GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1993

H 1

HOUSE BILL 1159

Short Title: Regulate Hog Operations.	(Public)
Sponsors: Representatives H. Hunter; and DeVane.	
Referred to: Agriculture.	
A mril 10, 1002	

April 19, 1993

1 A BILL TO BE ENTITLED 2 AN ACT TO REGULATE THE DISPOSAL OF ANIMAL WASTE AT INTENSIVE HOG OPERATIONS. 3 4 The General Assembly of North Carolina enacts: Section 1. Chapter 143 of the General Statutes is amended by adding a new 5 6

Article to read:

"ARTICLE 64. "MANAGEMENT AND DISPOSAL OF WASTE BY INTENSIVE HOG OPERATIONS. "PART 1. GENERAL.

"§ 143-595. Purpose.

7

8

9

10 11

12

13

14

15

16

17 18

19

20

21 22

23 24

The purpose of this Article is to protect the rural environment and the health of rural residents by establishing minimum qualifications, standards, and procedures for the issuance of permits for intensive hog operations using liquid animal waste management systems within the State and for the issuance of permits for land application sites within the State. This Article provides management, operational, and maintenance procedures necessary to prevent point source pollution and minimize nonpoint source pollution to the surface and groundwaters of the State and control to the degree practicable the generation of offensive odors by regulated intensive hog operations.

The siting and separation requirements set forth in this Article are intended to protect water quality, to protect public health, and to abate odor. In order to minimize odor, the policy is to encourage permittees to use chemical or biological additives or other best management practices in the operation of liquid animal waste management systems.

This Article will help prevent conditions at intensive hog operations that are detrimental to the health, safety, and welfare of nearby residents.

"<u>§ 143-596. Applicability.</u>

1 2

The provisions of this Article are applicable to the operation of all intensive hog operations operated in North Carolina.

"§ 143-597. Definitions.

The following definitions apply to this Article:

- (1) Animal Feeding Operations. Lot, yard, corral, building or other areas where animals are confined, fed, and maintained for 45 days or more in any 12-month period. Two or more animal feeding operations under common ownership or management are considered to be a single operation if they are adjacent or use a common area or system for waste disposal.
- (2) Animal Capacity. The maximum number of animals that the owner or operator will confine in an animal feeding operation at one time.
- (3) Anaerobic Lagoon. An earthen impoundment designed and operated to provide both long-term storage and partial treatment of animal wastes from a confinement feeding operation.
- (4) Animal Unit. A unit of measurement used to determine the animal capacity of an animal-feeding operation containing two or more categories of animals. The animal unit capacity of an operation is determined by multiplying the number of animals of each category by the appropriate equivalency factor and summing the resulting totals for animal categories contained in the operation.

Animal Unit Equivalency Factors

Animal Species	<u>Factor</u>
Swine - over 55 lbs.	0.5
Swine - under 55 lbs.	0.05

- (5) Applicant. Any person who seeks a permit to establish, modify, or maintain an Intensive Livestock Operation.
- (6) <u>Commission. Environmental Management Commission of the</u> Department of Environment, Health, and Natural Resources.
- (7) Confined Hog Operation. Any lot or facility where hogs have been, are or will be, stabled or confined and fed or maintained and where crops, vegetation, forage growth, or postharvest residues are not sustained in the normal growing season over significant portions of the lot or facility.
- (8) Confinement Feeding Operation. Totally roofed animal feeding operations in which wastes are stored or removed as a liquid or semiliquid.
- (9) <u>Construction Permit. A written approval of the Department to</u> construct a waste control facility or part of one.
- (10) <u>Department. The Department of Environment, Health, and Natural</u> Resources.

Director. - The Director of the Division of Environmental 1 (11)2 Management, Department of Environment, Health, and Natural 3 Resources. Discontinued Animal-Feeding Operation. – An animal-feeding 4 <u>(12)</u> 5 operation whose use has been discontinued and the owner or operator 6 does not intend to resume its use for a period of 12 months or more. 7 Earthen Waste Slurry Storage Basin. - An uncovered earthen (13)8 impoundment designed and operated to provide short-term storage of 9 wastes from a confinement feeding operation. An impoundment or 10 basin is considered earthen unless the bottom and sidewalls are completely covered with human-made materials (e.g. concrete, asphalt, 11 12 or synthetic liner). Formed Waste Storage Tank. – A waste storage tank whose walls and 13 (14)14 floor are constructed of materials such as concrete, concrete block, 15 wood, steel, or similar materials and used to store wastes from a confinement feeding operation. Formed tanks may be located either 16 17 inside or outside the confinement feeding facilities. 18 <u>(15)</u> Freeboard. – The difference in height between the lowest point on the lagoon dike and the level of wastes in the structure. 19 20 Intensive Hog Operation or IHO. - Any enclosure, pen, feedlot, (16)21 building, or group of buildings intended to be used or used to feed, confine, or maintain swine, where their dietary needs are met primarily 22 23 by means other than grazing and with at any time a total of 200 or 24 more animal units present. The term includes confined hog operation. Interested Person. – Any person interested in the impact that IHOs 25 (17)may have on the public health, the environment, or human quality of 26 27 life. 28 (18)Liquid Animal Waste Management System. – Any system used for the 29 collection, storage, distribution, or disposal of animal waste in liquid 30 form generated by a confined animal operation. Man-Made Waste Drainage System. – A man-made drainage ditch, 31 (19)32 flushing system, or other drainage device used for the purpose of 33 transporting wastes. Manure. - The feces, urine, litter, bedding, or feed waste from hog-34 (20)35 feeding operations. NPDES. – National Pollution Discharge Elimination System, pursuant 36 (21) to 33 U.S.C. § 1342. 37 38 NPDES Permit. - Permit to regulate and monitor discharge of (22)39 pollutants into the waters of the United States issued by the Department, pursuant to G.S. 143-215.1. 40 41 (23)Operator. – Any individual, partnership, corporation, or association 42 doing business in the State of North Carolina.

Person. – Any individual, corporation, partnership, association, 1 (24)2 cooperative, State, municipality, commission, governmental agency or 3 subdivision, or other legal entity. Pollutant. – Substance adversely affecting water quality or public 4 <u>(25)</u> 5 health, including manure. 6 (26)Sewage Lagoon. – Animal waste storage system, including anaerobic 7 lagoon, earthen waste, slurry storage basin, or formed waste storage 8 9 Site Management Plan. – A plan prepared by USDA Soil Conservation <u>(27)</u> 10 Service, a North Carolina Soil and Water Conservation District water quality technician, or a professional engineer registered in the State of 11 12 North Carolina that includes a detailed map of the land application site showing all buffer zones, a description of the land use, the crops 13 14 grown on the site, and a land-use agreement if the site is not owned by 15 the permittee. Ten-Year Twenty-Four-Hour Storm. – A storm of a 24-hour duration 16 (28)17 which yields a total precipitation of a magnitude which has a 18 probability of recurring once every 10 years. Twenty-Five-Year Twenty-Four-Hour Storm. – A storm of a 24-hour 19 <u>(29)</u> 20 duration which yields a total precipitation of a magnitude which has a 21 probability of recurring once every 25 years. USDA. – The United States Department of Agriculture. 22 (30)23 Waste Management Plan. - A plan prepared by the USDA Soil (31)24 Conservation Service, a North Carolina Soil and Water Conservation District water quality technician, or a professional engineer registered 25 26 in the State of North Carolina detailing the management and disposal 27 of liquid wastes generated in a confined hog farm operation. Waters of the State. – All creeks, streams, rivers, lakes, marshes, 28 (32)29 swamps, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of 30 31 water, surface and underground, natural or artificial, public or private, 32 which are contained within, flow through, or border upon this State or any portion of this State. 33 "§ 143-598. Administration and interpretation. 34 The Department shall adopt rules to implement this Article. 35 (a) In interpreting and applying the provisions of this Article, the Department 36 (b) shall apply the minimum requirements, except where maximum requirements are 37 38 expressly stated. 39 Whenever any provision of this Article overlaps or contradicts a local regulation, the local regulation shall govern if it imposes higher environmental 40 protection standards, unless it is the clear intent of this Article that only this Article shall 41 42 control.

- (d) It is not intended that any provision of this Article shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.
- (e) Failure of the Department to observe or recognize conditions which violate the intent and purpose of this Article, or to deny an IHO permit applied for under this Article, shall not relieve the IHO owner from responsibility for the condition or damages resulting from the violation and shall not result in the county, its officers, or agents being responsible for conditions or damages resulting from the violation.

"PART 2. PERMIT AND EDUCATION REQUIREMENTS.

"§ 143-599. Permit requirements.

- (a) No person shall initiate the construction, expansion, or operation of any IHO without first having obtained a permit from the Department.
- (b) IHO owners shall take all reasonable measures to protect the health, environment, and human quality of life from adverse consequences of the operation of IHOs.
- (c) The Department shall review all existing and proposed IHOs to determine if the IHOs must apply for a NPDES permit. A decision by the Department to require or not require an application for a NPDES permit can be appealed by the applicant or any interested person pursuant to Chapter 150B, Article 3, of the General Statutes.
- (d) A new animal feeding operation or existing operation planning expansion shall apply for an operation permit at least 180 days before the new or expanded facility is scheduled to begin operation.

"§ 143-600. Permit application.

- (a) To obtain a permit, an IHO shall submit a completed application form to the Department on any form as the Department may require.
 - (b) The application shall include all of the following:
 - An engineering report, design, plans and specifications, and related design information covering all proposed waste control facilities.

 Design plans submitted to the Department shall be prepared by a professional engineer registered in this State or by the personnel of the USDA Soil Conservation Service. Designs and waste management plans shall be in accordance with the criteria listed in this Chapter and the following USDA Soil Conservation Service technical publications:
 - Field Office Technical Guide
 - Annual Waste Management Field Manual
 - Technical Note 716, Lining Requirements
 - <u>Technical Note 102, Supplementing Nutrient and Pest</u> Management Practice Standards.
 - (2) USDA Agriculture Stabilization and Conservation Service aerial photos showing the location of existing and proposed animal feeding operations and waste control systems, and the location of any neighboring property or public use areas other than roads located within one mile of the operation.

- 1 (3) Information on the amounts and location of the land areas on which wastes will be disposed.
 - (4) Soil boring data for anaerobic lagoons, earthen waste slurry storage basins, open feedlot runoff storage basins, and other earthen waste storage structures.
 - (5) Plans for odor control, disposal of dead animals, and vermin control.
 - (6) The name, address, and description of similar facilities partly or wholly operated or owned by the applicant or an entity such as a corporation, subsidiary of the applicant, or the parent company of the applicant, or affiliate of the company, that are owned by the applicant or that owns the applicant. The information shall also include any violations cited within the last 10 years by federal, State, regional, or local regulatory agencies, approved plans for correcting such violations, and evidence that corrections have occurred or are occurring.

"§ 143-601. Notice of application.

- (a) Prior to submission of an application to construct or operate an IHO, or prior to submission of an application to modify any existing IHO, the applicant shall cause to be published in a newspaper having general circulation, in each county where the operation is to be located, a public notice of the application. The Department shall be provided a copy of this notice. All notices shall be published at least weekly for two consecutive weeks in a form prescribed by the Department. The notice shall call upon all interested persons having questions or objections pertaining to the application to file their questions or objections with the Department in writing, including their names and addresses. Proof of publication shall be submitted to the Department with the permit application. Publication of notices shall be at the applicant's expense and shall provide the following information:
 - (1) The type of facility to be constructed or operated;
 - (2) The type of waste to be generated, and a description of the waste treatment, handling, or disposal processes; and
 - (3) The legal description, including township and road and street description, indicating the location of all properties to be used in the treatment, handling, or disposal of waste.
- (b) The Department shall provide a copy of the public notice or similar written notification of the operation to the county zoning authority or, if located within an area zoned by a city, the city zoning authority.
- (c) Any interested person shall have 60 days from the date of first publication to submit written comments to the Department.

"§ 143-602. Permit review and public hearing.

(a) Upon receipt of an application, the Department shall review the application, determine if all required information has been submitted, and contact the applicant, individual, or agency providing design assistance if additional information is needed. If necessary, a departmental field office shall conduct an on-site inspection. The Department shall review proposed waste controls for compliance with the Department's

- rules and design standards, Soil Conservation Service standards and specifications, and other applicable criteria.
- (b) Should a hearing be deemed necessary by the Department, or in the event the Department desires a hearing, the Department shall schedule a public hearing and shall by certified mail, return receipt requested, notify the applicant and all persons who have submitted comments of the date, time, and place of the public hearing.
- (c) If the Department determines that the proposed waste controls do not meet the statutory and regulatory requirements, the operation will be asked to modify its plans and permit applications. Once all the Department's requirements are met, a permit will be issued.
- (d) If a final permit is issued, the applicant or any interested party has 30 days to appeal the decision pursuant to Chapter 150B, Article 3, of the General Statutes.
- (e) If a final permit is denied, the Department shall provide to the applicant a written statement setting out the basis for the denial. The applicant has 30 days from the date of the denial notice to appeal the denial pursuant to Chapter 150B, Article 3, of the General Statutes.
- (f) The Department shall issue a notice of its decision to the applicant and any interested party that submitted written comments pursuant to this section.

"§ 143-603. Permit contents.

- (a) An operation permit shall describe the minimum waste control requirements an animal feeding operation must follow. The permit shall also list monitoring and reporting requirements, acceptable methods for disposing stored wastes, as well as other conditions the Department determines necessary to prevent water pollution.
- (b) An operation permit is issued up to five years, but may be revoked, suspended, or modified by the Department if the permit terms are violated or unlawful waste discharges occur.
- (c) When necessary to comply with a present standard or a standard which must be met at a future date, an operation permit shall include a schedule for modification of the permitted facility to meet the standard. The schedule shall not relieve the permittee of the duty to obtain a permit. A compliance schedule shall not exceed two years from its date of issuance.

"§ 143-604. Permit modification, suspension, or revocation.

- (a) The operator shall notify and describe to the Department in writing prior to any change in operational procedures of the permitted facility, including, but not limited to, the following:
 - (1) Change in ownership and control of the facility;
 - (2) <u>Increase in the number of confined animals greater than ten percent</u> (10%) or more of the existing permitted confined animal operation;
 - (3) Change in land application sites; or
 - (4) Change in waste treatment, handling, or disposal.
- (b) Any changes in procedures as described in subsection (a) of this section shall require a permit modification. The Department in its discretion may require the operator to modify its permit with regard to waste treatment, handling, or disposal.
 - (c) All permit modifications will follow the requirements of this Chapter.

- (d) The Department may in its discretion require the operator to provide construction plans and specifications, amended plans of operation, or any other information required by this Chapter.
- (e) The Department may modify, suspend, or revoke in whole or in part any operation permit for cause. Cause for modification, suspension, or revocation of a permit may include the following:
 - (1) Violation of any term or condition of the permit;
 - Obtaining a permit by misrepresentation of fact or failure to disclose fully all material facts;
 - (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or
 - (4) Failure to timely submit the records and information that the Department requires in order to assure compliance with the operation and discharge conditions of the permit.

"§ 143-605. Permit renewals.

Requests for permit renewals are to be submitted to the Director at least 180 days prior to expiration unless revoked in accordance with this Chapter. Such requests must be submitted with a processing fee as shown in Section 27, in the form of a check or money order made payable to the N.C. Department of Environment, Health, and Natural Resources. All applications are incomplete until required processing fees are received and may be returned to the applicant.

"§ 143-606. Fees.

- (a) For every application for a new or revised animal waste disposal permit under this Chapter, a nonrefundable application processing fee of no less than four hundred dollars (\$400.00) and no more than eight hundred dollars (\$800.00) shall be submitted at the time of application. The exact amount of the fee shall be determined by the Department by regulation, based on the size of the IHO.
- (b) Each permit or renewal application is incomplete until the application processing fee is received.
- (c) No processing fee will be charged for modification of unexpired permits when the modifications are initiated by the Director.
 - (d) A processing fee of fifty dollars (\$50.00) will be charged for name changes.
- (e) A full application processing fee will be charged for all modifications except for name changes.
- (f) An annual fee for administering and compliance monitoring shall be charged in each year of the term of every renewable permit in the amount of no less than four hundred dollars (\$400.00) and no more than eight hundred dollars (\$800.00) shall be submitted at the time of application. The exact amount of the fee shall be determined by the Department by regulation, based on the size of the IHO.
 - (g) Collection of annual fees shall begin on the effective date of this Chapter.
- (h) A person with only one permit will be billed annually on an anniversary date to be determined by the Division. This will normally be the first day of the month of permit issuance.

- (i) A person with multiple permits may have annual administering and compliance monitoring fees consolidated into one annual bill.
- (j) A change in the facility which changes the annual fee will result in the revised annual fee being billed in all remaining whole permit years. The amount of the fee shall be no less than four hundred dollars (\$400.00) and no more than eight hundred dollars (\$800.00) shall be submitted at the time of application. The exact amount of the fee shall be determined by the Department by regulation, based on the size of the IHO.
 - (1) Failure to pay an annual administering and compliance monitoring fee within 30 days after being billed may cause the Division to initiate action to revoke the permit.
 - (2) All funds collected in fees pursuant to this section shall be transferred into the Animal Waste Disposal Best Management Practices Fund.

"§ 143-607. Educational requirements.

- (a) Commencing six months from the effective date of this Article, applicants for permits and all managing owners or managing operators of the proposed operation must provide certification of satisfactory completion of formal education or training in the areas of waste management and odor control. Proof of certification of a minimum of four hours of individualized training and education shall be submitted with the permit application or within one year of the effective date of the issued permit. Appropriate curricula and course content must be developed under the supervision of the North Carolina State Cooperative Extension Service which shall provide certification to the Department.
- (b) Commencing one year from the effective date of this Article, all managing owners or managing operators of all permitted liquid animal waste disposal systems subject to this Article, which have been in operation for no less than 18 months, must provide certification of satisfactory completion of annual refresher training in the areas of waste management and odor control as described in and in addition to the educational requirements provided in subsection (a) of this section. Appropriate curricula and course content shall be developed under the supervision of the North Carolina State Cooperative Extension Service which shall provide certification to the Department.
- (c) Failure to obtain the prerequisite and annual training and education as provided in the section shall be deemed a violation of this Article.

"PART 3. REGULATION OF INTENSIVE HOG OPERATIONS." \$ 143-608. Minimum requirements for storage of waste.

- (a) Confinement feeding operations shall collect and store all wastes produced in the operation between periods of waste disposal and dispose of the stored wastes by land application unless the Department determines that a NPDES permit is required. Additional storage shall be provided if precipitation or wastes from other sources can enter waste control structures.
 - (1) Wastes shall be removed from the control structures as needed to prevent overflow or discharge. For earthen waste control structures (anaerobic lagoons, earthen waste slurry storage basins, and other earthen waste storage basins), wastes shall be removed from the structures as needed to maintain a minimum of two feet of freeboard,

- 1 <u>unless additional freeboard is necessary to protect the structure or</u> 2 <u>prevent waste discharge.</u>
 - (2) Confinement feeding operations shall dispose of wastes before periods when disposal is impossible due to adverse weather conditions, lack of suitable disposal areas, etc., to ensure that adequate capacity exists to store all wastes produced during such periods. The Department may approve other methods of disposal as long as they are feasible and do not pose a threat to public health or the environment.
 - (b) The direct discharge of wastes from confinement feeding operations into waters of the United States is prohibited. This includes discharge to a publicly owned lake, sinkhole, an agricultural drainage well, or to ditches or tile lines that drain into waters of the United States.
 - (c) All wastes removed from a confinement feeding operation or its waste control facilities shall be disposed on land in a manner that does not cause surface water or groundwater pollution. The Department shall adopt rules, not inconsistent with this Article, to provide general requirements on how and when to dispose of waste.
 - (d) The Department may require a greater level of waste control from a confinement feeding operation if it is determined following an on-site inspection that the minimum level of waste control is inadequate to prevent water pollution.

A construction permit is issued only after the Department has reviewed the plans and determined that the system will comply with the applicable State and federal laws and the Department's rules.

- (e) Confinement buildings, settling basins, holding ponds, and other liquid animal waste containment structures shall not be constructed within 2,500 feet of the adjoining property unless the adjoining property owner consents by written agreement, notarized and recorded with the county register of deeds office. Confined animal operations existing as of the effective date of this Chapter and proposing to construct a liquid animal waste containment structure in order to reduce waste/wastewater runoff to waters of the State may be considered exempt from the buffer distances by the Director. These buffer distances do not apply to confinement buildings, settling basins, holding ponds, or other liquid animal waste containment structures existing as of the effective date of this Chapter; nor do they apply to existing structures when a liquid animal waste permit modification is required due to a change in ownership.
- (f) The subsurface investigation for earthen holding ponds and treatment lagoons suitability and liner requirements may consist of auger holes, dozer pits, or backhoe pits that should extend at least two feet below the planned bottom of the excavation. In those situations where this depth is not practical in the initial on-site subsurface investigation, the applicant shall provide additional subsurface investigation documentation to the Department.
- (g) The waste management plan shall be developed in accordance with the USDA Soil Conservation Service Technical Guide and shall address the timing of land application of wastes with respect to nutrient uptake cycle of the vegetation found on the land application site and, to the extent practicable, shall include measures to minimize off-site obnoxious and offensive odors.

- (h) There is a minimum separation distance requirement to neighboring property or public use areas for the construction of new or the expansion of existing anaerobic lagoons and earthen waste slurry storage basins. The separation distance is measured from the closest edge of the lagoon or basin to the neighbor's property.
- (i) Lagoons or earthen waste slurry storage basins used as part of a confinement feeding operation shall be located at least 3,500 feet from land not owned by the operation and from public use areas other than roads if the operation has a capacity of more than 625,000 pounds live animal weight. However, lagoons or earthen waste slurry storage basins may be constructed closer to a neighbor's property if the neighbor consents by written agreement, notarized and recorded with the county register of deeds office.
- (j) Hog waste lagoons and hog confinement buildings shall not be placed in any identified flood plain.
- (k) Hog waste lagoons shall not be placed within 250 feet of the waters of the United States. There shall be a strip of ground cover vegetation, such as alfalfa or lespedeza, at least 100 feet wide between the waste lagoons and the waters of the United States.
- (l) Hog waste lagoons shall at least comply with the requirements for livestock waste lagoons of the USDA Soil Conservation Service.
- (m) All vehicles used to transport livestock waste and livestock shall be leakproof.
- (n) IHOs shall be limited in the amount of livestock allowed to be on site to the amount the approved waste management plan indicates, according to scientifically supported standards, can be disposed of without damage to the environment, health, or human quality of life.
- (o) No IHO shall be located within three-fourths of a mile of 10 or more contiguous existing-dwelling lots or residential lots of two acres or less in size. IHOs may be constructed closer to these neighbors' property if all of the neighbors within three-fourths of a mile consent to the waiving of these requirements by written agreement, notarized and recorded with the county register of deeds office.
- (p) No IHO shall be closer than 1,000 feet from any primary street, road, or highway as defined by the North Carolina Department of Transportation.
- (q) No IHO shall be closer than 500 feet away from any secondary street, road, or highway as defined by the North Carolina Department of Transportation.

"§ 143-609. Waste disposal.

- (a) All animal feeding operations shall dispose of wastes in a manner that will not pollute surface water or groundwater.
- (b) All permitted facilities must have a waste management plan for the operation and a site management plan for each land application site prepared by a professional engineer registered in the State of North Carolina, the USDA Soil Conservation Service, or a water quality technician of the North Carolina Soil and Water Conservation District and approved by the Department. The Department shall require proof of land ownership or of contractual agreements for use of the land as a land application site. This plan shall include the following information:

- 1 - cropping system schedule 2
 - harvesting schedule

5

7

8

9

10

11 12

13 14

15

16 17

18

19 20

21

22 23

24

25

26

27

28

29

30

31

32

33

34 35

36

42

43 44

- frequency of nitrogen application
- projected nitrogen removal by crops 4
 - other projected nitrogen losses (volatilization.

6 surface runoff, leaching, etc.)

- All permittees with permits issued prior to the effective date of this Chapter that do not have a waste management plan approved by the Department or are applying waste/wastewater on sites for which a site management plan has not been approved by the Department shall submit a waste management plan and site management plans for each site in compliance with this Article no later than one year from the effective date of this Article. Requests of time extensions may be approved at the Department's discretion.
- (d) Irrigation of fields with lagoon waste water or application to fields of livestock waste or waste lagoon sludge shall not occur within 1,000 feet of neighboring Irrigation of fields within 1,000 feet of neighboring property may be undertaken if the neighbors waive these requirements by written agreement, notarized and recorded with the county register of deeds office.
- Irrigation of fields with lagoon waste water and application to fields of livestock waste or waste lagoon sludge shall not occur within 250 feet of the waters of the United States. Application of waste/wastewater shall not be made within 500 feet of outstanding resource waters as defined by the Department. Buffer distances for streams, ponds, and lakes shall be measured from the ordinary high watermark. The Department may require additional buffer distances deemed necessary to protect the waters of the United States.
- There shall be a strip of ground cover vegetation, such as alfalfa or lespedeza. (f) at least 100 feet wide between the fields irrigated with lagoon waste water and the waters of the United States.
- Application of waste/wastewater shall not be made in areas where the land application of waste/wastewater is prohibited by the Department's regulations for the protection of public water supplies.
- Records shall be kept by the IHO of all waste/wastewater applies. These records shall be kept in sufficient detail to determine the application rate. A log shall be kept of all land applied to waste/wastewater. The log should include the date, weight. and/or volume, destination, and acreage over which the load was spread. All records and logs shall be kept at the facility and provided to the Department in monthly reports.
- A representative sample of the waste/wastewater to be land applied shall be 37 38 collected monthly and analyzed for the following parameters: pH, Total Nitrogen, 39 Ammonium, Potassium, Total Phosphorus, Arsenic, Copper, and total suspended solids. The Department may require more frequent testing deemed necessary to protect the 40 41 waters of the State.
 - The soils of each field where liquid animal waste has been land applied shall be sampled and analyzed monthly prior to the application of the wastes for the following parameters: pH, Potassium, Phosphorus, Nitrates, Arsenic, and Copper.

Methods and timing of the sample and analysis described in this section shall 1 (k) be in accordance with the North Carolina State Cooperative Extension Service 2 3 Guidelines. Monthly reports for the previous month shall be submitted to the Department 4 (1) 5 prior to the 30th of each month and must include the following: 6 - waste/wastewater analyses required under this section 7 - soil analyses required under this section 8 - locations, volumes, and nitrogen application rates for previous month 9 10 - methods of application 11 - types of crops grown on each land application site 12 Reports must be submitted on forms provided by the Department. (m) Waste Application Rates: 13 (n) 14 (1) Annual reports for the previous calendar year shall be submitted to the 15 Department prior to May 30 of each year. The annual report shall include the following: annual volumes, nitrogen application rates, and 16 17 waste application locations for the previous year; methods of application; types and yields of crops grown on each land application 18 site. Reports shall be submitted on forms provided by the Department. 19 20 Nitrogen application from all sources including animal wastes. (2) legumes, and commercial fertilizers should not exceed the annual 21 22 nitrogen requirement of the crop being grown. The following nitrogen loading rates shall be used, and the total annual 23 <u>(3)</u> 24 nitrogen application rates shall not exceed the use requirement of the 25 crops that are grown: 26 **CROP NUTRIENT UTILIZATION** 20 Cron Viold Nitrogon Ib/ogra

<u>Crop Yiela</u>	Nitrogen - Ib/acre	
Corn 80 bu	<u>121</u>	
	<u>100 bu</u>	<u>160</u>
	<u>150 bu</u>	<u>185</u>
	<u>180 bu</u>	<u>240</u>
Corn silage	<u>16 tons</u>	<u>130</u>
	<u>32 tons</u>	<u>200</u>
Soybeans 30 bu	<u>123</u>	
	<u>40 bu</u>	<u>180</u>
	<u>50 bu</u>	<u>257</u>
	<u>60 bu</u>	<u>336</u>
Grain Sorghum	<u>4 tons</u>	<u>250</u>
	Corn 80 bu Corn silage	Corn 80 bu 121 100 bu 150 bu 180 bu Corn silage 16 tons 32 tons Soybeans 30 bu 123 40 bu 50 bu 60 bu

GENERAL ASSEMBL	Y OF N	NORTH CAROLINA	199
<u>Wheat 40 bu 70</u>			
		<u>60 bu</u>	<u>125</u>
		<u>80 bu</u>	<u>186</u>
Oats 80 bu 75		1001	150
		<u>100 bu</u>	<u>150</u>
Barley 65 bu 74			
<u> </u>		<u>100 bu</u>	<u>150</u>
		10000	<u> 100</u>
Alfalfa 4 tons	<u>180</u>		
		8 tons	<u>450</u>
<u>Orchardgrass</u>		6 tons	<u>300</u>
Dromograga		5 tons	<u>166</u>
<u>Bromegrass</u>		5 tons	100
Tall Fescue		3.5 tons	<u>135</u>
Blue Grass		3 tons	<u>200</u>
- 1- 1			
Coastal Bermuda	225		
Grass 4 tons	<u>225</u>	10 tons	535
		10 10115	<u>535</u>
Clover Grass		4.5 tons	<u>185</u>
<u> </u>		6.0 tons	300
			· · · · · · · · · · · · · · · · · · ·
Sugar Beets		30 tons	<u>275</u>
2.25	110		
Rice 2.25 tons	<u>110</u>	2.5.4	112
		3.5 tons	<u>112</u>
Timothy 4 tons	<u>150</u>		
<u> 1 iiiotiiy</u> <u> 4 tolis</u>	130		
Pangola Grass		12 tons	<u>299</u>
			
Sorghum-Sudan			
Grass 8 tons	<u>319</u>		
T . 1	.1 .	. 1	
			ogen contained in animal was
	_	_	readily available to crops. If waste application, the availab
	n conter		15 waste application, the availat

Page 14

- Seventy-five percent (75%) of the total nitrogen content of the applied waste 1 2 if the waste is injected or incorporated into the soil immediately following application; 3 <u>or</u> Fifty percent (50%) of the total nitrogen content of the applied waste if the 4 5 waste is surface-applied and allowed to dry before incorporation into the soil. 6 (5) During the second crop season following waste application, the 7 available nitrogen carry-over from the waste applied during the first 8 crop season is twelve and five-tenths percent (12.5%) of the original 9 nitrogen content of the waste. 10 (6) During the third crop season following waste application, the available nitrogen carry-over from the waste applied during the first crop season 11 12 is seven percent (7%) of the original nitrogen content of the waste. 13 (7) After more than three crop seasons, no more carry-over of nitrogen 14 from the waste applied during the first crop season is assumed. 15 <u>(8)</u> To minimize phosphorus movement to surface waters, phosphorus 16 shall be applied at rates equivalent to crop uptake when soil tests 17 indicate adequate phosphorus levels (between 40 and 60 pounds per 18 acre or equivalent to 20-30 parts per million). Land application of waste/wastewater shall not be undertaken when 19 <u>(9)</u> 20 soil is saturated, frozen, covered with ice or snow, or when significant 21 precipitation is reasonably anticipated in the next 24 hours. 22 Fields and other areas in the 50-year flood plain shall not be irrigated (10)23 with lagoon waste water nor used as the site for disposal of other 24 noncomposted livestock waste and waste lagoon sludge. Waste disposal on tilled land with greater than ten percent (10%) 25 (11)26 slopes shall be limited to areas where erosion is adequately controlled. 27 Injection or incorporation of wastes is recommended and should be done in a manner that maintains an adequate level of erosion control. 28 29 Waste/wastewater shall not be applied on slopes with a grade more (12)30 than fifteen percent (15%) if in any manner that will allow waste to 31 enter waters of the State or to run into adjacent property without the 32 written consent of the affected adjacent property owner. environmental or human quality of life consequences. 33 34
 - (h) A decision by the Department to reduce the amount of livestock allowed at an IHO may be appealed pursuant to Chapter 150B, Article 3, of the General Statutes.
 - (i) The Department shall receive, investigate, and as appropriate, refer for appropriate action by other offices and agencies of local, State, and federal government citizen complaints regarding odor, runoff, and groundwater contamination from the IHOs.

"§ 143-610. Facility closure.

35

3637

38

39

40

41 42

43

44

(a) If a permitted confined animal operation using a liquid waste management system ceases operation, the permittee shall submit to the Department a closure plan for the liquid waste system storage/treatment structure(s) within 60 days of the final day of operation. This plan shall be prepared by the USDA Soil Conservation Service, a North

 Carolina Soil and Water Conservation District water quality technician, or a professional engineer registered in the State of North Carolina.

- (b) All wastes from the feeding operation and its waste control system must be removed and disposed on land as soon as practical but not more than six months after closure.
- (c) In order to adequately guarantee the proper closure and post closure and care of livestock sewage lagoons, any party or person that desires to construct and/or maintain a sewage lagoon must file with the Department a surety bond or cash in lieu thereof in the following amounts twenty-five thousand dollars (\$25,000) for each acre foot of capacity over 10 acre feet. No bond or cash deposited is required for lagoons of 10 acre feet or less. The principal amount of the bond or the cash deposited in lieu of bond may be expended by the Department to consummate the proper closure or post closure of any abandoned or unused livestock sewage lagoons as contemplated in this ordinance. Any unexpended sums remaining on deposit after the cleanup has been completed shall be refunded to the party or the party making the deposit.

"§ 143-611. Transfer of legal responsibilities or title.

If legal responsibility for a permitted animal-feeding operation and its associated waste control system is transferred, the person to whom legal responsibility is transferred shall be subject to all terms and conditions of the permit and of this Chapter. The person to whom the permit was issued shall notify the Department of the transfer of legal responsibility or title of the operation within 30 days of the transfer. Within 30 days of receiving a written request from the Department, the person to whom legal responsibility is transferred shall submit to the Department all information needed to modify the permit to reflect the transfer of legal responsibility.

"§ 143-612. Inspections and enforcement procedures.

- (a) The Department shall at least annually, including an inspection during July or August, inspect the IHO sites for which permits have been issued. The inspectors are to determine whether the activity is being conducted in accordance with the livestock waste management, odor control, dead animal, and vermin control plans and to determine whether the measures required in the plans are effective in preventing adverse consequences for public health, the environment, or human quality of life. The Department has the authority without prior notice to the IHO owner to collect samples of livestock waste lagoon water which is being field-applied. The Department may collect subsurface soil samples from the IHO tract. Such samples may be analyzed by offices certified by the Department to have requisite expertise.
- (b) If through inspection it is determined that a person engaged in construction, expansion, and/or operation of an IHO has failed to comply with an approved plan, a Notice of Violation shall be served upon that person by registered or certified mail. The notice shall set forth the measures necessary to achieve compliance with the plan, specify a reasonable time period within which such measures must be completed, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If the person engaged in IHO construction, expansion, or operation fails to comply within the time specified, enforcement action shall be initiated.

- reasonably necessary to carry out its duties as prescribed in this Article. For this purpose, the Department may enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any IHO. No person shall refuse entry or access to any of the Department's authorized representative or agent who requests entry for purposes of inspection, and who presents appropriate credentials. Nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his or her official duties.
- (d) The Department shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to IHO construction, expansion, and operation.
- (e) The holder of the IHO permit shall notify the Department when the permitted activity is to begin.
- (f) The owner of each IHO regulated under this Article shall be responsible to report the IHO inventory of livestock, with indication of approximate live weight, to the Department within five working days of January 15th, April 15th, July 15th, and October 15th.
- (g) When the Department determines that competently conducted research clearly indicates that an approved waste management plan of an IHO either underestimates or overestimates the amount of livestock the waste of which can be accommodated without adverse environmental, or quality of human life consequences at an IHO, the Department may communicate to the IHO permit holders indicated increases or decreases in the amount of livestock allowed to be located at the IHO. The IHO to which decreases in allowable livestock have been communicated shall have six months from the date of notice to reduce the amount of livestock at the site to the new limit or obtain approval of a new waste management plan providing for disposal of the waste of the previously indicated amount of livestock without adverse health, environmental or human quality of life consequences.
- (h) A decision by the Department to reduce the amount of livestock allowed at an IHO may be appealed pursuant to Chapter 150B, Article 3, of the General Statutes.
- (i) The Department shall receive, investigate, and as appropriate, refer for appropriate action by other offices and agencies of local, State, and federal government citizen complaints regarding odor, runoff, and groundwater contamination from the IHOs.

"§ 143.613. Groundwater contamination.

- (a) The Department and the local health departments shall test local wells upon the well owner's request even though the wells may not meet State specifications. The Department shall not use the fact that a local well may not meet State specifications as a means to dissuade the well owner from requesting testing.
- 40 (b) Upon receiving proof that people living near IHOs have their wells
 41 contaminated with fecal indicator bacteria or nitrate levels over 8.0 mg/l, the
 42 Department shall conduct an investigation to determine the source of the contamination.
 43 The Department shall drill monitoring wells in and around the irrigated fields and near
 44 the lagoons in such a manner as will show whether the IHO is the source of the

- groundwater contamination. The Department shall conduct weekly tests for fecal indicator bacteria and nitrates in these wells to see if the IHO is the source of the contamination. The Department shall also test nearby ditches, streams, and other waters of the United States to see if runoff from the irrigated fields may be contaminating these water bodies. The Department shall conduct water quality testing that can demonstrate contamination. These tests can include the following parameters: fecal indicator bacteria; total phosphorus; total nitrogen; dissolved oxygen; biochemical oxygen demand; total suspended solids; pH; chlorophyl a; and nitrates.
 - (c) The Department shall also test the soil in the irrigated field for nitrates at foot long intervals to a depth of six feet.
 - (d) The Department shall also place lysimeters in the soil in the irrigation field and near the lagoon in order to test the nitrate levels in the groundwater. These tests shall be conducted weekly.
 - (e) The results of all these tests are public information.
 - (f) If the IHO is found to be the source of the contamination, the IHO shall pay the costs of the investigation, including the monitoring wells, soil and surface and groundwater testing, and the Department's administrative costs.
 - (g) If the IHO is found to be the source of the groundwater contamination, the Department shall declare the IHO an imminent health hazard. The IHO shall remedy the situation by stopping or reducing irrigation and cleaning out its lagoon and resurfacing it so that no waste seeps into the groundwater. The IHO shall pay for all remediation costs.
 - (h) Under no circumstance shall the local homeowners or other businesses be penalized by the Department or any other federal, State, or county departments for having wells that are not State certified and for not upgrading their wells to a State-certified condition when these wells are contaminated by an IHO. IHOs that contaminate nearby wells shall pay to drill new State-certified wells for the people or businesses whose wells are contaminated. If the water from these new wells does not meet State and Environmental Protection Agency water quality standards, the IHOs shall provide the people or businesses with a source of water that does meet these standards.

"§ 143-614. Dead animal disposal.

- (a) All existing and new IHOs must have a plan to dispose of dead animals owned by the IHOs. The plans must be designed by engineers licensed in North Carolina and approved by the local county Soil and Water Conservation Service and the local county health department. Where the animals, while alive, are owned by corporations that contract animals out to farmers, the corporations will design and implement a dead animal disposal plan such that the growers will not be responsible for dead animal disposal.
 - (1) Existing animal operations or corporations must have their plans approved within six months of this Article's enactment. Existing animal operations or corporations must have their dead animal disposal plans in operation within one year of this Article's enactment.

New animal operations or corporations must have their plans approved 1 (2) 2 and ready for operation before animals are placed at the facilities. 3 Dead animals can be disposed of by placing them in fabricated pits, (b) incineration, composting, or removal to a rendering plant. 4 5 The fabricated pits must be made of concrete block, poured concrete. (1) 6 or treated timbers and built to Soil Conservation Service standards. 7 The incinerators must have dual-burning chambers or afterburners. <u>(2)</u> 8 The animal operation must apply to DEM for an air permit before the 9 incinerator begins operation. 10 (3) All composters must have a roof, concrete foundation, and pressuretreated wood or other rot-resistant building materials. 11 12 Before disposal, all animal operations must keep dead animals inside a (c) building to prevent dogs or wild animals from having any contact with the dead 13 14 animals. 15 "§ 143-615. Violations. 16 If there is substantial evidence that any person has violated or is violating any 17 provision of this Article, then: 18 (1) The Director may issue an order directing the person to desist in the practice which constitutes the violation or to take any corrective action 19 20 as may be necessary to ensure that the violation will cease. The person 21 to whom the order is issued may cause to be commenced a contested hearing pursuant to Chapter 150B, Article 3, of the General Statutes by 22 23 filing with the Director within 30 days a notice of appeal. 24 If it is determined by the Director that an emergency exists respecting (2) any matter affecting or likely to affect the public health, the Director 25 may issue any order necessary to terminate the emergency without 26 27 notice and without hearing. Any order shall be binding and effective immediately and until the order is modified or vacated at a hearing 28 29 pursuant to Chapter 150B, Article 3, of the General Statutes or by a 30 court. 31 The Department may request the Attorney General to institute legal (3) 32 proceedings pursuant to the penalties section. 33 "§ 143-616. Penalties. 34 Any person who violates any provision of this Article is subject to a civil penalty of up to five thousand dollars (\$5,000) for each day of the violation. 35 Any person who negligently dumps, deposits, or discharges a pollutant into 36 37 any water of the State in violation of this Article is guilty of a misdemeanor punishable 38 as follows: 39 For a first conviction, the person shall be fined up to twenty-five <u>(1)</u> thousand dollars (\$25,000) for each day of the violation, imprisoned 40 41 for a term of up to one year, or both.

For a second or subsequent conviction, the person shall be fined up to fifty thousand dollars (\$50,000) for each day of the violation,

imprisoned for a term of up to two years, or both.

(2)

42

43

- (c) Any person who knowingly dumps, deposits, or discharges a pollutant into any water of the State in violation of this Article:
 - (1) For a first conviction, the person is guilty of a misdemeanor punishable by a fine of up to fifty thousand dollars (\$50,000), a term of imprisonment not to exceed two years, or both.
 - (2) For a second or subsequent conviction is guilty of a Class I felony, punishable by a fine of up to one hundred thousand dollars (\$100,000) for each day of the violation, imprisonment for a term not to exceed five years, or both.
- (d) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Article, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Article is guilty of a misdemeanor punishable by a fine of not more than ten thousand dollars (\$10,000), imprisonment in the county jail for not more than six months, or both.
- (e) The Attorney General shall, at the request of the Department, institute any legal proceeding, including an action for injunctive relief, necessary to enforce the penalty provisions of this Article or to obtain compliance with this Article. In any such action, any previous findings of fact of the Director or the Commission after notice and hearing shall be conclusive if supported by substantial evidence in the record when the record is viewed as a whole.
- (f) <u>In all proceedings with respect to any alleged violation of this Article, the burden of proof shall be upon the Commission or the Department except in an action for contempt.</u>
- (g) If the Attorney General has instituted legal proceedings in accordance with this section, all related issues which could otherwise be raised by the alleged violator in a proceeding for judicial review shall be raised in the legal proceedings instituted in accordance with this section.

"§ 143-617. Injunctive relief.

- (a) Whenever the Department has reasonable cause to believe that any person is violating or threatening to violate this Article or any rule or order adopted or issued pursuant to this Article, or any term condition, or provision of an approved IHO construction, expansion, and/or operation plan or other approved plan required under this Article, it may request the Attorney General to institute a civil action for injunctive relief to restrain the violation or threatened violation.
- (b) Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this Article.

"§ 143-618. Citizen actions.

(a) Except as provided in subdivision (2) of this subsection, a person with standing as provided in subdivision (3) of this subsection may commence a civil action in superior court on the person's own behalf against any of the following:

- 1 (1) A person, including the State of North Carolina, for violating any provision of this Article; or
 - (2) The Director or any official or employee of the Department where there is an alleged failure to perform any act or duty under this Article or a rule adopted pursuant to this Article which is not a discretionary act or duty.
 - (b) An action shall not be commenced pursuant to subsection (a)(1), unless the person commencing the action has provided the Director and the alleged violator with a written notice at least 60 days prior to commencing the action. The written notice shall specify the nature of the violation and that legal action is contemplated under this section if the violation is not abated and, if necessary, remedial action is not taken. The State may intervene in such an action as a matter of right. An action shall not be commenced pursuant to subsection (a)(1) if the Department or the State has commenced and is actively prosecuting a civil action or is actively negotiating an out-of-court settlement to require abatement of the violation and, if necessary, remediation of damages. However, any person may intervene as a matter of right in such an action.
 - (c) A person shall have standing to commence an action pursuant to subsection (a)(1) or to intervene in an action pursuant to subsection (a)(2) if the person is adversely affected by the alleged violation or the alleged failure to perform a duty or act.
 - (d) In an action commenced pursuant to subsection (a)(1), the court may award costs of litigation including reasonable attorneys' fees and expert witness fees, to a prevailing party who had standing to sue or intervene.
 - (e) This section does not restrict any right under statutory or common law of a person or class of persons to seek enforcement of provisions of this Article or a rule adopted pursuant to this Article or seek other relief permitted under the law.

"§ 143-619. Court actions.

All civil and criminal actions instituted pursuant to this Article shall be brought in the Superior Court of Wake County, unless the action is initiated by a private citizen, in which event the action may be initiated in either the Superior Court of Wake County or the county in which the IHO is located.

"§ 143-620. Animal Waste Disposal Best Management Practices Fund.

There is established an account within the Department of Environment, Health, and Natural Resources to be known as the Animal Waste Disposal Best Management Practices Fund. Funds collected pursuant to G.S. 143-605 shall be credited to that account.

Growers who need financial assistance in implementing the best management practices which are required by this Article may apply to the Animal Waste Disposal Best Management Practices Fund for funds to help pay for their best management practice implementation costs. These funds should be distributed on a sliding scale with preference being given to growers who have the lowest incomes and least number of animal units at their operations."

Sec. 2. An animal feeding operation that exists on July 1, 1993, that is required to have a permit under this act, shall apply for a permit no later than one year from the effective date of this act.

Sec. 3. If any paragraph, subparagraph, sentence, clause, phrase, or word of
this Chapter, or any part thereof, be declared unconstitutional or invalid for any reason
the remainder of said Chapter shall not be affected thereby and shall remain in full force
and effect, and to that end, this Chapter is declared to be severable.

Sec. 4. There is appropriated from the General Fund to the Department of Environment, Health, and Natural Resources the sum of five hundred thousand dollars (\$500,000) for the 1993-94 fiscal year and the sum of five hundred thousand dollars (\$500,000) for the 1994-95 fiscal year to establish the Animal Waste Disposal Best Management Practices Fund.

Sec. 5. This act becomes effective July 1, 1993.