Rule, which have an approved animal waste management plan after December 31, 1993.

(H) For the purpose of this Rule, the procedures for the development of an approved animal waste management plan shall be as follows:

(i) The animal waste management practices or combination of practices which are selected to comprise a plan for a specific feedlot must meet the minimum standards and specifications of the U.S. Department of Agriculture – Soil Conservation Service contained in the Field Office Technical Guide or the standard of practices adopted by the Soil and Water commission or standards for any combination of practices which provide water quality protection and are approved by one of these two agencies.

(ii) Plans must be certified by any technical specialist designated pursuant to rules adopted by the Soil and Water Conservation Commission and the certificate submitted to the DEM central office on forms approved or supplied by DEM. The technical specialist must certify that the best management practices which comprise the plan meet the applicable minimum standards and specifications. Should the Soil and Water Conservation Commission fail to adopt rules to implement the provisions of this Rule within 12 months of its effective date, all animal waste management systems that would have been required to obtain an approved animal waste management plan must apply for and receive an individual nondischarge permit from the Division of Environmental Management.

(iii) The land application buffers must meet the conditions established in Subpart (a)(1)(C)(ii) of this Rule.

(iv) The waste shall not be applied at greater than agronomic rates.

(v) For new or expanded animal waste management systems requiring a plan, plan approval must include an on–site inspection to confirm that animal waste storage and treatment structures such as but not limited to lagoons and ponds have been designed and constructed to meet the appropriate minimum standards and specifications.

(vi) New and expanded animal waste storage and treatment facilities such as but not limited to lagoons and ponds shall be located at least 100 feet from perennial waters as indicated on the most recent published version of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps and other waters as determined by the local soil and water conservation district. This buffer requirement shall also apply to areas where an established vegetative cover will not be maintained because of the concentration of animals, with the exception of stream crossings. Animal waste storage/treatment facilities and animal concentration areas will be exempt from the minimum buffer requirements if it can be documented that no practicable alternative exists and that equivalent controls are used as approved by the Soil and Water Conservation Commission.

(vii) For new facilities, an animal waste management plan must be approved before animals are initially stocked. For an expanded facility, an animal waste management plan must be approved before the additional animals are stocked. New and expanded systems may be constructed in phases as long as each phase meets the minimum criteria established in Subpart (a)(1)(H)(i) of this Rule.

(viii) For existing animal waste management systems, the animal waste management plan shall include only operational and maintenance standards and specifications in effect on the date of plan approval . Meeting minimum design and construction standards and specifications for existing animal waste storage and treatment structures, such as but not limited to lagoons and ponds, shall not be required for plan approval.

(ix) An approved plan for an existing animal waste management system may be amended at any time without submitting a new certification to DEM if the revision meets minimum standards and specifications and is approved by any technical specialist designated pursuant to Subpart (a)(1)(H)(ii) of this Rule.

(x) For animal waste management systems which use third party applicators, the plan must require a current record to be maintained for a period of one year which includes the name, address and phone number of the third party applicator, the date of removal of the animal waste and the amount of waste removed.

(xi) An approved plan is not required to be approved again when revisions are made to the minimum standards and specifications, but such revision, as applicable, will be encouraged to be incorporated into the plan.

(xii) For each change in ownership of the feedlot, the new owner must notify DEM in writing within 60 days of transfer of ownership that the approved plan has been read and is understood and that all provisions of the plan will be implemented.

(xiii) A copy of the approved plan, the signed certification form and any approved revisions to the plan shall be maintained by the operator.

(2) Treatment works and disposal systems for solid waste disposal sites and composting facilities for solid waste, residuals or residues approved in accordance with the rules of the Commission for Health Services if the Commission for Health Services has received the written concurrence of the Director. The term solid waste is used as defined in G.S. 130A–290 and includes hazardous waste.

(3) Any building sewer documented by the local building inspector to be in compliance with the N.C. State Plumbing Code.

(4) Sites permitted under the authority of the Commission for Health Services for the disposal/utilization of residuals/septage.

(5) Individual land application sites receiving compost or other stabilized residuals that are demonstrated as being nonhazardous and nontoxic, meet EPA's criteria for PFRP or Class A residuals as defined in 40 CFR 503, are registered by the North Carolina Department of Agriculture as a commercial fertilizer/soil amendment, are utilized at agronomic rates and are sold and used exclusively in bag form. No distinction will be made as to whether the material is bagged in North Carolina or shipped into the state already bagged.

(6) Storage sites for petroleum contaminated soils that are utilized for less than 45 days, storage is on 10 mil or thicker plastic, provisions are made for containing potential leachate and runoff and approval of the activity has been receiving from the appropriate DEM Regional Supervisor or his designee.

(7) Land application sites for petroleum contaminated soils with volumes of soil from each source of less than or equal to 50 cubic yards and approval of the activity has been received from the appropriate DEM Regional Supervisor or his designee.

(8) Swimming Pool filter backwash and pool drainage that is discharged to the land surface.

(9) Drilling muds, cuttings and well water from the development of wells.

(10) Composting facilities for dead animals, if the facilities are constructed and operated in accordance with guidelines approved by the North Carolina Department of Agriculture, are constructed on an impervious, weight–bearing foundation, operated under a roof and are approved by the State Veterinarian.

(11) Operations that involve routine maintenance or the rehabilitation of existing sewer lines. In situations where existing sewer lines are undergoing routine maintenance, the existing sewer lines are being rehabilitated by constructing or installing replacement sewers, or the existing sewer lines are being refurbished by the installation of some

type of sealant or sleeve inside the existing sewer line, a specific nondischarge permit is not required. These operations will be deemed to be permitted as long as all construction and installation conforms to the design criteria of the Division pursuant to Rule .0219 of this Section, as long as new sources of wastewater flow are not being connected to the rehabilitated sewers, and as long as all replacements or newly constructed sewers are located in the same proximity (same general horizontal and vertical alignment) as the existing sewers. If any of the criteria in this Paragraph are not being adhered to, a site specific permit must be requested by the applicant. Additionally, once the maintenance or rehabilitation activities are completed, a North Carolina Professional Engineer's certification (form provided by the Division) must be submitted to the appropriate Regional Supervisor for the completed work.

(b) The Director however may on a case by case basis determine that a facility should not be deemed to be permitted in accordance with this Rule and be required to obtain individual nondischarge permits. This determination will be made based on existing or projected environmental impacts.

(c) All existing, new or expanding animal waste management systems serving equal to or greater than the number of animals as listed in Part (a)(1)(A) of this Rule must submit a registration form for the system to DEM. Failure to register on or before December 31, 1993, shall result in an appropriate enforcement action being initiated or the facility being required to apply for and receive an individual nondischarge permit. Penalties assessed may be based on any one or a combination of the factors as established in G.S. 143B–282.1(b) and commensurate with actual or potential environmental damage.

(d) Failure to obtain approval of a management plan as required by the dates specified in Paragraph (a)(1) of this Rule or failure to follow an approved animal waste management plan shall result in appropriate enforcement actions being initiated or the facility being required to apply for and receive an individual nondischarge permit. Penalties assessed may be based on any one or a combination of the factors as established in G.S. 143B–282.1(b) and commensurate with actual or potential environmental damage.

(e) The Secretary of Environment, Health, and Natural Resources is delegated the authority to assess fines and penalties for the willful discharge of animal waste from animal or poultry feeding operations pursuant to N.C. General Statutes 143–215(e).

(f) Nothing in this Rule shall be deemed to allow the violation of any assigned surface water, groundwater, or air quality standards, and in addition any such violation shall be considered a violation of a condition of a permit. Further, nothing in this Rule shall be deemed to apply to or permit activities for which a state/NPDES permit is otherwise required. The term NPDES means National Pollutant Discharge Elimination System.

HISTORY NOTE

Statutory Authority G.S. 130A–300; 143–215.1(a)(1); 143–215.3(a),(d);
Eff. February 1, 1976;
Amended Eff. February 1, 1993; December 1, 1984.

.0218 LOCAL PROGRAMS FOR SEWER SYSTEMS

(a) Jurisdiction. Municipalities, counties, local boards or commissions, water and sewer authorities, or groups of municipalities and counties may apply to the Commission for approval of programs for permitting construction, modification, and operation of public and private sewer systems in their utility service areas. Permits issued by approved local programs serve in place of permits issued by the Division.

(b) Applications. Applications for approval of local sewer system programs must provide adequate information to assure compliance with the requirements of G.S. 143–215.1(f) and the following requirements:

(1) Applications for local sewer system programs shall be submitted to the Director, Division of Environmental Management, Department of Environment, Health, and Natural Resources, P. O. Box 29535, Raleigh, North Carolina, 27626–0535.

(2) The program application shall include copies of permit application forms, permit forms, minimum design criteria, and other relevant documents to be used in administering the local program.

(3) An attorney representing the local unit of government submitting the application must certify that the local authorities for processing permit applications, setting permit requirements, enforcement, and penalties are compatible with those for permits issued by the Division.

(4) If the treatment and disposal system receiving the waste is under the jurisdiction of another local unit of government, then the program application must contain a written statement from that local unit of government that the proposed program complies with all its requirements and that the applicant has entered into a satisfactory contract which assures continued compliance.

(5) Any future amendments to the requirements of this Section shall be incorporated into the local sewer system program within 60 days of the effective date of the amendments.

(6) A professional engineer licensed to practice in this state shall be on the staff of the local sewer system program or retained as a consultant to review unusual situations or designs and to answer questions that arise in the review of proposed projects.

(7) Each project permitted by the local sewer system program shall be inspected for compliance with the requirements of the local program at least once during construction.

(8) A copy of each permit issued by the local sewer system program shall be sent to the regional office of the Division and another copy sent to the central office of the Division in Raleigh. Copies of the approved plans must also be submitted upon request by the Division.

(9) A semi–annually report shall be submitted to the Director with a copy to the appropriate DEM Regional Office, listing for each local permit issued during the quarter the name of the person receiving the permit, the permit number, the treatment facility receiving the waste, and the design flow and the type of waste for sewer system extensions or changes. The report shall also provide a listing and summary of all enforcement actions taken or pending during the quarter. The quarters begin on January 1, April 1, July 1, and October 1, and the report shall be submitted within 30 days after the end of each period.

(c) Approval of Local Programs. The staff of the division shall acknowledge in writing receipt of an application for a local sewer system program, review the application, notify the applicant of additional information that may be required, and make a recommendation to the Commission on the acceptability of the proposed local program. Final action on the proposed local program shall be made by the Commission within 180 days of receiving a complete application.

(d) Adequacy of Receiving Facilities. Local sewer system programs shall not issue a permit for a sewer project which would increase the flow or change the characteristics of waste to a treatment works or sewer system unless the local program has received a written determination from the Division that, pursuant to G.S. 143–215.67(a), the treatment works or sewer system is adequate to receive the waste. The Division staff may, when appropriate, provide one written determination that covers all local permits for domestic sewage sewer projects with total increased flow to a particular treatment works less than a specified amount and which are issued within a specified period of time not to exceed 60 days. In no case shall the local sewer system program issue a permit for additional wastewater if the receiving wastewater treatment is in noncompliance with its Division issued permit unless the additional flow is allowed as part of a special order or judicial order.

SUBCHAPTER 6F – PROCEDURES AND GUIDELINES TO IMPLEMENT THE NONDISCHARGE RULE FOR ANIMAL WASTE MANAGEMENT SYSTEMS

.0001 PURPOSE

This Subchapter describes rules to implement the provisions of 15A NCAC 2H .0200 – Waste Not Discharged To Surface Waters, hereinafter called the Nondischarge Rule for Animal Waste Management Systems. In agreement with the Environmental Management Commission (EMC) and the Division of Environmental Management (DEM), the Soil and Water Conservation Commission sets forth these Rules in accordance with 15A NCAC 2H .0217. Alternatively, and in lieu of these Rules, the requirements of 15A NCAC 2H .0200 may be satisfied also by receiving an individual nondischarge permit from the Division of Environmental Management in accordance with 15A NCAC 2H .0217(d). An owner must either obtain certification under these Rules or meet DEM requirements for an individual nondischarge permit. The review process of the District does not abrogate the responsibilities of the owner to either obtain a certification or to meet DEM requirements for an individual nondischarge permit.

History Note

Filed as a Temporary Adoption Eff. December 9, 1993 for a Period of 180 Days or Until the Permanent Rule Becomes Effective, Whichever is Sooner;
Statutory Authority G.S. 139–2; 139–4; 143B–294;
Eff. March 1, 1994.

.0002 DEFINITIONS

The terms used in this Subchapter shall be as defined in G.S. 139–3; 143–215.74; 143B–294; 15A NCAC 2H .0203; 15A NCAC 6E .0002; and as follows:

(1) "Agronomic rates" means those amounts of animal waste or compost to be applied to lands as contained in the nutrient management standard of the USDA Soil Conservation Service Technical Guide Section IV or as recommended by the North Carolina Department of Agriculture and the North Carolina Cooperative Extension Service at the time of certification of the animal waste management plan.

(2) "Certification" means the certification required in the Nondischarge Rule for Animal Waste Management Systems (15A NCAC 2H .0217).

(3) "DEM" means the Division of Environmental Management, Department of Environment, Health, and Natural Resources, and the agency to receive the certification forms and responsible for enforcement of 15A NCAC 2H .0200.

(4) "Design approval authority" means that authority granted by the Commission to designated individuals or groups of individuals to certify that a BMP or the system of BMPs for waste management has been designed to meet the standards and specifications of practices adopted by the Commission.

(5) "Installation approval authority" means that authority granted by the Commission to designated individuals or groups of individuals to certify a BMP or system of BMPs for waste management has been installed to meet the standard of practices adopted by the Commission.

(6) "Technical Specialist" means individuals or groups of individuals designated by the Commission at 15A NCAC 6F .0005 to certify an entire or portion of an animal waste management plan.

History Note

Filed as a Temporary Adoption Eff. December 9, 1993 for a Period of 180 Days or Until the Permanent Rule Becomes Effective, Whichever is Sooner;
Statutory Authority G.S. 139–4; 143–215.74; 143B–294;
Eff. March 1, 1994.

.0003 REQUIREMENTS FOR CERTIFICATION OF WASTE MANAGEMENT PLANS

(a) In accordance with 15A NCAC 2H .0217(a)(1), owners of animal waste management systems are required to:

(1) obtain certification that the system will properly collect, treat, store, or apply animal waste to the land such that no discharge of pollutants occurs to surface waters of the state by any means except as a result of a storm event more severe than the 25–year, 24–hour storm as required in 15A NCAC 2H .0203(3); or

(2) receive an individual nondischarge permit from the Division of Environmental Management in accordance with 15A NCAC 2H .0217(d).

(b) The certification is to be made by a Technical Specialist designated pursuant to this Subchapter, and will confirm that the best management practices (BMPs) contained in the animal waste management plan meet applicable minimum standards and specifications. BMPs in an existing system are not required to meet current standards and specifications as established by the Commission as long as the system is certified to be nondischarging as required in 15A NCAC 2H .0203(3).

(c) More than one Technical Specialist may be consulted for the design of BMPs and installation of BMPs. A Technical Specialist must certify the entire animal waste management plan as installed.

(d) Upon receiving a certification from a Technical Specialist, the owner must submit a copy of the certification to DEM and a copy of both the certification and the waste management plan to the District in which the system is or is to be located.

(e) The District shall review the waste management plan and, within 30 days of receipt of the plan, notify the owner, the certifying Technical Specialist, DEM and the Division if the District does not concur that the certification was signed by an approved Technical Specialist and that the waste management plan satisfies the purpose of proper conservation and utilization of farm generated animal by–products. If the District, upon review, concurs with the certification, no further action is required.

(f) The District shall maintain a copy of all animal waste management plans and the accompanying certification form.

(g) If the District does not concur that the certification was signed by a Technical Specialist, or that the waste management plan is acceptable, and if either the owner or the DEM requests that the District reconsider its decision, the District shall review its decision and within 45 days of the request, notify the owner, the certifying Technical Specialist, DEM, and the Division of the District's final decision. The District is encouraged to utilize other technical specialists, local agricultural agencies and disinterested agricultural producers in reconsidering its initial decision. If the District fails to act within 45 days on a request for reconsideration, the District's initial decision shall become final.

(h) An owner not receiving concurrence from the District may request that the Commission mediate a dispute over concurrence. Nothing in this Rule creates an administrative remedy which must be exhausted prior to exercising permit appeal rights pursuant to the rules of the Environmental Management Commission.

(i) An owner who does not obtain a certification is not deemed permitted pursuant to G.S. 143–215.1(d) and must apply for an individual

permit from the Division of Environmental Management. Nothing in these Rules prohibits permit appeal rights pursuant to the rules of the Environmental Management Commission.

(j) Any proposed modification of an animal waste management plan requires approval by a Technical Specialist.

(k) Any modifications made in the system as a result of changes in the operation such as types and numbers of animals, equipment, or crops, must be in accordance with the BMP standards and specifications approved by the Commission and in effect at the time of the modification.

(l) A change in the cropping pattern as a result of weather–caused delays after application of animal waste shall not require the owner to obtain a new certification as long as the owner followed the certified waste management plan application rates and no discharge occurs to surface waters.

(m) The certifying Technical Specialist and the District are not required to spot check or otherwise assure proper maintenance and operation of an animal waste management system installed to meet the DEM certification requirements. Enforcement of the Nondischarge Rule for Animal Waste Management Systems (15A NCAC 2H .0217) shall remain the responsibility of DEM.

HISTORY NOTE

Filed as a Temporary Adoption Eff. December 9, 1993 for a Period of 180 Days or Until the Permanent Rule Becomes Effective, Whichever is Sooner;
Statutory Authority G.S. 139–4; 143–215.74; 143B–294;
Eff. March 1, 1994.

.0004 APPROVED BEST MANAGEMENT PRACTICES (BMPs)

(a) The Commission will approve a list of BMPs that are acceptable as part of an approved animal waste management system. The list of BMPs will be approved annually (by August 1) and revised as needed during the year by the Commission.

(b) As required by DEM in 15A NCAC 2H .0217, a BMP or system of BMPs designed and installed for an animal waste management plan must either:

(1) meet the minimum standards and specifications of the US Department of Agriculture Soil Conservation Service Technical Guide, Section IV or minimum standards and specifications as otherwise determined by the Commission; or

(2) the owner must receive an approved individual nondischarge permit as required for the animal waste management system.

(c) BMPs approved for use in the Agriculture Cost Share Program for Nonpoint Source Pollution Control are hereby approved for these purposes.

(d) Land application BMPs following the nutrient management standard contained in the Section IV of the SCS Technical Guide or as recommended by the North Carolina Department of Agriculture (Soil Test Report and Waste Analysis, Form AD 10) and the Cooperative Extension Service (AG–439–4) (AG–439–5) (AG–439–28) are acceptable. In cases where agronomic rates are not specified in the nutrient management standard for a specific crop or vegetative type, application rates may be determined using the best judgement of the certifying Technical Specialist after consultation with NCDA or CES.

(e) Exemptions from the minimum buffer requirements for animal waste storage and treatment facilities and animal concentration areas are acceptable if no practical alternative exists and the BMP installed as an equivalent control meets the requirements for Nondischarge except as a result of a storm event more severe than the 25–year, 24–hour storm.

HISTORY NOTE

Filed as a Temporary Adoption Eff. December 9, 1993 for a Period of 180 Days or Until the Permanent Rule Becomes Effective, Whichever is Sooner;
Statutory Authority G.S. 139–4; 143–215.74; 143B–294;
Eff. March 1, 1994.

.0005 TECHNICAL SPECIALIST DESIGNATION

(a) As required in 15A NCAC 2H .0217, the Commission designates the following individuals or groups of individuals as Technical Specialists, to assist owners in animal waste management plan development and certification. No rights are afforded to Technical Specialists by this designation. Technical Specialists are defined as:

(1) Individuals who have been assigned design approval authority or installation approval authority by the USDA, Soil Conservation Service, the NC Cooperative Extension Service or the NC Department of Agriculture;

(2) Professional engineers subject to "The North Carolina Engineering and Land Surveying Act" as rewritten by Session Laws 1975, c. 681, s. 1, and recodified; and

(3) Individuals with demonstrated skill and experience in the design or installation of animal waste management system BMPs.

(b) Design approval authority or installation approval authority of Technical Specialists may be for specific BMPs or a system of BMPs to be applied to complete an entire or a portion of an animal waste management plan.

(c) Those individuals not designated in Subparagraphs (a)(1) or (2) of this Rule must:

(1) Meet the minimum qualifications established by the Commission for each BMP or system of BMPs;

(2) Provide to the NPS Section of the Division an "Application for Designation as a Technical Specialist" and evidence of demonstrated skill and experience required for a BMP or system of BMPs for which they are requesting Technical Specialist designation. This documentation must be received by the second Wednesday of the first month of the quarter in order to have the application reviewed for designation that quarter; and

(3) The individual may provide additional information and request that their approval authority be updated based on new evidence of skill and experience.

(d) A copy of the minimum requirements for skill and experience will be available at the District field office. The NPS Section of the Division will provide a list of designated Technical Specialists to all Districts, after each Commission meeting where action was taken concerning Technical Specialists. The list will specify the BMPs or system of BMPs which the Technical Specialist has designed or installed. The individual will be notified of the Commission action.

HISTORY NOTE

Filed as a Temporary Adoption Eff. December 9, 1993 for a Period of 180 Days or Until the Permanent Rule Becomes Effective, Whichever is Sooner;
Statutory Authority G.S. 139–4; 143–215.74; 143B–294;
Eff. March 1, 1994.

* * *

APPENDIX F

Procedure for Adopting Animal Waste Standards in North Carolina

The failure of seven animal waste structures in eastern North Carolina, during heavy rains in the summer of 1995 and the ensuing public response, prompted the NRCS to examine the standards from which many of these structures were built. Because the state of North Carolina used the NRCS standards for compliance with the state's Agricultural Cost-Share Program and the state's .0200 animal waste regulatory law, all future animal waste structures in the state would conform to NRCS standards. NRCS recognized the need to provide a diverse spectrum of opinions to be heard in the formulation process.

Step One

The creation of State Technical Committees, in all states, was directed by the Secretary of Agriculture under authority provided in the 1990 Farm Bill. The question of examining North Carolina's animal waste standards was brought before this body in November, 1995.

The State Technical Committee created subcommittees to examine the structural aspect, the waste utilization aspect, and policy changes that might be needed. In order to provide a diverse opinion the membership on these subcommittees was expanded to include almost 40 people representing university research, agriculture and the animal waste industry, environmental organizations, state regulatory agencies, and natural resource conservation partners.

Step Two

The NRCS conducted engineering investigations and developed final reports for all the failed structures the agency assisted in designing. In the case of the Oceanview Farm accident, a team consisting of both state and regional engineers investigated the structure. A National Engineering Consequence Team with specialist from across the country was created to look at NRCS animal waste responsibilities nationally. The first state they visited was North Carolina. In all of these investigations the standards were examined.

Step Three

The subcommittees met many times over the next four months. In the subcommittees deliberations many sources of information were considered. Both the NRCS investigations and the findings of the National Engineering Consequence Team were considered. So were the findings of two independent engineering firms hired by the swine industry to examine NRCS standards. The findings of NC State University and those from the DEM's inventory of all the state's animal waste lagoons also provided the subcommittees with new information.

Step Four

In March, 1996, the subcommittees submitted their draft recommendations to the state conservationist. The subcommittees' recommendations were then presented to the Governor's Blue Ribbon Commission on Animal Waste. In addition, separate meetings were set up with

the leaders of the livestock production industry and the environmental organizations. The NCDA and the NCDEHNR leadership were also updated on the proposed changes.

Step Five

Draft standards were then developed using the recommendations of the subcommittees and the feedback from the targeted interest groups. The draft standards were then sent to a broader representation of the various interests involved. The draft standards were also sent to the regional engineering team and the national office for their information. At the same time the NRCS in North Carolina polled the neighboring states to see how the new standards conformed with other states.

Step Six

Final standards were developed in late April with plans to put them in effect June 1, 1996. The NC Soil & Water Conservation Commission will decide on May 1, 1996 if these new standards should be adopted for .0200 regulations.

CHANGES IN WASTE TREATMENT LAGOON STANDARD CODE 359

1. Additional 25-year, 24-hour storm for periods of excessive (heavy) rains. - Applies only to lagoons that do not have an outside drainage area.

2. Five years of sludge storage required. Current standard only recommends sludge storage.

3. Excess fresh water as recommended by NCSU.

   There will be some increase in the size of a typical lagoon:

   - Feeder to finish - 35-40%
   - Farrow to feed - 25%

   These increase sizes are due to sludge, "heavy.rainfall" and excess fresh water

4. All embankments will have 3:l side slopes. Current standard requires a combination (back and front) of 5:l with no slope steeper than 2:l.

5. Odor control measures:

   - Pipes must discharge below the surface
   - Recycle and irrigation pumps in aerobic layer
   - Precharge lagoons with half the treatment volume

6. Inspection/testing required for clay liners

7. Emergency Action Plan required

8. Irrigation design/plan required as part of Waste Utilization Plan

9. Requires soil investigation at embankment site. Depth equal to height of embankment.

10. Requires that observation trench be dug the entire length of embankment on site where tile drains may be present.

11. Lagoons without an outside drainage area do not need emergency spillways until they reach 1 million cu. ft. of waste treatment volume.

12. Changes mandated by .0200 Regulations and Senate Bill 1080.

WASTE HOLDING PONDS (PRIMARILY FOR DAIRIES) 425

1. No major changes except things mandated by the .0200 regulations and Senate Bill 1080
2. Emergency Action Plan
3. Inspection/testing required for clay liners
4. Requires soil investigation at embankment site. Depth equal to height of embankment.
5. Requires that observation trench be dug the entire length of embankment on site where tile drains may be present.

WASTE UTILIZATION STANDARD 633

1. Rate of nitrogen for grazed grass will be 50% of that used for hay. Current standard is 25% reduction.
2. Requires notarized agreement for using land for animal waste application that is not owned by the producer of the animal waste. This can be a one-year agreement.

   Current Standard - Requires written agreement for life of facility.
3. Setbacks required per .0200 and Senate Bill 1080. 25 feet or 50 feet from perennial streams.
4. Requires soil test every 2 years, liquid waste analysis twice a year, and dry waste analysis before application.
5. Requires that records be kept 5 years.
6. Emergency Action Plan required.
7. Highly visible markers for start and stop pumping.
8. Requires that animal waste be applied to land that is eroding at less than 5 tons per acre per year. Allows application if erosion is between 5-10 tons per acre annually providing that filter strips are used.

   Current Standard states less than 5 tons per acre annually or may be applied on land that has an acceptable Alternative Cropping System if the land has filter strips in addition to the buffer required by DEM.

   New standard is more understandable.
9. Added table on Soil Values Indicating Potential Phytotoxic Problems of Zinc and Copper per NCDA.

NUTRIENT MANAGEMENT 590

1. **Adds forest as suitable area for waste application**

FILTER STRIP - 393

1. **Increase width from 15 to 25 feet in cropland where rows are perpendicular to stream and 5 to 15 feet where rows are parallel to stream.**

2. **Deleted filter strip for treating runoff from paved lots and milking parlors, because DEM will not accept these for .0200 certification. DEM considers these as point discharges.**

3. **Added 100-foot filter strip to address lounging areas that are normally void of vegetation in the winter months.**

APPENDIX G

SAMPLE GENERAL PERMITS FOR ANIMAL WASTE MANAGEMENT SYSTEMS
(Swine, Cattle, Poultry)

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Environmental Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
A. Preston Howard, Jr., P.E., Director

DEHNR

(Date)

(Name & Address of Applicant)

Subject: Certificate of Coverage No. AW(COC #)
(Name of Farm)
Swine Waste Operation
Land Application of Animal Wastes
(County Name) County

Dear (Farm Owner);

In accordance with your application received on **(date),** we are forwarding herewith Certificate of Coverage (COC) No. AW(Permit No.), dated **(date)** to **(applicant's name)** for the operation of an animal waste management system in accordance with the State's General Permit. This approval shall consist of the land application of animal waste from the (name of farm) Farm with an animal capacity of no greater than **(number and type of animal raised at these operations)** and is approved for application to approximately **(number of acres)** acres of land in **(county name)** County with no discharge of wastes to the surface waters, and in conformity with the facility's Certified Animal Waste Management Plan.

The COC shall be effective from the date of issuance until **(expiration date)** and shall be subject to the conditions and limitations as specified in the General Permit, the Certified Animal Waste Management Plan, and this COC. An adequate system for collecting and maintaining the required monitoring data and operational information must be established in order to avoid future compliance problems. Any increase in flow or increase in number of stocked animals above the number authorized by this COC will require a modification to the certified animal waste management plan and COC and shall be completed prior to actual increase in either flow or number of animals.

This COC shall be voided:

1. if the animal waste applications is not properly managed in accordance with the conditions of the general permit, the Certified Animal Waste Management Plan, and in the manner approved by the Division; or
2. if the soils fail to adequately assimilate the wastes and if the sites are not maintained and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters; or
3. **(Delete this condition if the Permittee owns all application sites)**unless the agreements between the Permittee and the landowners/lessees are in full force and effect. A copy of these agreements shall be maintained on site with a copy of this COC and the general permit. A copy of the agreement should be provided to the landowners.

The Permittee shall employ a certified animal waste application/residuals operator to be in responsible charge (ORC) of the animal waste application program. No waste shall be land applied after January 1, 1997, unless supervised by the ORC.

The Permittee, at least six (6) months prior to the expiration of this COC, shall request its extension. Upon receipt of the request, the Commission will review the adequacy of the facilities described therein, and if warranted, will extend the permit for such period of time and under such conditions and limitations as it may deem appropriate.

This COC is not automatically transferable. A formal request must be submitted to the DEM 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 non-discharge permit by contacting the engineer listed below for information on this process. Unless such a request is made within 30 days, this COC shall be final and binding.

If you need additional information concerning this matter, please contact **(engineer's name)** at (919) 733-5083 ext. **(ext. number)**.

Sincerely,

A. Preston Howard, Jr., P.E.

cc: (County name) County Health Department
(DEM Regional Office for farm's county) Regional Office, Water Quality Section
(DEM Regional Office for farm's county) Regional Office, Groundwater Section
Groundwater Section, Central Office
Training and Certification Unit
(County name) County Soil and Water District
Division of Soil and Water
Facilities Assessment Unit
(County Name) County Natural Resource Conservation Service

DRAFT

NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

SWINE WASTE OPERATION GENERAL PERMIT

This permit shall be effective from the date of issuance until **(date)** and shall be subject to the following specified conditions and limitations:

I. PERFORMANCE STANDARDS

1. The animal waste application program shall be effectively maintained and operated as a non-discharge system to prevent the discharge of wastes to surface waters, wetlands, or surface water drainage systems (except for storm events exceeding the 25 year, 24 hour storm or the 30-day chronic rainfall event as defined by NRCS design standards).

2. The Certified Animal Waste Management Plan shall be considered a part of this general permit. Any violation of the Plan shall be considered a violation of this general permit and subject to appropriate enforcement actions. Such a violation may require the Permittee to cease applying animal waste to the sites and take any immediate corrective actions as may be required by the Division of Environmental Management (DEM).

3. For land application sites included in a plan certified prior to October 1, 1995, a vegetative buffer of 25 feet from the banks of perennial waters and intermittent streams must be maintained for existing facilities. For sites included in a plan certified after October 1, 1995, a vegetative buffer of 50 feet shall be maintained for existing facilities.

4. For new and expanding animal waste management systems, a vegetative buffer of 100 feet from the banks of perennial waters must be maintained from the following areas:

   a. Lounging areas or animal concentration areas;

   b. Waste management structures such as lagoons or ponds;

5. A copy of this permit and the Certified Animal Waste Management Plan shall be maintained **at the farm** where animal waste management activities are being conducted for the life of this permit.

II. OPERATION AND MAINTENANCE REQUIREMENTS

1. The treatment and storage facilities and application sites shall be properly maintained and operated at all times.

2. A suitable vegetative cover shall be maintained in accordance with the Certified Animal Waste Management Plan.

3. An acceptable pH of the soil shall be maintained on all land application sites to insure optimum yield for the crop(s) being grown.

4. The Plant Available Nitrogen application rates identified in the Certified Animal Waste Management Plan shall not be exceeded. When two crops are planted on the application site in the same year, a second application of the waste will be limited and must account for the carryover nitrogen from the first crop.

5. Application of animal waste onto land which is used to grow crops for direct human consumption (e.g., strawberries, melons, lettuce, cabbage, apples, etc...) shall not occur within 30 days prior to the planting of the crop or in the case of fruit bearing trees, 30 days prior to breaking dormancy. For feed, fiber and food crops that undergo further processing, application of animal wastes shall not occur within 30 days of harvesting. If waste is to be applied on soil where no cover crop is established, the waste shall be incorporated into the soil within twenty-four (24) hours after application on the land.

6. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the animal waste management system. Washdown of stock trailers will be permissible as long as system design accommodates the additional flow and as long as readily biodegradable detergents and disinfectants are utilized.

7. Disposal of dead animals shall be done in accordance with the North Carolina Department of Agriculture (NCDA) regulations.

8. Grazing animals on an application site shall be accomplished in accordance with Natural Resources Conservation Service (NRCS) standards and the grazing shall be controlled.

9. No vehicular traffic or equipment shall be allowed on the waste disposal area except during installation or while normal planting, harvesting, irrigation, or maintenance is being performed.

10. All stormwater runoff from the surrounding property and buildings shall be diverted away from the animal waste lagoon to prevent any unnecessary addition to the liquid volume in the lagoon.

11. A protective vegetative cover will be established on all disturbed areas (lagoon embankments, berms, pipe runs, etc.) Vegetation such as trees, shrubs, and other woody species shall not occur on the lagoon dikes or sideslopes. Lagoon areas should be kept mowed and accessible. Lagoon berms and structures should be inspected regularly for evidence of erosion, leakage, animal damage or discharge and shall be repaired and certified as necessary. No grazing shall occur on the lagoons or dikes.

12. When removal of sludge from the lagoon is necessary, provisions must be taken to prevent damage to lagoon dikes and liners.

13. Solid materials such as bottles, light bulbs, gloves, syringes or any other solid waste from the animal waste operation shall be minimized from entering the treatment/storage lagoon and should be properly disposed in an approved landfill.

III. MONITORING AND REPORTING REQUIREMENTS

1. Waste handling structures, piping, pumps, reels, etc., under the control of the owner/operator shall be inspected regularly and a maintenance checklist shall be kept on site or readily available.

2. Proper records shall be maintained for a minimum of five years by the Permittee on forms provided by the DEM and shall be submitted to the DEM upon request.

3. A representative annual Standard Soil Fertility Analysis, as may be provided by the NCDA, shall be conducted of each field receiving animal waste in the respective calendar year and the results maintained on file by the Permittee for a minimum of five years.

4. An analysis of animal waste from the lagoon, as may be provided by the NCDA, shall be conducted initially after permit issuance and thereafter as specified in the Certified Animal Waste Management Plan. In no case shall this be less than once per permit term. The results shall be maintained on file by the Permittee for a minimum of five years.

5. A lagoon level gauge shall be installed within 30 days of issuance of a certificate of coverage under this general permit to monitor lagoon levels. This gauge shall have readily visible permanent markings indicating the maximum lagoon levels at which pump-out must begin, end of pump-out, and freeboard elevations. Where multiple lagoons are utilized, the storage lagoon(s) shall only need a gauge with a visible permanent markings indicating the pump-out begin and freeboard elevations. Caution must be taken not to damage the integrity of the liner when installing the gauge.

6. **Regional Notification:**

The Permittee shall report by telephone to the appropriate Regional Office (see attached list) as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

a. Any failure of the animal waste treatment and disposal program resulting in a discharge to surface waters.
b. Any time that the facility has gone out of compliance with the conditions of this permit.
c. Any failure of the animal waste treatment and disposal program that renders the facility incapable of adequately treating the animal waste and/or sludge.
d. Spillage or discharge from a vehicle or piping system transporting animal waste or sludge to the application sites which results in, or may result in, a discharge to surface waters.

Persons reporting such occurrences by telephone shall also file a written report in letter form within 5 days following first knowledge of the occurrence, if so directed by the Regional Office. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

IV. INSPECTIONS

Any duly authorized officer, employee, or representative of the DEM may, upon presentation of credentials and in accordance with appropriate biosecurity measures, enter and inspect any property, premises or place on or related to the application site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the terms and conditions of this permit; and may obtain samples of the wastewater, groundwater, or surface water.

V. GENERAL CONDITIONS

1. The issuance of a Certificate of Coverage (COC) under this permit shall not relieve the Permittee of the responsibility for damages to surface waters or ground waters resulting from the operation of this program.

2. Lagoons and other uncovered waste containment structures must not exceed an operating level that provides adequate storage to contain a 25 year, 24 hour storm event or the 30-day chronic rainfall event as defined by NRCS design standards. The maximum level of lagoon liquid shall not exceed that specified in the Certified Animal Waste Management Plan.

3. The Groundwater Compliance Boundary for the disposal system constructed after December 31, 1983, is established at either (1) 250 feet from the waste disposal area, or (2) 50 feet within the property boundary, whichever is closest to the waste disposal area. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to immediate remediation action in addition to the penalty provisions applicable under the North Carolina General Statutes.

4. Failure to abide by the conditions and limitations contained in this permit and any COC issued under this permit may subject the Permittee to an enforcement action by the DEM in accordance with North Carolina General Statutes and may include the requirement to obtain an individual animal waste operation permit, the addition of treatment or storage units, or the addition of land application sites.

5. The issuance of a COC under this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by *this and* other government agencies (local, state, and federal) which have jurisdiction.

6. 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, or the potential for injury and shall include lagoon closure in accordance with NRCS standards in effect when the closure plan is developed and implemented. Closure shall also include notifying the DEM so a site visit can be conducted.

7. The annual administering and compliance fee must be paid by the Permittee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15 NCAC 2H .0205 (c)(4).

Permit issued this the **(date)** day of **(month)**, **(year)**.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

_____

A. Preston Howard, Jr., P.E., Director
Division of Environmental Management
By Authority of the Environmental Management Commission

Animal Waste General Permit Number AWG100000

DIVISION OF ENVIRONMENTAL MANAGEMENT REGIONAL OFFICES

Asheville Regional WQ Supervisor
59 Woodfin Place
Asheville, NC 28801
(704) 251-6208
Fax (704) 251-6452

Avery	Macon
Buncombe	Madison
Burke	McDowell
Caldwell	Mitchell
Cherokee	Polk
Clay	Rutherford
Graham	Swain
Haywood	Transylvania
Henderson	Yancy
Jackson	

Washington Regional WQ Supervisor
Post Office Box 1507
Washington, NC 27889
(919) 946-6481
Fax (919) 975-3716

Beaufort	Jones
Bertie	Lenoir
Camden	Martin
Chowan	Pamlico
Craven	Pasquotank
Currituck	Perquimans
Dare	Pitt
Gates	Tyrell
Greene	Washington
Hertford	Wayne
Hyde	

Raleigh Regional WQ Supervisor
Post Office Box 27687
Raleigh, NC 27611
(919) 571-4700
Fax (919) 571-4718

Chatham	Nash
Durham	Northampton
Edgecombe	Orange
Franklin	Person
Granville	Vance
Halifax	Wake
Johnston	Warren
Lee	Wilson

Fayetteville Regional WQ Supervisor
Wachovia Building, Suite 714
Fayetteville, NC 28301
(910) 486-1541
Fax (910) 486-0707

Anson	Moore
Bladen	Robeson
Cumberland	Richmond
Harnett	Sampson
Hoke	Scotland
Montgomery	

Mooresville Regional WQ Supervisor
919 North Main Street
Mooresville, NC 28115
(704) 663-1699
Fax (704) 663-6040

Alexander	Lincoln
Cabarrus	Mecklenburg
Catawba	Rowan
Cleveland	Stanly
Gaston	Union
Iredell	

Wilmington Region. WQ Supervisor
127 Cardinal Drive Extension
Wilmington, NC 28405-3845
(910) 395-3900
Fax (910) 350-2004

Brunswick	New Hanover
Carteret	Onslow
Columbus	Pender
Duplin	

Winston-Salem Regional WQ Supervisor
585 Waughtown Street
Winston-Salem, NC 27107
(910) 771-4600
Fax (910) 771-4631

Alamance	Rockingham
Alleghany	Randolph
Ashe	Stokes
Caswell	Surry
Davidson	Watauga
Davie	Wilkes
Forsyth	Yadkin
Guilford	

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Environmental Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
A. Preston Howard, Jr., P.E., Director

DEHNR

(Date)

(Name & Address of Applicant)

Subject: Certificate of Coverage No. AW(**COC #**)
(Name of Farm)
Cattle Waste Operations
Land Application of Animal Wastes
(County Name) County

Dear **(Farm Owner)**;

In accordance with your application received on **(date),** we are forwarding herewith Certificate of Coverage (COC) No. AW(**Permit No.**), dated **(date)** to **(applicant's name)** for the operation of an animal waste management system in accordance with the State's General Permit. This approval shall consist of the land application of animal waste from the **(name of farm)** Farm with an animal capacity of no greater than **(number and type of animal raised at these operations)** and is approved for application to approximately **(number of acres)** acres of land in **(county name)** County with no discharge of wastes to the surface waters, and in conformity with the facility's Certified Animal Waste Management Plan.

The COC shall be effective from the date of issuance until **(expiration date)** and shall be subject to the conditions and limitations as specified in the General Permit, the Certified Animal Waste Management Plan, and this COC. An adequate system for collecting and maintaining the required monitoring data and operational information must be established in order to avoid future compliance problems. Any increase in flow or increase in number of stocked animals above the number authorized by this COC will require a modification to the certified animal waste management plan and COC and shall be completed prior to actual increase in either flow or number of animals.

This COC shall be voided:

1. if the animal waste applications is not properly managed in accordance with the conditions of the general permit, the Certified Animal Waste Management Plan, and in the manner approved by the Division; or
2. if the soils fail to adequately assimilate the wastes and if the sites are not maintained and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters; or
3. **(Delete this condition if the Permittee owns all application sites)**unless the agreements between the Permittee and the landowners/lessees are in full force and effect. A copy of these agreements shall be maintained on site with a copy of this COC and the general permit. A copy of the agreement should be provided to the landowners.

The Permittee, at least six (6) months prior to the expiration of this COC, shall request its extension. Upon receipt of the request, the Commission will review the adequacy of the facilities described therein, and if warranted, will extend the permit for such period of time and under such conditions and limitations as it may deem appropriate.

This COC is not automatically transferable. A formal request must be submitted to the DEM 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 non-discharge permit by contacting the engineer listed below for information on this process. Unless such a request is made within 30 days, this COC shall be final and binding.

If you need additional information concerning this matter, please contact **(engineer's name)** at (919) 733-5083 ext. **(ext. number)**.

Sincerely,

A. Preston Howard, Jr., P.E.

cc: (County name) County Health Department
(DEM Regional Office for farm's county) Regional Office, Water Quality Section
(DEM Regional Office for farm's county) Regional Office, Groundwater Section
Groundwater Section, Central Office
Training and Certification Unit
(County name) County Soil and Water District
Division of Soil and Water
Facilities Assessment Unit
(County Name) County Natural Resource Conservation Service

DRAFT

NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

CATTLE WASTE OPERATION GENERAL PERMIT

This permit shall be effective from the date of issuance until **(date)** and shall be subject to the following specified conditions and limitations:

I. PERFORMANCE STANDARDS

1. The animal waste application program shall be effectively maintained and operated as a non-discharge system to prevent the discharge of pollutants to surface waters, wetlands, or surface water drainage systems (except for storm events exceeding the 25 year, 24 hour storm or the 30-day chronic rainfall event as defined by the NRCS design standards).

2. The Certified Animal Waste Management Plan shall be considered a part of this general permit. Any violation of the Plan shall be considered a violation of this general permit and subject to appropriate enforcement actions. Such a violation may require the Permittee to cease applying animal waste to the sites and take any immediate corrective actions as may be required by the Division of Environmental Management (DEM).

3. For land application sites included in a plan certified prior to October 1, 1995, a vegetative buffer of 25 feet from the banks of perennial waters and intermittent streams must be maintained for existing facilities. For sites included in a plan certified after October 1, 1995, a vegetative buffer of 50 feet shall be maintained for existing facilities.

4. For new and expanding animal waste management systems, a vegetative buffer of 100 feet from the banks of perennial waters must be maintained from the following areas:

   a. Lounging areas or animal concentration areas;

   b. Waste management structures such as lagoons or ponds;

5. A copy of this permit and the Certified Animal Waste Management Plan shall be maintained **at the farm** where animal waste management activities are being conducted for the life of this permit.

II. OPERATION AND MAINTENANCE REQUIREMENTS

1. The treatment and storage facilities and application sites shall be properly maintained and operated at all times.

2. A suitable vegetative cover shall be maintained in accordance with the Certified Animal Waste Management Plan.

3. An acceptable pH of the soil shall be maintained on all land application sites to insure optimum yield for the crop(s) being grown.

4. The Plant Available Nitrogen application rates identified in the Certified Animal Waste Management Plan shall not be exceeded. When two crops are planted on the application site in the same year, a second application of the waste will be limited and must account for the carryover nitrogen from the first crop.

5. Application of animal waste onto land which is used to grow crops for direct human consumption (e.g., strawberries, melons, lettuce, cabbage, apples, etc...) shall not occur within 30 days prior to the planting of the crop or in the case of fruit bearing trees, 30 days prior to breaking dormancy. For feed, fiber and food crops that undergo further processing, application of animal wastes shall not occur within 30 days of harvesting. If waste is to be applied on soil where no cover crop is established, the waste shall be incorporated into the soil within twenty-four (24) hours after application on the land.

6. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the animal waste management system. Washdown of stock trailers will be permissible as long as system design accommodates the additional flow and as long as readily biodegradable detergents and disinfectants are utilized.

7. Disposal of dead animals shall be done in accordance with the North Carolina Department of Agriculture (NCDA) regulations.

8. Grazing of animals on an application site shall be accomplished in accordance with Natural Resources Conservation Service (NRCS) standards and the grazing shall be controlled.

9. No vehicular traffic or equipment shall be allowed on the waste disposal area except during installation or while normal planting, harvesting, irrigation, or maintenance is being performed.

10. All stormwater runoff from the surrounding property and buildings shall be diverted away from the animal waste storage ponds or lagoons whenever possible to prevent any unnecessary liquid addition to them. Runoff from lounging areas to the waste storage ponds or lagoons may be allowed if approved in the Certified Animal Waste Management Plan.

11. A protective vegetative cover will be established on all disturbed areas (storage ponds, lagoons, embankments, berms, pipe runs, emergency spillways, erosion control areas, etc.) Vegetation such as trees, shrubs, and other woody species shall not occur on the dikes or sideslopes of the storage ponds or lagoons. These areas should be kept mowed and accessible. Lagoon berms and structures should be inspected regularly for evidence of erosion, leakage, animal damage or discharge and shall be repaired and certified as necessary. No grazing shall occur on or near the storage ponds, lagoons or dikes.

12. When removal of sludge from the lagoon is necessary, provisions must be taken to prevent damage to lagoon dikes and liners.

13. Solid materials such as bottles, light bulbs, gloves, syringes or any other solid waste from the animal waste operation is prohibited from entering the treatment/storage lagoon and should be properly disposed in an approved landfill.

III. MONITORING AND REPORTING REQUIREMENTS

1. Waste handling structures, piping, pumps, reels, etc., under the control of the owner/operator shall be inspected regularly and a maintenance checklist shall be kept on site or readily available.

2. Proper records shall be maintained for a minimum of five years by the Permittee on forms provided by the DEM and shall be submitted to the DEM upon request.

3. A representative annual Standard Soil Fertility Analysis, as may be provided by the NCDA, shall be conducted of each field receiving animal waste in the respective calendar year and the results maintained on file by the Permittee for a minimum of five years.

4. An analysis of animal waste from the treatment system, as may be provided by the NCDA, shall be conducted initially after permit issuance and thereafter as specified in the Certified Animal Waste Management Plan. In no case shall this be less than once per permit term. The results shall be maintained on file by the Permittee for a minimum of five years.

5. A lagoon level gauge shall be installed within 30 days of issuance of a certificate of coverage under this general permit to monitor lagoon levels. This gauge shall have readily visible permanent markings indicating the maximum lagoon levels at which pump-out must begin, end of pump-out, and freeboard elevations. Where multiple lagoons are utilized, the storage lagoon(s) shall only need a gauge with a visible permanent markings indicating the pump-out begin and freeboard elevations. Caution must be taken not to damage the integrity of the liner when installing the gauge.

6. **Regional Notification:**

The Permittee shall report by telephone to the appropriate Regional Office (see attached list) as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

a. Any failure of the animal waste treatment and disposal program resulting in a discharge to surface waters.
b. Any time that the facility has gone out of compliance with the conditions of this permit.
c. Any failure of the animal waste treatment and disposal program that renders the facility incapable of adequately treating the animal waste and/or sludge.
d. Spillage or discharge from a vehicle or piping system transporting animal waste or sludge to the application sites which results in, or may result in, a discharge to surface waters.

Persons reporting such occurrences by telephone shall also file a written report in letter form within 5 days following first knowledge of the occurrence, if so directed by the Regional Office. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

IV. INSPECTIONS

Any duly authorized officer, employee, or representative of the DEM may, upon presentation of credentials and in accordance with appropriate biosecurity measures, enter and inspect any property, premises or place on or related to the application site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the terms and conditions of this permit; and may obtain samples of the wastewater, groundwater, or surface water.

V. GENERAL CONDITIONS

1. The issuance of a Certificate of Coverage (COC) under this permit shall not relieve the Permittee of the responsibility for damages to surface waters or ground waters resulting from the operation of this program.

2. Lagoons and other uncovered waste containment structures must not exceed an operating level that provides adequate storage to contain a 25 year, 24 hour storm event or the 30-day chronic rainfall event as defined by NRCS design standards.. The maximum level of lagoon liquid shall not exceed that specified in the Certified Animal Waste Management Plan.

3. The Groundwater Compliance Boundary for the disposal system constructed after December 31, 1983, is established at either (1) 250 feet from the waste disposal area, or (2) 50 feet within the property boundary, whichever is closest to the waste disposal area. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to immediate remediation action in addition to the penalty provisions applicable under the North Carolina General Statutes.

4. Failure to abide by the conditions and limitations contained in this permit and any COC issued under this permit may subject the Permittee to an enforcement action by the DEM in accordance with North Carolina General Statutes and may include the requirement to obtain an individual animal waste operation permit, the addition of treatment or storage units, or the addition of land application sites.

5. The issuance of a COC under this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by *this and* other government agencies (local, state, and federal) which have jurisdiction.

6. 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, or the potential for injury and shall include lagoon closure in accordance with NRCS standards in effect when the closure plan is developed and implemented. Closure shall include notifying the DEM so a site visit can be conducted.

7. The annual administering and compliance fee must be paid by the Permittee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15 NCAC 2H .0205 (c)(4).

Permit issued this the **(date)** day of **(month)**, **(year)**.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

_____

A. Preston Howard, Jr., P.E., Director
Division of Environmental Management
By Authority of the Environmental Management Commission

Cattle Waste General Permit Number AWG200000

DIVISION OF ENVIRONMENTAL MANAGEMENT REGIONAL OFFICES

Asheville Regional WQ Supervisor
59 Woodfin Place
Asheville, NC 28801
(704) 251-6208
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Avery	Macon
Buncombe	Madison
Burke	McDowell
Caldwell	Mitchell
Cherokee	Polk
Clay	Rutherford
Graham	Swain
Haywood	Transylvania
Henderson	Yancy
Jackson	

Washington Regional WQ Supervisor
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Fax (919) 975-3716

Beaufort	Jones
Bertie	Lenoir
Camden	Martin
Chowan	Pamlico
Craven	Pasquotank
Currituck	Perquimans
Dare	Pitt
Gates	Tyrell
Greene	Washington
Hertford	Wayne
Hyde	

Raleigh Regional WQ Supervisor
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Chatham	Nash
Durham	Northampton
Edgecombe	Orange
Franklin	Person
Granville	Vance
Halifax	Wake
Johnston	Warren
Lee	Wilson

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Cumberland	Richmond
Harnett	Sampson
Hoke	Scotland
Montgomery	

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Cabarrus	Mecklenburg
Catawba	Rowan
Cleveland	Stanly
Gaston	Union
Iredell	

Wilmington Region. WQ Supervisor
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Brunswick	New Hanover
Carteret	Onslow
Columbus	Pender
Duplin	

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Fax (910) 771-4631

Alamance	Rockingham
Alleghany	Randolph
Ashe	Stokes
Caswell	Surry
Davidson	Watauga
Davie	Wilkes
Forsyth	Yadkin
Guilford	

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Environmental Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
A. Preston Howard, Jr., P.E., Director

DEHNR

(Date)

(Name & Address of Applicant)

Subject: Certificate of Coverage No. AW(**COC #**)
(Name of Farm)
Poultry Waste Operation
Land Application of Animal Wastes
(County Name) County

Dear (**Farm Owner**);

In accordance with your application received on **(date),** we are forwarding herewith Certificate of Coverage (COC) No. AW(**Permit No.**), dated **(date)** to **(applicant's name)** for the operation of an animal waste management system in accordance with the State's General Permit. This approval shall consist of the land application of animal waste from the (name of farm) Farm with an animal capacity of no greater than **(number and type of animal raised at these operations)** and is approved for application to approximately **(number of acres)** acres of land in **(county name)** County with no discharge of wastes to the surface waters, and in conformity with the facility's Certified Animal Waste Management Plan.

The COC shall be effective from the date of issuance until (**expiration date**) and shall be subject to the conditions and limitations as specified in the General Permit, the Certified Animal Waste Management Plan, and this COC. An adequate system for collecting and maintaining the required monitoring data and operational information must be established in order to avoid future compliance problems. Any increase in flow or increase in number of stocked animals above the number authorized by this COC will require a modification to the certified animal waste management plan and COC and shall be completed prior to actual increase in either flow or number of animals.

This COC shall be voided:

1. if the animal waste applications is not properly managed in accordance with the conditions of the general permit, the Certified Animal Waste Management Plan, and in the manner approved by the Division; or
2. if the soils fail to adequately assimilate the wastes and if the sites are not maintained and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters; or
3. (**Delete this condition if the Permittee owns all application sites**)unless the agreements between the Permittee and the landowners/lessees are in full force and effect. A copy of these agreements shall be maintained on site with a copy of this COC and the general permit. A copy of the agreement should be provided to the landowners.

The Permittee shall employ a certified animal waste application/residuals operator to be in responsible charge (ORC) of the animal waste application program. No waste shall be land applied after January 1, 1997, unless supervised by the ORC.

The Permittee, at least six (6) months prior to the expiration of this COC, shall request its extension. Upon receipt of the request, the Commission will review the adequacy of the facilities described therein, and if warranted, will extend the permit for such period of time and under such conditions and limitations as it may deem appropriate.

This COC is not automatically transferable. A formal request must be submitted to the DEM 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 non-discharge permit by contacting the engineer listed below for information on this process. Unless such a request is made within 30 days, this COC shall be final and binding.

If you need additional information concerning this matter, please contact **(engineer's name)** at (919) 733-5083 ext. **(ext. number)**.

Sincerely,

A. Preston Howard, Jr., P.E.

cc: **(County name)** County Health Department
(DEM Regional Office for farm's county) Regional Office, Water Quality Section
(DEM Regional Office for farm's county) Regional Office, Groundwater Section
Groundwater Section, Central Office
Training and Certification Unit
(County name) County Soil and Water District
Division of Soil and Water
Facilities Assessment Unit
(County Name) County Natural Resource Conservation Service

NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

POULTRY WASTE OPERATION GENERAL PERMIT

This permit shall be effective from the date of issuance until **(date)** and shall be subject to the following specified conditions and limitations:

I. PERFORMANCE STANDARDS

1. The animal waste application program shall be effectively maintained and operated as a non-discharge system to prevent the discharge of wastes to surface waters, wetlands, or surface water drainage systems (except for storm events exceeding the 25 year, 24 hour storm or the 30-day chronic rainfall event as defined by the NRCS design standards).

2. The Certified Animal Waste Management Plan shall be considered a part of this general permit. Any violation of the Plan shall be considered a violation of this general permit and subject to appropriate enforcement actions. Such a violation may require the Permittee to cease applying animal waste to the sites and take any immediate corrective actions as may be required by the Division of Environmental Management (DEM).

3. For land application sites included in a plan certified prior to October 1, 1995, a vegetative buffer of 25 feet from the banks of perennial waters and intermittent streams must be maintained for existing facilities. For sites included in a plan certified after October 1, 1995, a vegetative buffer of 50 feet shall be maintained for existing facilities.

4. For new and expanding animal waste management systems, a vegetative buffer of 100 feet from the banks of perennial waters must be maintained from the following areas:

   a. Lounging areas or animal concentration areas;

   b. Waste management structures such as lagoons or ponds;

5. A copy of this permit and the Certified Animal Waste Management Plan shall be maintained **at the farm** where animal waste management activities are being conducted for the life of this permit.

II. OPERATION AND MAINTENANCE REQUIREMENTS

1. The treatment and storage facilities and application sites shall be properly maintained and operated at all times.

2. A suitable vegetative cover shall be maintained in accordance with the Certified Animal Waste Management Plan.

3. An acceptable pH of the soil shall be maintained on all land application sites to insure optimum yield for the crop(s) being grown.

4. The Plant Available Nitrogen application rates identified in the Certified Animal Waste Management Plan shall not be exceeded. When two crops are planted on the application site in the same year, a second application of the waste will be limited and must account for the carryover nitrogen from the first crop.

5. Application of animal waste onto land which is used to grow crops for direct human consumption (e.g., strawberries, melons, lettuce, cabbage, apples, etc...) shall not occur within 30 days prior to the planting of the crop or in the case of fruit bearing trees, 30 days prior to breaking dormancy. For feed, fiber and food crops that undergo further processing, application of animal wastes shall not occur within 30 days of harvesting. If waste is to be applied on soil where no cover crop is established, the waste shall be incorporated into the soil within twenty-four (24) hours after application on the land.

6. Domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the animal waste management system. Washdown of stock trailers will be permissible as long as system design accommodates the additional flow and as long as readily biodegradable detergents and disinfectants are utilized.

7. Disposal of dead animals shall be done in accordance with the North Carolina Department of Agriculture (NCDA) regulations.

8. Grazing animals on an application site shall be accomplished in accordance with Natural Resources Conservation Service (NRCS) standards and the grazing shall be controlled.

9. No vehicular traffic or equipment shall be allowed on the waste disposal area except during installation or while normal planting, harvesting, irrigation, or maintenance is being performed.

10. All stormwater runoff from the surrounding property and buildings shall be diverted away from the animal waste lagoon to prevent any unnecessary addition to the liquid volume in the lagoon.

11. A protective vegetative cover will be established on all disturbed areas (lagoon embankments, berms, pipe runs, etc.) Vegetation such as trees, shrubs, and other woody species shall not occur on the lagoon dikes or sideslopes. Lagoon areas should be kept mowed and accessible. Lagoon berms and structures should be inspected regularly for evidence of erosion, leakage, animal damage or discharge and shall be repaired and certified as necessary. No grazing shall occur on or near the lagoons or dikes.

12. When removal of the sludge from the lagoon is necessary, provisions must be taken to prevent damage to lagoon dikes and liners.

13. Solid materials such as bottles, light bulbs, gloves, syringes or any other solid waste from the animal waste operation is prohibited from entering the treatment/storage lagoon and should be properly disposed in an approved landfill.

III. MONITORING AND REPORTING REQUIREMENTS

1. Waste handling structures, piping, pumps, reels, etc., under the control of the owner/operator shall be inspected regularly and a maintenance checklist shall be kept on site or readily available.

2. Proper records shall be maintained for a minimum of five years by the Permittee on forms provided by the DEM and shall be submitted to the DEM upon request.

3. A representative annual Standard Soil Fertility Analysis, as may be provided by the NCDA, shall be conducted of each field receiving animal waste in the respective calendar year and the results maintained on file by the Permittee for a minimum of five years.

4. An analysis of animal waste from the lagoon, as may be provided by the NCDA, shall be conducted initially after permit issuance and thereafter as specified in the Certified Animal Waste Management Plan. In no case shall this be less than once per permit term. The results shall be maintained on file by the Permittee for a minimum of five years.

5. A lagoon level gauge shall be installed within 30 days of issuance of a certificate of coverage under this general permit to monitor lagoon levels. This gauge shall have readily visible permanent markings indicating the maximum lagoon levels at which pump-out must begin, end of pump-out, and freeboard elevations. Where multiple lagoons are utilized, the storage lagoon(s) shall only need a gauge with a visible permanent markings indicating the pump-out begin and freeboard elevations. Caution must be taken not to damage the integrity of the liner when installing the gauge.

6. **Regional Notification:**

The Permittee shall report by telephone to the appropriate Regional Office (see attached list) as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

a. Any failure of the animal waste treatment and disposal program resulting in a discharge to surface waters.
b. Any time that the facility has gone out of compliance with the conditions of this permit.
c. Any failure of the animal waste treatment and disposal program that renders the facility incapable of adequately treating the animal waste and/or sludge.
d. Spillage or discharge from a vehicle or piping system transporting animal waste or sludge to the application sites which results in, or may result in, a discharge to surface waters.

Persons reporting such occurrences by telephone shall also file a written report in letter form within 5 days following first knowledge of the occurrence, if so directed by the Regional Office. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

IV. INSPECTIONS

Any duly authorized officer, employee, or representative of the DEM may, upon presentation of credentials and in accordance with appropriate biosecurity measures, enter and inspect any property, premises or place on or related to the application site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the terms and conditions of this permit; and may obtain samples of the wastewater, groundwater, or surface water.

V. GENERAL CONDITIONS

1. The issuance of a Certificate of Coverage (COC) under this permit shall not relieve the Permittee of the responsibility for damages to surface waters or ground waters resulting from the operation of this program.

2. Lagoons and other uncovered waste containment structures must not exceed an operating level that provides adequate storage to contain a 25 year, 24 hour storm event or the 30-day chronic rainfall event as defined by NRCS design standards. The maximum level of lagoon liquid shall not exceed that specified in the Certified Animal Waste Management Plan.

3. The Groundwater Compliance Boundary for the disposal system constructed after December 31, 1983, is established at either (1) 250 feet from the waste disposal area, or (2) 50 feet within the property boundary, whichever is closest to the waste disposal area. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to immediate remediation action in addition to the penalty provisions applicable under the North Carolina General Statutes.

4. Failure to abide by the conditions and limitations contained in this permit and any COC issued under this permit may subject the Permittee to an enforcement action by the DEM in accordance with North Carolina General Statutes and may include the requirement to obtain an individual animal waste operation permit, the addition of treatment or storage units, or the addition of land application sites.

5. The issuance of a COC under this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by *this and* other government agencies (local, state, and federal) which have jurisdiction.

6. 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, or the potential for injury and shall include lagoon closure in accordance with NRCS standards in effect when the closure plan is developed and implemented. Closure shall also include notifying the DEM so a site visit can be conducted.

7. The annual administering and compliance fee must be paid by the Permittee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15 NCAC 2H .0205 (c)(4).

Permit issued this the **(date)** day of **(month), (year)**.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

_____

A. Preston Howard, Jr., P.E., Director
Division of Environmental Management
By Authority of the Environmental Management Commission

Poultry Waste General Permit Number AWG300000

DIVISION OF ENVIRONMENTAL MANAGEMENT REGIONAL OFFICES

Asheville Regional WQ Supervisor
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Avery	Macon
Buncombe	Madison
Burke	McDowell
Caldwell	Mitchell
Cherokee	Polk
Clay	Rutherford
Graham	Swain
Haywood	Transylvania
Henderson	Yancy
Jackson	

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Bertie	Lenoir
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Craven	Pasquotank
Currituck	Perquimans
Dare	Pitt
Gates	Tyrell
Greene	Washington
Hertford	Wayne
Hyde	

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Halifax	Wake
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Davidson	Watauga
Davie	Wilkes
Forsyth	Yadkin
Guilford	