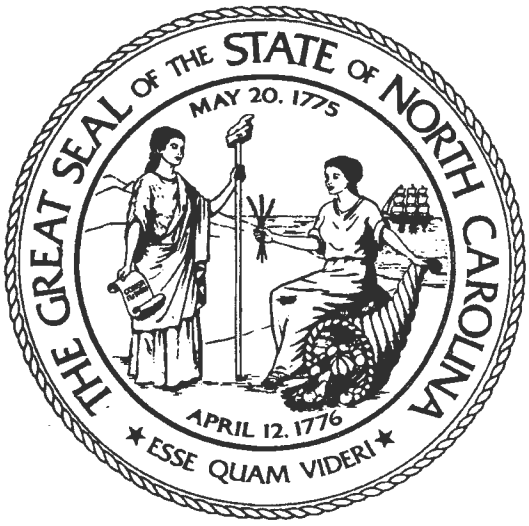
LEGISLATIVE

RESEARCH COMMISSION

AGRIBUSINESS PLANT VARIANCE



REPORT TO THE
1989 GENERAL ASSEMBLY
OF NORTH CAROLINA
1990 SESSION

A LIMITED NUMBER OF COPIES OF THIS REPORT IS AVAILABLE FOR DISTRIBUTION THROUGH THE LEGISLATIVE LIBRARY.

ROOMS 2126, 2226
STATE LEGISLATIVE BUILDING
RALEIGH, NORTH CAROLINA 27611
TELEPHONE: (919) 733-7778

OR

ROOM 500
LEGISLATIVE OFFICE BUILDING
RALEIGH, NORTH CAROLINA 27611
TELEPHONE: (919) 733-9390

TABLE OF CONTENTS

STATE OF NORTH CAROLINA
LEGISLATIVE RESEARCH COMMISSION
STATE LEGISLATIVE BUILDING
RALEIGH 27611

May 21, 1990

TO THE MEMBERS OF THE 1989 GENERAL ASSEMBLY (SECOND SESSION, 1990):

The Legislative Research Commission herewith submits to you for your consideration its final report on the land application of agribusiness residues. The report was prepared by the Legislative Research Commission's Committee on Agribusiness Plant Variances pursuant to Section 2.1(18) of Chapter 802 of the 1989 Session Laws.

Respectfully submitted,

Josephus L. Mavretic
Speaker

Henson P. Barnes
President Pro Tempore

Cochairmen
Legislative Research Commission

1989-1990

LEGISLATIVE RESEARCH COMMISSION

MEMBERSHIP

Speaker of the House of Representatives
Josephus L. Mavretic, Cochair

Rep. Joanne W. Bowie

Rep. J. Fred Bowman

Rep. Harold J. Brubaker

Rep. James W. Crawford, Jr.

Rep. John W. Hurley

President Pro Tempore of the Senate
Henson P. Barnes, Cochair

Senator Ralph A. Hunt

Senator Donald R. Kincaid

Senator Robert L. Martin

Senator Lura S. Tally

Senator Russell G. Walker

PREFACE

The Legislative Research Commission, established by Article 6B of Chapter 120 of the General Statutes, is a general purpose study group. The Commission is co-chaired by the Speaker of the House and the President Pro Tempore of the Senate and has five additional members appointed from each house of the General Assembly. Among the Commission's duties is that of making or causing to be made, upon the direction of the General Assembly, "such studies of and investigations into governmental agencies and institutions and matters of public policy as will aid the General Assembly in performing its duties in the most efficient and effective manner" (G.S. 120-30.17(1)).

At the direction of the 1989 General Assembly, the Legislative Research Commission has undertaken studies of numerous subjects. These studies were grouped into broad categories and each member of the Commission was given responsibility for one category of study. The Co-chairs of the Legislative Research Commission, under the authority of G.S. 120-30.10(b) and (c), appointed committees consisting of members of the General Assembly and the public to conduct the studies. Co-chairs, one from each house of the General Assembly, were designated for each committee.

The study of agribusiness plant variances was authorized by Section 2.1(18) of Chapter 802 of the 1989 Session Laws (1989 Session). That act states that the Commission may consider House Bill 1304 in determining the nature, scope and aspects of the study. A copy of the first and second versions of House Bill 1304 are included in the Appendices of this report.

The Legislative Research Commission grouped this study in its Agriculture and Criminal Law area under the direction of Representative Fred Bowman. The Committee was chaired by Senator Jim Speed and Representative John Brown. The full membership of the Committee is listed in Appendix B of this report. A committee notebook containing the committee minutes and all information presented to the committee is filed in the Legislative Library.

COMMITTEE PROCEEDINGS

COMMITTEE PROCEEDINGS

DECEMBER 11, 1989

The Agribusiness Plant Variance Committee held its initial meeting on December 11, 1989 to acquaint the members with the issue of food byproduct reuse and disposal. Mr. Linwood Jones, Committee Counsel, explained the Committee's charge -- to study in particular the land application of food byproducts and food residuals. The issue originally arose with the introduction of House Bill 1304, proposed legislation that would have authorized the land application of food byproducts (including post-wastewater treatment residuals consisting solely of food processing waste) under a general notification arrangement. House Bill 1304 was rewritten during the 1989 session to establish a study committee -- the Agribusiness Plant Variance Committee -- to examine the issue in more detail.

Dr. Roy Carawan, Food Science Specialist with the North Carolina State University Agricultural Extension Service, briefed the Committee generally on the food processing industry and its byproducts. Dr. Carawan referred the Committee to recent regulations adopted by the State of New York that provides for the land application of recognizable food processing wastes under best management practices and nonrecognizable, sewage-free food wastes at agronomically-acceptable rates, with prior notification to the responsible State agency and adherence to regulations safeguarding against runoff and leaching. Sewage sludge continues to be regulated in New York in the same manner that sewage sludge and food wastes are both regulated in North Carolina.

Dr. Carawan stated that we should seek methods of reducing the amount of food materials and byproducts disposed of in landfills. The current regulatory process in North Carolina governing land application of sludges and food byproducts is designed for large sites and often takes 6 to 9 months for site approval. The regulations, adopted by the Enivonmental Management Commission, are contained in 15 N.C.A.C. 2H.0200 (see Appendix D).

Representative Fred Bowman, sponsor of House Bill 1304 and the LRC member overseeing the Committee's work, commented that two food processing industries in his area -- the Miller Brewing Company in Eden and the Equity Group plant in Reidsville -- were experiencing problems in disposing of their food byproducts. Mr. Bowman noted that with landfill space rapidly diminishing statewide, the food waste problem is not just a local problem confined to these two companies. Mr. Bowman also pointed out that Senate Bill 111, the Solid Waste Management Act of 1989, would force food processors as well as other industries to reduce their reliance on landfills for the disposition of food byproducts; the Act calls for a 25% reduction by 1993 in the volume of materials being landfilled.

Mr. Steve Tedder, Chief of the Water Quality Section of the Division of Environmental Management (Department of Environment, Health, and Natural Resources), stated that regulations are already in place to deal with the issue of land application of food byproducts. He felt that the disposition of these wastes must continue to be regulated through the use of permits, with site reviews and information gathering required. Mr. Tedder stated that his agency was responsible for ensuring the public that appropriate regulations are in place to govern land application of wastes. He

added that the Division would be amenable to a modification of the regulations for the purposes of clarification.

Mr. Jim Waynick, Director of Personnel for the Equity Group in Reidsville, North Carolina, addressed the Committee concerning Equity's processing (chicken nuggets) and their byproducts. He noted that Equity generates over 103,000 pounds of breading material a week that ends up as a byproduct that must be disposed of. Several disposal options (renderers, landfills, land application sites, etc.) are needed to ensure that there is always a method for disposing of the wastes. Mr. Waynick felt that the treatment of food processing waste as "sludges" gave the waste a negative connotation that impeded its marketability for other re-uses.

Dr. Carawan noted that the National Food Processors Association had adopted a policy that recommends that food processors not purchase crops grown on soil to which sewage sludge has been applied; the policy does not apply to soils treated with pure food wastes and food byproducts. In addition, eight food processors have specific policies requiring their produce suppliers to certify that the crops being sold were grown in soils that were not treated with sewage sludge.

Mr. Jim Oliver, Agribusiness Specialist with the Department of Economic and Community Development, spoke briefly to the Committee about the value of rendering plants in re-using food byproducts as animal feeds and pet foods. He mentioned that many of the materials now going into landfills can be composted. Mr. Oliver also felt that a distinction needs to be made in the way sewage sludge and agricultural byproducts are regulated and treated.

FEBRUARY 7, 1990

Mr. Linwood Jones, Commission Counsel, briefed the Commission again on the issue of land application of food wastes. He stated that there are several alternative methods of disposal or recycling of food byproducts, residuals, and wastes, including rendering, landfilling, and land application. The focus of the Agribusiness Plant Variance Committee is on the land application method. Mr. Jones mentioned that Senate Bill 111, the comprehensive Solid Waste Management Act enacted by the 1989 General Assembly, excluded sludges (both sewage and industrial processing wastes) from its coverage. However, the bill's mandate to counties to reduce by 25% the volume of materials being landfilled within the next three years could prompt many counties to discontinue accepting food processing wastes, especially since these wastes are re-useable either as rendered products or organic fertilizers.

Mr. George Wornson, Manager of Byproduct Development for the Miller Brewing Company (Milwaukee, Wisconsin), addressed the Committee on the use of agribusiness residues. Mr. Wornson stated that with landfills rapidly reaching their capacity, there is a need to find beneficial uses for many of the materials going into the landfills. With respect to the food industry and the agribusiness residues it generates, it would be important to make a distinction between sludges and these residues. Miller Brewing generates a large volume of byproducts in its operations. The brewery biomass produced by Miller (which it calls FARM O.N.) is beneficially useful as a fertilizer. The biomass is free of sanitary or toxic wastes, unlike sludges coming from a municipal

wastewater system or many non-food industrial systems. Mr. Wornson also mentioned the use of brewer's yeast and whey permiate as land-applied fertilizers.

Mr. Wornson stated that the State of New York had adopted regulations distinguishing food residuals and sludges. The food residual regulations allow year-round application of food residuals without over-regulation of the materials. Mr. Wornson feels that we need to continue searching for beneficial uses for food products and that the public must be made aware of these positive, beneficial uses.

Dr. Ellis Brunton, Corporate Laboratory Director for Holly Farms/Tyson Foods (Wilkesboro), addressed the Committee on behalf of the North Carolina Poultry Federation concerning recycling of poultry byproducts. Dr. Brunton stated that the poultry industry is a leading proponent of reclaiming and recycling poultry processing byproducts.

The poultry byproduct reclamation process begins as early as the live grow-out operations of chicks. Fecal material generated during the grow-out of the chicks, high in organic nitrogen and carbon, provides a good soil conditioner and fertilizer, useful in particular for fertilizing otherwise sterile pastureland for grazing cattle. At the processing plant, the offal of the chickens is recovered for rendering into animal feeds and supplements.

A large volume of water is used in processing the chickens, although the volume has been decreasing substantially since the enactment of the federal Clean Water Act of 1972. Reductions in the water volume, however, have yielded higher concentrations of water pollutant byproducts that have been removed from the processing stream by

dissolved air flotation equipment. Dr. Brunton stated that these byproducts should not be considered sludges since they are natural organic compounds consisting of three basic nutrients -- protein, fat, and carbohydrates. "Sludges" cover everything from sewage to materials pumped out of oil wells to hazardous wastes and should not be used to refer to poultry wastes and other agricultural byproducts.

Dr. Brunton stated that most poultry waste is now land-applied. However, land costs are very high and the sites are difficult to purchase. Dr. Brunton felt that the land application of poultry wastes (consisting of 90 to 95% water) was over-regulated and potential new regulations for sludges are unnecessary for agricultural waste byproducts. Dr. Brunton concluded by encouraging the government to take into account the differences between agricultural byproducts and other industrial wastes in determining how the two types of materials are regulated.

Mr. Barry Frank, a consultant and owner of National Proteins and Oils (Greensboro), discussed the rendering industry and its contributions to recycling of animal and food byproducts. The rendering industry services primarily the poultry plants, meat packing plants, restaurants, and supermarkets. Frying oils are picked up from restaurants, excess fats and bones from supermarkets, slaughter waste from meat plants, and offal from poultry processing plants. Approximately 42 million pounds of this material is picked up every week for rendering.

Mr. Frank Post, Vice-President of Technical Services for AMSCO, Inc. (Clemmons), a sludge application contractor. Mr. Post stated that AMSCO provides land application of sludges for numerous municipalities and industries in North Carolina. Mr. Post stated that there are basically four options currently available for the management of residuals:

(i) beneficial uses, consisting of either land application or marketing, (ii) landfilling in a monofill or codisposal, (iii) incineration, and (iv) surface disposal into lagoons, stockpiles, etc. Each option has advantages and disadvantages. A company managing residuals must be concerned with costs, heavy metals, pathogens, organics, impacts to groundwater and surface water, odors, and aesthetics.

Mr. Post stated that agribusiness byproducts are generally pathogen-free, although some food industries can have significant pathogens in their residuals, thereby necessitating some pathogen stabilization. Agribusiness byproducts are also generally low in trace elements and heavy metals.

He stated that the key to successful land application is the management. Both the generator of the residuals and the applicator must be committed to ensuring the proper beneficial use and protecting the environment and the public's health and safety. Site selection and rate of application will affect the success of the application program. Record-keeping is also essential. Both the generator and the farmer whose site is receiving the material need a record of the materials applied to the land and the rates of application. Most of the residuals will not serve as complete fertilizers and will therefore require supplemental fertilizers for agricultural production.

Mr. Post expressed concerns about the amount of time it takes to obtain a land application permit. An applicant attempting to start a land application program can anticipate at least one year in developing an application and having it reviewed and approved by the Department of Environment, Health, and Natural Resources. Mr. Post felt that House Bill 1304 could enhance the environment if there is chemical analysis and monitoring of the residuals, training and certification of the applicators, licensing

permits issued to the generator, record-keeping by the farmer, generator, and applicator, application at agronomic rates, and Departmental inspections.

Mr. Dennis Ramsey, Assistant Chief for Operations of the Water Quality Section (DEHNR), addressed the Committee concerning his Department's regulation of land application. Mr. Ramsey stated that a permit application must generally contain a map of the site, a soil scientist's recommendation on application rates, an agronomist's recommendation on the crops to be grown, a description of the project, a chemical analysis of the waste, information of wells and surface water area in the area, and a soils evaluation to establish the depth to the groundwater and the soil type. Once an application is received, one copy is retained, one is sent to the Regional DEHNR office, and another is sent to the Groundwater Section of the Department. The Regional Office does a site evaluation to examine slopes, distances to houses, distances to streams, verification of soil types, and other site characteristics. Mr. Ramsey provided the Committee with slides showing problems at some sites where the land application of residuals had not been properly managed.

APRIL 18, 1990

The Committee met for the final time prior to the short session to consider the draft copy of the report and proposed legislation entitled AN ACT TO PROVIDE FOR THE MANAGEMENT AND RECYCLING OF SECONDARY NUTRIENTS. Mr. Linwood Jones, Committee Counsel, briefed the Committee on the report. Representative Fred

Bowman then presented the above-referenced legislation to the Committee for consideration along with findings to explain the need for the legislation.

Mr. Jones explained the details of the legislation. Under current law, all wastes, whether sewage sludge, industrial wastes, or food residuals, are treated the same under the Environmental Management Commission's ("EMC") regulations: in order to apply these materials to the land for fertilization, disposal, or any other purpose, a nondischarge permit must be obtained from EMC. The major requirements for obtaining a nondischarge permit are summarized in earlier committee proceedings and the regulations are contained in the appendices.

Under the proposed legislation presented to the Committee by Representative Bowman, EMC will no longer issue nondischarge permits for the land application of food residuals. Instead, EMC will certify the waste product (food residuals and food byproducts) as being free of toxic and hazardous substances and free of sewage. Once certified, the material is then considered a "secondary nutrient." The food processor may then apply the secondary nutrients or have them applied to the land under the following conditions: (i) they are applied at the agronomic rate; (ii) they are applied in accordance with best management practices developed by the NCSU Agricultural Extension Service; and (iii) a record is maintained by the processor indicating the site and date of application and the volume of material applied.

Several members of the audience commented on specifics of the proposal. Mr. Allen Spalt of the Agricultural Resources Center expressed concern that the certification of the waste material would never be renewed unless the nature of the waste changes. Mr. Spalt also felt that the legislation should ensure that no change in the chemical

constituency of the waste occur at any time prior to application without recertification. Dr. Ellis Brunton (Holly Farms/Tyson Foods) agreed with Mr. Spalt's suggestions. The Committee amended the bill to provide for recertification of the waste every five years, or earlier if the nature of the waste changed. The bill was also amended to ensure that any changes in the constituency of the waste through fermentation or other chemical reactions would trigger the need for recertification, provided that the change occurs prior to application to the land.

Mr. Dennis Ramsey, Assistant Chief for Operations for the Water Quality Section of the Department of Environment, Health, and Natural Resources, informed the Committee of the Department's concerns with the proposed legislation. The Department is willing to work with the food industry through the regulatory process to make changes to the land application regulations. Mr. Ramsey and Ms. Katherine Patseavouras, a legislative liasion for the Department, felt that problems with the current regulatory process and regulations had not been identified.

Ms. Ann Coan questioned the Counsel concerning fees. Mr. Jones, Counsel, noted that EMC has existing statutory authority to charge up to $400 for nondischarge permits and that this authority would apply to the secondary nutrient certification. He also noted that EMC currently charges $250 for a land application permit. Ms. Coan then questioned how the bill would be enforced. Mr. Jones responded that EMC would enforce the waste certification procedure. Although there are no enforcement provisions in the bill concerning adherence to best management practices, EMC has existing enforcement powers to address water pollution sources. Mr. Jones suggested that the Committee add the word "permit" to the bill to make clear that existing EMC

enforcement remedies involving nondischarge permits would also apply to the waste certification procedure.

Dr. Roy Carawan, Food Science specialist at North Carolina State University, and Mr. George Wornson, Manager of Byproduct Development for the Miller Brewing Company, suggested additional changes to the bill to provide for beneficial agricultural uses in addition to land application. Most of the changes involved making clear that the bill promotes the use of secondary nutrient materials as animal feedstocks. Another amendment made clear that "other beneficial agricultural uses" involving land application would be acceptable. The Counsel questioned whether the language concerning animal feedstocks should be in both the preamble and the operative language of the bill. Placing it in the operative language in sections 1 and 2 of the bill could place restrictions on animal feedstocks that currently do not exist since EMC does not regulate the disposition of animal feedstock unless it is put onto the land. The bill was amended to provide that animal feedstock use is a beneficial use of the food materials and that any waste placed on the land as an animal feedstock would be covered by the bill rather than by nondischarge permits.

Mr. Jim Waynick, Director of Personnel for the Equity Group in Reidsville, noted that land application is not the food processor's primary recycling method. The conversion or use of the secondary nutrients as animal feeds and supplements is a better beneficial use of the secondary nutrient material than land application, although land application is superior to landfilling.

The final version of the bill, after all amendments, was approved along with the report. A copy of the bill is contained in the section labeled "RECOMMENDED

LEGISLATION." (Note: Section 2 of the bill includes all the EMC definitions currently in G.S. 143-213, whereas the bill reviewed by the Committee contained only the definition of "waste." This change has no effect on the bill since the amendment of the definition of "waste" is still the only revision to G.S. 143-213).

FINDINGS

FINDINGS

The Agribusiness Plant Variance Committee finds that the State of North Carolina should encourage the beneficial use of food byproducts and food residuals. "Beneficial uses" include the rendering of these food materials into animal feeds and their application to land as soil conditioners and fertilizers.

Food byproducts and food residuals that are to be land applied are currently treated as industrial sludges, thus requiring a nondischarge permit issued by the Environmental Management Commission prior to any application to the land. Although the requirements for a nondischarge permit for land application may be appropriate for industrial sludges generally (see Attachment -- in this report), food byproducts and residuals differ signficantly from industrial sludges and should not be subject to the same regulatory criteria. Food byproducts and residuals are nonhazardous and nontoxic, contain fewer heavy metals, and are generally free of pathogens. Several large food-processing companies distinguish sewage sludges from food residues by refusing to accept for processing any vegetables or fruits grown in soil that has been treated with sewage sludge.

The recycling of food byproducts into animal feeds should continue to be pursued by all food processors, food manufacturers, and restaurants. Food materials and food residuals that cannot be appropriately recycled into animal feeds or supplements and which are nontoxic and nonhazardous should be recycled into the soil as nutrients. The recycling of food residuals into the soil through land application provides the following benefits:

(1) The food material is displaced from landfills. The recently-enacted Solid Waste Management Act of 1989 requires local governments to reduce their landfill usage by implementing programs for waste stream reduction and recycling. The secondary nutrient recycling bill proposed by the Committee would assist local governments in implementing the State's recycling goals and reducing their landfill dependence.

(2) The food material provides valuable nutrients to the soils. Both industrial sludges and food residuals are used as fertilizers, soil conditioners, and soil amendments. Both generally also require supplemental fertilization from inorganic fertilizers and conditioners in order to support and sustain crop growth. However, the expense and time involved in locating, studying, and permitting a particular site for land application deter many food processors from seeking land application permits. The proposed secondary nutrient recycling bill would encourage more food processors to recycle their residuals back into the soil by allowing the residuals to be applied to smaller, dispersed tracts of farmland that are not economically feasible to permit under the current regulations. The bill contains measures to ensure that the application is conducted in an environentally-safe manner.

(3) Disposal and recycling outlets (rendering plants, municipal sewers, landfills, etc.) for food residues, food byproducts, and wastewater may be unavailable to food processors at certain times. Even the temporary unavailability of an outlet for the byproducts and residues pose storage problems for the processor. By increasing the feasibility of the land application "outlet," the proposed legislation helps encourage proper disposal and/or recycling of food materials.

(4) Many groups will benefit from the proposed secondary nutrient legislation. The proposal will held local governments reduce their landfill dependence. It will provide farmers valuable soil conditioners and fertilizers. In addition, if the food processing industry is able to recognize cost savings from land application of their byproducts and residual materials, those savings can be passed onto the consumers.

The Committee therefore finds that the current Environmental Management Commission ("EMC") regulations for nondisharge permits for land application of waste materials should not apply to food byproducts and food residuals. The Committee finds that the certification of the food byproducts and residuals by EMC as "non-toxic, nonhazardous, and sewage-free" and the land application of the materials at agronomic rates and in accordance with best management practices is an environmentally-sound method of recycling these materials back into the soils.

RECOMMENDED LEGISLATION

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1989

D

89-RNZ-501
THIS IS A DRAFT 20-APR-90 10:47:18

Short Title: SECONDARY NUTRIENT RECYCLING **(Public)**

Sponsors:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO PROVIDE FOR THE MANAGEMENT AND RECYCLING OF SECONDARY NUTRIENTS.

Whereas, current laws and regulations treat the byproducts and residues of food processing as sludge and inhibit their use as nutrients on smaller, dispersed tracts of farmland; and

Whereas, such byproducts and residues are derived from food products and contain no harmful substances; and

Whereas, land application, use as animal feedstocks, and other beneficial agricultural uses of these food byproducts is an economically, agronomically and environmentally sound method of recycling such secondary nutrients and should be encouraged by the State; and

Whereas, the State's Solid Waste Management Act discourages and may eventually prohibit the disposal of these secondary nutrients into landfills; and

Whereas, land application and other agricultural uses of secondary nutrients by processors constitutes a beneficial use that will assist local governments in meeting their obligations under the Solid Waste Management Act to reduce their landfill dependence;

Now therefore,

The General Assembly of North Carolina enacts:

Section 1. G.S. §143-215.1 is amended by adding a new subsection (d2) as follows:

"(d2) Land Application of Secondary Nutrients.-- A person may dispose of secondary nutrients on the land

(1) through a land application system,
(2) as an animal feedstock, or
(3) for other beneficial agricultural uses

in accordance with the provisions of this subsection only after certification by the Commission that the secondary nutrients are free of toxic wastes as defined in this Chapter and hazardous substances as defined in G.S. 130A-310(2). An application for a permit for certification or recertification of a waste as a secondary nutrient and any decision denying such application shall be in writing. The Commission shall act on the application as quickly as possible. The Commission may conduct any inquiry or investigation it considers necessary with respect to the chemical constituency of the waste before acting on an application and may require an applicant to submit samples, data, and other information the Commission considers necessary to evaluate the application. If the Commission fails to act on an application for a certification or recertification permit within 45 days after the applicant submits all information required by the Commission, the application is considered to be approved. The generator of the waste must obtain a recertification permit whenever the chemical constituency of the waste is altered prior to its disposition on the land. Each permit must be renewed every five years from the date of initial certification or the most recent recertification, whichever is later.

Notwithstanding the provisions of subsection (a), a certified secondary nutrient may be applied to the land, provided that the following conditions are met:

(1) the secondary nutrient is applied at agronomically-acceptable rates, where appropriate, and in accordance with best management practice guidelines developed by the North Carolina State University Agricultural Extension Service, in consultation with the Division of Environmental Management and the Department of Agriculture; or
(2) the secondary nutrient is applied as an animal feedstock in accordance with nutrient management guidelines developed by the North Carolina State University Agricultural Extension Service in consultation with the North Carolina Department of Agriculture; and
(2) the generator of the secondary nutrients maintains a record of the disposition of its secondary nutrients, available for inspection by the Department, including application sites, date of application, and the approximate volume of material applied at each site."

Sec. 2. G.S. 143-213 reads as rewritten:

"**§143-213. Definitions applicable to Part.** Unless the context otherwise requires, the following terms as used in this Part are defined as follows:

(1) The term 'air cleaning device' means any method, process or equipment which removes, reduces, or renders less noxious air contaminants discharged into the atmosphere.

(2) The term 'air contaminant' means particulate matter, dust, fumes, gas, mist, smoke, or vapor or any combination thereof.

(3) The term 'air contamination' means the presence in the outdoor atmosphere of one or more air contaminants which contribute to a condition of air pollution.

(4) The term 'air contamination source' means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant.

(5) The term 'air pollution' shall mean the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as is or tends to be injurious to human health or welfare, to animal or plant life or to property or that interferes with the enjoyment of life or property.

(6) to (8) Repealed by Session Laws 1987, c. 827, s. 153.

(9) Whenever reference is made in this Article to the 'discharge of waste,' it shall be interpreted to include the discharge of waste into any unified sewerage system or arrangement for sewage disposal, which system or arrangement in turn discharges the waste into the waters of the State.

(10) The term 'disposal system' means a system for disposing of waste, and including sewer systems and treatment works.

(11) Repealed by Session Laws 1987, c. 827, s. 153.

(12) The term 'emission' means a release into the outdoor atmosphere of air contaminants.

(13) The term 'outlet' means the terminus of a sewer system, or the point of emergence of any waste or the effluent therefrom, into the waters of the State.

(14) Repealed by Session Laws 1987, c. 827, s. 153.

(15) The term 'sewer system' means pipelines or conduits, pumping stations, and force mains, and all other construction, devices, and appliances appurtenant thereto, used for conducting wastes to a point of ultimate disposal.

(16) The term 'standard' or 'standards' means such measure or measures of the quality of water and air as are established by the Commission pursuant to G.S. 143-214.1 and G.S. 143-215.

(17) The term 'treatment works' means any plant, septic tank disposal field, lagoon, pumping station, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary landfill, or other works not specifically mentioned herein, installed for the purpose of treating, equalizing, neutralizing, stabilizing or disposing of waste.

(18) 'Waste' shall mean and include the following:

a. 'Sewage,' which shall mean water-carried human waste discharged, transmitted, and collected from residences, buildings, industrial establishments, or other places into a unified sewerage system or an arrangement for sewage disposal or a group of such sewerage arrangements or systems, together with such ground, surface, storm, or other water as may be present.

b. 'Industrial waste' shall mean any liquid, solid, gaseous, or other waste substance or a combination ~~thereof~~ thereof, except secondary nutrients, resulting from any process of industry, manufacture, trade or business, or from the development of any natural resource.

b1. 'Secondary nutrients' means any solid or semisolid waste which is derived from food processing or food manufacturing and contains no sewage as defined in this subdivision.

c. 'Other waste' means sawdust, shavings, lime, refuse, ~~offal,~~ oil, tar chemicals, and all other substances, except secondary nutrients, industrial waste and sewage, which may be discharged into or placed in such proximity to the water that drainage therefrom may reach the water.

d. 'Toxic waste' means that waste, or combinations of wastes, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformities, in such organisms or their offspring.

(19) The term 'water pollution' means the man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of the waters of the State, including, but specifically not limited to, alterations resulting from the concentration or increase of natural pollutants caused by man-related activities.

(20) Repealed by Session Laws 1987, c. 827, s. 153.

(21) The term 'watershed' means a natural area of drainage, including all tributaries contributing to the supply of at least one major waterway within the State, the specific limits of each separate watershed to be designated by the Commission.

(22) The term 'complex sources' means any facility which is or may be an air pollution source or which will induce or tend to induce development or activities which will or may be air pollution sources, and which shall include, but not be limited to, shopping centers; sports complexes; drive-in theaters; parking lots and garages; residential, commercial, industrial or institutional developments; amusement parks and recreation areas; highways; and any other facilities which will result in increased emissions from motor vehicles or stationary sources.

(23) The term 'effluent standards' or 'effluent limitations' means any restrictions established pursuant to this Article on quantities, rates, characteristics and concentrations of chemical, physical, biological and other constituents of wastes which are discharged from any pretreatment facility or from any outlet or point source to the waters of the State.

(24) The term 'point source' means any discernible, confined, and discrete conveyance, including, but specifically not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or concentrated animal- feeding operation from which wastes are or may be discharged to the waters of the State.

(25) The term 'pretreatment facility' means any treatment works installed for the purpose of treating, equalizing, neutralizing or stabilizing waste from any source prior to discharge to any disposal system subject to effluent standards or limitations.

(26) The term 'pretreatment standards' means effluent standards or limitations applicable to waste discharged from a pretreatment facility.

(27) The term 'Federal Clean Air Act' refers to the Clean Air Act, 42 U.S.C. 7401 et seq.

(28) The term 'nonattainment area' refers to an area which is shown to exceed any national ambient air quality standard for such pollutant.

(29) The term 'prevention of significant deterioration' refers to the statutory and regulatory requirements arising from the Federal Clean Air Act designed to prevent the significant deterioration of air quality in areas with air quality better than required by the national ambient air quality standards.

(30) The term 'waste treatment management practice' means any method, measure or practice to control plant site runoff, spillage or leaks, sludge or waste disposal and drainage from raw material storage which are associated with, or ancillary to the industrial manufacturing or treatment process of the class or category of point sources to which the management practice is applied. Waste treatment management practices may only be imposed, supplemental to effluent limitations, for a class or category of point sources, for any specific pollutant which has been designated as toxic or hazardous pursuant to sections 307(a)(1) or 311 of the Federal Water Pollution Control Act."

Sec. 3. This act is effective upon ratification and shall apply to applications submitted to the Department on or after the date of adoption by the Agricultural Extension Service of best management practice and nutrient guidelines.

APPENDIX A

GENERAL ASSEMBLY OF NORTH CAROLINA
1989 SESSION
RATIFIED BILL

CHAPTER 802
SENATE BILL 231

AN ACT TO AUTHORIZE STUDIES BY THE LEGISLATIVE RESEARCH COMMISSION, TO CREATE AND CONTINUE VARIOUS COMMITTEES AND COMMISSIONS, TO MAKE APPROPRIATIONS THEREFOR, AND TO DIRECT VARIOUS STATE AGENCIES TO STUDY SPECIFIED ISSUES.

The General Assembly of North Carolina enacts:

PART I. TITLE

Section 1. This act shall be known as "The Studies Act of 1989."

. . .

PART II.-----LEGISLATIVE RESEARCH COMMISSION

Sec. 2.1. The Legislative Research Commission may study the topics listed below. Listed with each topic is the 1989 bill or resolution that originally proposed the issue or study and the name of the sponsor. The Commission may consider the original bill or resolution in determining the nature, scope and aspects of the study. The topics are:

(1) State Ports--study continued (S.J.R. 96 - Barker, H.B. 133 - Hall), Lease and Renegotiation of Contracts of the North Carolina Railroad Company and the Atlantic and North Carolina Railroad Company,
(2) Development of a State Strategy for the Management of Solid Waste (S.J.R. 112 - Speed, S.B. 1214 - Basnight) and Infectious Wastes (H.B. 1045 - Diggs),
(3) Worker Training Trust Fund (S.B. 271 - Parnell),
(4) Tourism's Growth and Effect--study continued (S.B. 297 - Block, H.B. 379 - Warren) and Travel/Tourism Reorganization (H.B. 1132 - Perdue),
(5) Deregulation of Revolving Credit and Authorization of Credit Card Banks (S.B. 377 - Staton) and Linked Deposits (H.B.1910 - Locks),
(6) Administrative Procedure Act's Rule-Making Process (S.B. 535 - Johnson) and Office of Administrative Hearings and the Administrative Rules Review Commission (S.J.R. 1003 -Martin of Guilford, H.B. 1459 - Michaux),
(7) "Willie M." Programs (S.J.R. 887 - Block),
(8) State Procurement Contracts to Minority Business Enterprises (S.B. 927 - Hunt of Durham) and Small Business Technical Assistance Programs (H.J.R. 1514 - Colton),

(9) Consumer Protection Issues, including those relating to the Elderly (S.B. 1261 - Barker),
(10) State Marine Patrol (S.B. 1267 - Barker),
(11) Sports Fishing Licenses (S.B. 1284 - Barker),
(12) Revenue Laws--study continued, including the impact of 1989 tax law changes (H.J.R. 3 - Lilley) and Local Revenue Sources Options (S.B. 1298 - Odom),
(13) Care Provided by Rest Homes, Intermediate Care Facilities, and Skilled Nursing Homes--study continued (H.J.R. 173 - Easterling), Necessity for Certificates of Need, and Continuing Care Issues,
(14) Health Care/Insurance Costs Issues, including but not limited to, Availability, Benefits, Costs, Portability, Long-Term Care Insurance (H.B. 202 - Wiser), Health Insurance Costs (H.B. 961 - Perdue, S.B. 1068 - Johnson, Joe), Health Insurance (H.J.R. 1159 - Duncan), Infertility Treatment Coverage (H.B. 1187 - Payne), Mammogram/Pap Smear Coverage (H.B. 1014 - Barnes), and Health Care Insurance Coverage (H.B. 1242 - Mills),
(15) Development of a State Strategy for the Protection of All Groundwater Resources (H.J.R. 554 - DeVane, S.J.R. 367 - Winner),
(16) Surface Water Quality and Resources Issues, Including Interbasin Transfer, Albemarle-Pamlico Estuarine (H.J.R. 33 - Ethridge, B.), Coastal Water Quality -- study continued (H.J.R. 37 - Ethridge, B.), Haw in Scenic River System (H.B. 1224 - Hackney), Pesticides (H.J.R. 1399 - Holt), Water Resources Planning (H.B. 1945 - Payne), Toxaway River (H.B. 1955 - Colton), and Yadkin River Use and Protection (S.B. 1182 - Kaplan),
(17) Insanity Verdict (H.B. 1364 - Rhodes), and Guilty but Insane Verdict (H.B. 1372 - Sizemore),

(18) **AGRICULTURE STUDY (H.B. 1362 - BROWN), AGRIBUSINESS PLANT VARIANCES (H.B. 1304 - BOWMAN), FALLOW DEER (H.J.R. 1924 - JAMES),**

(19) Homeless Persons (H.B. 2018 - Greenwood, S.B. 1290 - Martin of Guilford),
(20) State Information Processing Needs and Cost -- study continued (S.B. 47 - Royall),
(21) Sports Fishing Licenses (S.B. 1284 - Barker),
(22) Proprietary Schools (S.B. 854 - Martin, W.),
(23) Public Employees' Day Care and Medical and Dental Benefits.

Sec. 2.4. Committee Membership. For each Legislative Research Commission Committee created during the 1989-1991 biennium, the Cochairmen of the Commission each shall appoint a minimum of seven members.

Sec. 2.5. Reporting Dates. For each of the topics the Legislative Research Commission decides to study under this act or pursuant to G.S. 120-30.17(1), the Commission may report its findings, together with any recommended legislation, to the 1990 Session of the 1989 General Assembly or the 1991 General Assembly, or both.

Sec. 2.6. Bills and Resolution References. The listing of the original bill or resolution in this Part is for reference purposes only and shall not be deemed to have incorporated by reference any of the substantive provisions contained in the original bill or resolution.

Sec. 2.7. Funding. From the funds available to the General Assembly, the Legislative Services Commission may allocate additional monies to fund the work of the Legislative Research Commission.

. . .

PART XXV.-----EFFECTIVE DATE

Sec. 25.1. This act shall become effective July 1, 1989.

In the General Assembly read three times and ratified this the 12th day of August, 1989.

APPENDIX B

MEMBERSHIP OF LRC COMMITTEE ON AGRIBUSINESS PLANT VARIANCES

LRC Member in Charge:
Rep. J. Fred Bowman
814 N. Graham-Hopedale Road
Burlington, NC 27217
(919)228-7521

President Pro Tem's Appointments

Sen. James D. 'Jim' Speed
Co-Chairman
Route 6, Box 542
Louisburg, NC 27549
(919)853-2167

Sen. Charles W. 'C. W.' Hardin
67 Rhoda Street
Canton, NC 28716
(704)648-2327

Sen. Wendell H. Murphy
P.O. Box 280
Rose Hill, NC 28458
(919)289-2111

Sen. David R. Parnell
P.O. Box 100
Parkton, NC 28371
(919)858-3521

Sen. R. C. Soles, Jr.
P.O. Box 6
Tabor City, NC 28463
(919)653-2015

Mr. Norwood P. Whitley, Jr.
Route 2
Stantonsburg, NC 27883

Mr. Billy Yeargin
N.C. Sweet Potato Commission
1201 Ravens Point Circle
Raleigh, NC 27614
(919)894-2166

Counsel:
* Linwood Jones
(919) 733-2578

Speaker's Appointments

Rep. John W. Brown
Co-Chairman
Route 2, Box 87
Elkin, NC 28621
(919)835-2373

Rep. Charles W. 'Charlie' Albertson
Route 2, Box 141-E
Beulaville, NC 28518
(919)298-4923

Mr. John C. Allen
717 Clark Road
Snow Camp, NC 27349

Rep. H. Clayton Loflin
1425 Medlin Road
Monroe, NC 28110
(704)289-4554

Rep. Edith L. Lutz
Route 3, Box 197
Lawndale, NC 28090
(704)538-7818

Rep. Leo Mercer
115 Miller Street
Chadbourn, NC 28431
(919)654-3518

Rep. John H. Weatherly
Route 3, Box 728
Kings Mountain, NC 28086
(704)487-0039

Clerk:
Anne Kidd
Legislative Building, Room 1111

APPENDIX C

AGRIBUSINESS COMMITTEE MAILING LIST

Ms. Nancy Barnhardt
P.O. Box 21
Carrboro, NC 27510

Dr. Roy Carawan
Department of Food Science
Box 7624
Raleigh, N.C. 27695-7624

Mrs. Ann Coan
North Carolina Farm Bureau
Post Office Box 27766
Raleigh, N.C. 27611

Mr. Paul Crissman
DEHNR-Solid Waste Management Division
401 Oberlin Road
Raleigh, N.C. 27605

Mr. Ray Forrest
Department of Agriculture
Agriculture Building

Mrs. Margaret Holton
N.C. League of Women Voters
411 Holly Lane
Chapel Hill, N.C. 27514

Mr. Glenn Jernigan
Post Office Box 1863
Fayetteville, North Carolina 28302

Mr. Ken Lane
Miller Brewing Company
Worldgate One
13100 Worldgate Drive/Suite 200
Herndon, Va. 22070

Mr. David McLeod
Legal Division
Department of Agriculture
Agriculture Building

Mr. Jim Oliver
Agribusiness Specialist
Dep't. of Economic & Community Development
Dobbs Building

AGRI-BUSINESS MAILING LIST
PAGE TWO

Ms. Katherine Patseavouras
DEHNR
14th Floor
Archdale Building

Mr. Frank Post
AMSCO, Inc.
P.O. Box 568
Clemmons, N.C. 27012

Mr. Steve Tedder
DEHNR
Environmental Management Division
Water Quality Section
Archdale Building

Mr. Chuck Wakild
DEHNR
Environmental Management
Archdale Building

Mr. Jim Waynick
Equity Group/Personnel Dep't.
Post Office Box 1436
Reidsville, N.C. 27320

Mr. Ed Woodhouse
N.C. Poultry Federation
4020 Barrett Drive/Suite 102
Raleigh, N.C. 27609

Mr. George Wornson
Manager of Byproduct Development
Miller Brewing Company
3939 W. Highland Blvd.
Milwaukee, Wisconsin 53201-0482

APPENDIX D

ENVIRONMENTAL MANAGEMENT COMMISSION'S NONDISCHARGE REGULATIONS

(15 N.C.A.C. 2H.0200)

SECTION .0200 - WASTE NOT DISCHARGED TO SURFACE WATERS

.0201 PURPOSE

These rules 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) sludge disposal systems.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.1;
Eff. February 1, 1976;
Amended Eff. November 1, 1987.

.0202 SCOPE

These rules apply to all persons proposing to construct, alter, extend, or operate any sewer system, treatment works, disposal system or sludge disposal 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 which are regulated by the Department of Human Resources.

History Note: Statutory Authority G.S. 130A-335; 143-215.1; 143-215.3(a)(1);
Eff. February 1, 1976;
Amended Eff. 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) "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.
(3) "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 to its perimeter. Each unit separated from other units by a four hour fire wall shall be considered as a separate building.
(4) "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 ten feet outside the building wall.
(5) "Building sewer" means that part of the horizontal piping of a drainage system which receives the discharge of the building drain and conveys it to a public sewer, private sewer, or on-site sewage disposal system.
(6) "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.
(7) "Director" means the Director of the Division of Environmental Management, Department of Natural Resources and Community Development or his delegate.
(8) "Dedicated site" means a site:
(a) to which sludge is applied at rates or frequencies greater than agronomically justifiable, or where the primary use of the land is for sludge disposal and crop or ground cover production is of secondary importance, or
(b) any sludge disposal site designated by the director.
(9) "Division" means the Division of Environmental Management, Department of Natural Resources and Community Development.
(10) "Groundwaters" means those waters in the saturated zone of the earth.
(11) "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 car 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.

(12) "Pollutant" means waste as defined in G.S. 143-213(18).

(13) "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.

(14) "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.

(15) "Public or community sewage system" means a single system of sewage collection, treatment, and/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.

(16) "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.

(17) "Rapid infiltration system" means rotary distributor systems or other similar systems that dispose of tertiary treated waste at high surface area loading rates.

(18) "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.

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

(20) "Sludge" means any solid or semisolid waste generated from a wastewater treatment plant, water supply treatment plant or air pollution control facility permitted under the authority of the Environmental Management Commission.

(21) "Soil Scientist" means an individual who is a Certified Professional in Soils through the N.C. Soil Science Society or a Certified Professional Soil Scientist or Soil Specialist by ARCPACS (American Registry of Certified Professionals in Agronomy, Crops and Soils) or an individual with a demonstrated knowledge in soils science.

(22) "Staff" means the staff of the Division of Environmental Management, Department of Natural Resources and Community Development.

(23) "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 sludge injection are not included.

(24) "Surface waters" means all waters of the state as defined in G.S. 143-213(20) except underground waters.

(25) "Toxicity test" means a test for toxicity conducted using the procedures contained in 40 CFR 261, Appendix II as amended through July 1, 1986 or any later adopted amendments or additions of this document as is allowed by G.S. 150B-14(c).

(26) "Treatment works or disposal system which does not discharge to surface waters" means any treatment works or disposal system which is designed to:
(a) operate as closed system with no discharge to waters of the state, or
(b) dispose of wastes, including residual sludges, after treatment to the surface of the land, or
(c) dispose of wastes through a subsurface absorption system.

(27) "Underground waters" means all waters in the subsurface including waters in the unsaturated and saturated zone.

History Note: Statutory Authority G.S. 130A-335; 143-213; 143-215.3(a)(1);
Eff. February 1, 1976;
Amended Eff. August 1, 1988; November 1, 1987; February 1, 1986; November 1, 1978.

.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 (10) 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. October 1, 1987; February 1, 1986.

.0205 APPLICATION: PERMIT FEES: SUPPORTING INFORMATION: REQRMTS

(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 form 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 Natural Resources and Community Development. Applications may be returned if not accompanied by the processing fee. The signature of the consulting engineer or other agent will be accepted on the application only if accompanied by a letter of authorization.

(c) Permit Fees.

(1) Permit Application Processing Fee. For every application for a new or revised permit under this Section, a nonrefundable application processing fee in the amount stated in Subparagraph (5) of this Paragraph shall be submitted at the time of application.

(A) Each permit or renewal application is incomplete until the application processing fee is received;

(B) For a facility with multiple treatment units under a single permit, the processing fee shall be set by the total design treatment capacity;

(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 twenty-five dollars ($25.00) will be charged for minor modifications such as name changes;

(E) A full application processing fee will be charged for major modifications specifically including any which increase the design capacity; this fee will be in the same amount as shown in Subparagraph (5) of this Paragraph for standard applications. Permittees requesting special orders by consent, judicial orders or flow increases under G.S. 143-215.67(b), will pay a reduced fee of one hundred dollars ($100.00).

(2) Annual Administering and Compliance Monitoring Fees. An annual fee for administering and compliance monitoring shall be charged in each year of the term of every renewable permit according to the schedule in Subparagraph (5) of this Paragraph. Annual fees will not be charged for permits which do not require renewal.

(A) Collection of annual fees shall begin upon approval of this Rule for new or modified permits;

(B) Annual administering and compliance monitoring fees must be paid for any facility operating on an expired permit after the effective date of this Rule. The director shall establish an anniversary date for such a facility and notify the responsible party of the requirement to pay annual fees. If the director determines that the permittee was not responsible for the delay in permit reissuance, no annual fee shall be assessed until the permit is reissued;

(C) For any permit which undergoes a major modification which requires an application processing fee in accordance with Subparagraph (1) of this Paragraph, the annual administering and compliance monitoring fee shown in Subparagraph (5) of this Paragraph must be paid for each whole permit-year left in the duration of its permit;

(D) For a facility with multiple treatment units under a single permit, the annual administering and compliance monitoring fee shall be set by the single treatment system with the highest fee in the fee schedule;

(E) 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;

(F) A person with multiple permits may have annual administering and compliance monitoring fees consolidated into one annual bill;

(G) Any permittee which has maintained full compliance with all permit conditions during the previous calendar year will have its administering and compliance monitoring annual fee reduced by 25 percent. Permittees operating under interim limits, judicial orders, or special orders by consent will not be eligible for any discount. Full compliance will be established if it can be certified by the director that no Notice of Noncompliance or a Notice of Violation was sent to the permittee during the compliance period being considered. If a Notice of Noncompliance or a Notice of Violation was based on erroneous information, the director can send a letter of correction to the permittee clearing the record for compliance purposes;

(H) A change in the facility which changes the annual fee set by Subparagraph (5) of this Paragraph will result in the revised annual fee being filled in all remaining whole permit years;

(I) A facility not yet in operation or which has ceased all operations at a site will not be required to pay the next annual administering and compliance monitoring fee provided operations are not started or resumed during that permit year. Any operations will necessitate the payment of the entire annual fee for that year;

(J) Closed-loop recycle or evaporative systems, which store or recycle industrial waste and do not discharge to the surface water, groundwater or land surface, shall be charged a constant annual administering and compliance monitoring fee for all sizes of facilities at the fee amount shown by Subparagraph (5) of this Paragraph.

(3) No fees are required to be paid under this Regulation by a farmer who submits an application or receives a permit that pertains to farming operations.

(4) 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.

(5) Schedule of Nondischarge Fees:

	PERMIT APPLICATION PROCESSING FEE		ANNUAL ADMINISTERING AND COMPLIANCE MONITORING FEE	
CATEGORY	STANDARD	SIMPLE RENEWAL	STANDARD	IN COMPLIANCE
>1,000,000 GPD				
Industrial	$300	$150	$ 800	$600
Domestic/Cooling Water	300	150	600	450
10,001 - 1,000,000 GPD				
Industrial	250	125	400	300
Domestic/Cooling Water	250	125	300	225
1,001 - 10,000 GPD				
Industrial	200	100	300	225
Domestic/Cooling Water	200	100	225	150
≤1,000 GPD and Single family dwelling	120	60	0	0
Sludge ≤300 acres	250	125	300	225
Sludge >300 acres	250	125	500	375
Sewer extensions (nondelegated)	200	-	-	-
Sewer extensions (delegated to municipalities)	100	-	-	-
Closed-loop recycle or evaporative system	250	100	150	-

(6) If the total payment for fees required for all permits under G.S. 143-215.3(a)(1b) for any single facility will exceed seventy-five hundred dollars ($7,500.00) per year, then the total for all these fees will be reduced for this facility so that the total payment is seventy-five hundred dollars ($7,500.00) per year.

(7) A portion of the permit application processing fees shown in the fee schedule in Subparagraph (5) of this Paragraph will be transferred into the Wastewater Treatment Works Emergency Maintenance, Operation and Repair Fund according to the following schedule:

(A) All nonmunicipal facilities treating domestic wastewater with design flows of 100,000 gallons per day or less, except single family dwellings and facilities with design flows of less than 1,000 GPD, seventy-five dollars ($75.00);

(B) Single family dwellings and facilities with design flows of less than 1,000 GPD, forty dollars ($40.00); and

(C) All other facilities, zero.

(8) When the total value of the Wastewater Treatment Works Emergency Maintenance, Operation and Repair Fund, as certified by the State Treasurer, is at least seven hundred fifty thousand dollars ($750,000.00) at the end of a quarter, the application processing fees for facilities with capacities of one hundred thousand gallons per day (100,000 GPD) or less shall be reduced by the amounts being transferred under Subparagraph (7) of this Paragraph. This reduction shall continue until, at the end of some subsequent quarter, the State Treasurer certifies that the fund's balance is less than seven hundred fifty thousand dollars ($750,000.00), in which case the full amount of the application processing fees as listed in Subparagraph (5) of this Paragraph shall be charged.

(9) In order to avoid violation of the statutory limit that total permit fees collected in any year not exceed 30 percent of the total budgets from all sources of environmental permitting and compliance programs, the division shall in the first half of each state fiscal year project revenues from all sources including fees for the next fiscal year. If this projection shows that the statutory limit will be exceeded, rulemaking shall be commenced in order to have an appropriately adjusted fee schedule which will avoid excessive revenue collection from permit fees.

(d) Supporting Documents and Information. This Paragraph outlines those supporting documents and information which must be submitted for sewers, sewer extensions, and disposal systems and wastewater treatment works which do not discharge to the surface waters of the state.

(1) For all facilities:

(A) Required sets of plans and specifications:

(i) regular projects -- three sets of detailed plans and specifications signed and sealed by a professional engineer;

(ii) federal and state grants projects -- four sets of detailed plans and specifications plus federal assurances required by appropriate federal agency;

(B) Specifications describing all materials to be used, methods of construction and means for assuring the quality and integrity of the finished project;

(C) A general location map, showing orientation of the facility with reference to at least two geographic references (numbered roads, named streams, rivers, etc.);

(D) A description of the origin, type and flow of waste to be treated. Waste analysis must be extensive enough to allow a complete evaluation of the system to treat the waste and any potential impacts on the waters of the state;

(E) When required, a statement submitted that the wastewater treatment facility involved will be properly disconnected and the wastewater discharged into an adequate district or municipal system when it becomes available;

(F) Permits which result in construction of facilities which will be funded by public monies may require environmental documentation pursuant to the North Carolina Environmental Policy Act. Permit applications for which such documentation is required will not be considered complete until supported by the required documentation;

(G) If more than one contiguous acre of land is to be uncovered by a project, documentation should be supplied verifying that the applicant has completed or is working with the appropriate regional engineer of the Land Quality Section on the completion of an erosion control plan.

(2) For wastewater facilities specified in G.S. 143-215.1 (d1) that are or will be jointly or commonly owned, either a copy of a properly executed operational agreement or evidence to show that the applicant has been designated as a public utility by the State Utilities Commission.

(3) For sewers and sewer extensions:

(A) design flow;

(B) rate of infiltration in gallons per day per inch of pipe diameter per mile of pipe;

(C) letter of agreement from owner or proper official of treatment works accepting the wastewater, if application is not submitted by owner or proper official having charge of treatment works;

(D) plan and profile of sewers, showing their proximity to other utilities and natural features, such as water supply lines, water lines, storm drains, surface waters, roads and other trafficked areas.

(E) Construction of sewers and sewer extensions are prohibited in the following areas unless the specified determinations are made:

(i) in a natural area designated on the State Registry of Natural Heritage Areas by a protection agreement between the owner and the Secretary of the N.C. Department of Natural Resources

and Community Development, unless the EMC agrees that no prudent, feasible or technologically possible alternative exists;

(ii) in a natural area dedicated as a North Carolina Nature Preserve by mutual agreement between the owner and State of North Carolina (Governor and Council of State), unless the EMC recommends and the Governor and Council of State agree that no prudent, feasible or technologically possible alternative exists.

(4) For pumping stations:

(A) design calculations for pump and force main sizing;

(B) plan and profile of sewers, showing their proximity to other utilities and natural features, such as water supply lines, water lines, storm drains, surface waters, roads and other trafficked areas;

(C) pump station site location map;

(D) name and classification of adjacent surface waters which could be affected by a failure.

(5) For subsurface ground absorption systems:

(A) soil evaluation of the disposal site conducted by a soils scientist to adequately evaluate the soils to be utilized for treatment and disposal down to a depth of seven feet to include, but is not limited to, field descriptions of texture; color; structure, the depth thickness and type of restrictive horizons: the presence or absence and depth of evidence of any seasonal high water table; recommendations concerning application rates of liquids, solids, and other wastewater constituents; field estimates of saturated hydraulic conductivity in the most restrictive horizon; and cation exchange capacity. Applicants may be required to dig pits when necessary for proper evaluation of the soils at the site;

(B) design data;

(C) plans of complete system including plan and profile and cross section views for all relevant system components;

(D) a map of the site, with topographic contour intervals not exceeding two feet and showing all facility-related structures within the property boundary and the location of all wells, springs, lakes, ponds, or other surface drainage features within 500 feet of the principal waste treatment disposal site(s);

(E) For systems treating industrial waste and any system with a design flow of over 25,000 gpd, a hydrogeologic and soils description of the subsurface to a depth of 20 feet or bedrock, whichever is less. The number of borings shall be sufficient to define the following for the area underlying each major soil type at the disposal site:

(i) significant changes in lithology underlying the site;

(ii) the vertical permeability of the unsaturated zone and the hydraulic conductivity of the saturated zone, and

(iii) depth to the mean seasonal high water table (if definable from soil morphology or from evaluation of other applicable available data).

(F) For all projects with a design flow of greater than 25,000 gpd, a determination of transmissivity and specific yield of the unconfined aquifer based on withdrawal or recharge test;

(G) Information on the location, construction details, and primary usage (drinking water, process water, monitoring, etc.) of all wells within 500 feet of the waste treatment disposal area;

(H) Degree of treatment (primary, secondary, tertiary);

(I) For industrial waste a complete chemical analysis of the typical wastewater or sludge to be discharged, may include but not limited to Total Organic Carbon, BOD, COD, Chlorides, Phosphorus, Ammonia, Nitrates, Phenol, Total Trihalomethanes, Toxicity test parameters, Total Halogenated Compounds, Total Coliforms and Total Dissolved Solids;

(J) proposed location and construction details of a monitoring well network.

(6) For land application of sludge on other than dedicated sites:

(A) a map of the site with topographic contour intervals not exceeding ten feet or 25 percent of total site relief, whichever is less, and showing all facility related structures within the property boundary and the location of all wells, pits and quarries, springs, lakes, ponds, or other surface drainage features within 500 feet of the disposal site;

(B) a soil scientist's recommendations concerning application rates of liquids, solids, minerals and other wastewater constituents;

(C) a project evaluation conducted by an agronomist including recommendations concerning cover crops and their ability to accept the proposed application rates of liquids, solids, minerals, and other wastewater constituents;

(D) project description for the land application system, including treatment, storage, land application method, equipment, and a receiver management plan;
(E) for industrial wastes, a complete chemical analysis of the typical wastewater or sludge to be applied may include, but is not limited to percent Total Solids, pH, NH3-N, NO3-N, TKN, Total Phosphorus, Potassium, Toxicity test parameters, Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Mercury, Arsenic, Selenium;
(F) information on the location, construction details, and primary usage (drinking water, process water, monitoring, etc.) of all wells within 500 feet of the disposal site;
(G) For sites previously permitted: Soil evaluation of the application sites by a soils scientist to confirm or establish the soil map through field evaluation of soil texture; color; structure; the depth, thickness, and type of restrictive horizons; the presence or absence of seasonal high water table within three vertical feet of the surface or subsurface application depth; and cation exchange capacity;
(H) For sites not previously permitted:
(i) A USDA-SCS soils map of the application site. In addition, a soil evaluation of the application site by a Soils Scientist, to verify the accuracy of the SCS soils map regarding the presence or absence of a seasonally high water table or bedrock within three vertical feet of the deepest point of sludge application; and cation exchange capacity;
(ii) If a USDA-SCS soils map of the application site is not available, soil evaluation of the disposal site by a soils scientist down to a depth of seven feet or the "C" horizon, whichever is less, to develop a soil map through field evaluation of soil texture; color; the depth, thickness, and type of restrictive horizons; the presence of absence of a seasonal high water table, or bedrock within three vertical feet of the deepest point of sludge application; and cation exchange capacity.
(7) For spray irrigation, land application on dedicated sites, or sludge disposal systems and treatment works, except for rapid infiltration disposal systems and systems for composting sludge for land application:
(A) a map of the site, with topographic contour intervals not exceeding ten feet or 25 percent of total site relief, whichever is less, and showing all facility-related structures within the property boundary and the location of all wells, pits and quarries, springs, lakes, ponds, or other surface drainage features within 500 feet of the waste treatment disposal site(s);
(B) the information specified in Subsections (d) (5) (E), (F), (H) and (I) of this Rule;
(C) soil evaluation of the disposal site conducted by a soils scientist to adequately evaluate the soils to be utilized for treatment and disposal down to a depth of seven feet to include, but is not limited to field descriptions of texture; color; structure; the depth; thickness and type of restrictive horizons; the presence or absence and depth of evidence of any seasonal high water table; recommendations concerning application rates of liquids, solids, and other wastewater constituents; field estimates or measurements of saturated hydraulic conductivity in the most restrictive horizon; and cation exchange capacity. Applicants may be required to dig pits when necessary for proper evaluation of the soils at the site.
(D) a project evaluation and a receiver site management plan (if applicable) prepared by a agronomist and his recommendations concerning cover crops and their ability to accept the proposed application rates of liquid, solids, minerals and other constituents of the wastewater;
(E) complete plans and specifications for the entire system, including treatment, storage, application, and disposal facilities and equipment. Treatment works previously permitted will not need to be shown, unless they are directly tied into the new units or are critical to the understanding of the complete process;
(F) a complete chemical analysis of the typical wastewater or sludge to be treated, may include but not limited to Percent Total Solids, pH, Total Organic Carbon, BOD, COD, Chlorides, Sodium, Phosphorus, Sulfides, Bicarbonate, Magnesium, Nitrates, Phenol, Total Trihalomethanes, EP Toxicity test parameters, Total Halogenated Compounds, Total Coliforms and Total Dissolved Solids;
(G) proposed location and construction details of a monitoring well network;
(H) information on the location, construction details, and primary usage (drinking water, process water, monitoring, etc.) of all wells within the 500 feet of the disposal site.
(8) For systems for composting sludge for land application:
(A) a map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief, whichever is less, and showing all facility-related structures within the property

boundary and the location of all wells, springs, lakes, ponds, or other surface drainage features within 500 feet of the principal waste treatment/disposal site(s);

(B) complete plans and specifications for the entire system, including facilities and equipment for treatment, storage and preparation for disposal;

(C) for industrial waste, a hydrogeologic description of the subsurface, to a depth of 20 feet or bedrock, whichever is less. The number of borings shall be sufficient to define the following for the area underlying each major soil type at the disposal site:

(i) significant changes in lithology underlying the site;

(ii) the vertical permeability of the unsaturated zone and the hydraulic conductivity of the saturated zone; and

(iii) depth to the mean seasonal high water table (if definable from soil morphology or from evaluation of other applicable available data);

(D) proposed location and construction details of a monitoring well network.

(9) For closed system or recycle disposal systems and treatment works:

(A) for industrial waste, a complete chemical analysis of the typical wastewater or sludge to be discharged, may include but not limited to Total Organic Carbon, BOD, COD, Chlorides, Phosphorus, Nitrates, Phenol, Total Trihalomethanes, EP Toxicity test parameters, Total Halogenated Compounds, Total Coliforms and Total Dissolved Solids;

(B) plans and specifications of the entire system. When necessary for an understanding of a treatment process, the applicant should also submit process flow diagrams;

(C) For industrial waste, a hydrogeologic description of the subsurface to a depth of 20 feet or bedrock, whichever is less. The number of borings shall be sufficient to define the following for the area underlying each major soil type at the disposal site:

(i) significant changes in lithology underlying the site;

(ii) the vertical permeability of the unsaturated zone and the hydraulic conductivity of the saturated zone; and

(iii) depth to the mean seasonal high water table (if definable from soil morphology or from evaluation of other applicable available data).

(10) For RAPID INFILTRATION SYSTEMS:

(A) a map of the site, with a horizontal scale of one inch equal 1,000 feet or less and topographic contour intervals not exceeding two feet or 25 percent of the total site relief, whichever is less, and showing all facility-related structures within the property boundary and the location of all wells, springs, lakes, ponds or other surface drainage features within 500 feet of the principal waste treatment disposal site(s);

(B) hydrogeological information describing the vertical and horizontal extent and lithologic character of the unconfined aquifer and its hydraulic relationship to the first confined aquifer beneath the site and the vertical permeability and thickness of the confining bed. The information must also include a determination of the transmissivity and specific yield of the unconfined aquifer, determined by either a withdrawal or recharge test;

(C) a determination of the quality and movement of groundwater and surface water in the area and an evaluation of the impact that the proposed system will have on water levels, movement and quality of waters;

(D) complete plans and specifications for the entire system, including treatment storage and rotary distributor facilities and equipment;

(E) the information specified in .0205 (d) (5) (H);

(F) proposed location and construction details of monitoring well network;

(G) proposed monitoring plan including the method of determining groundwater levels and quality of water parameters and frequency of sampling.

History Note: Statutory Authority G.S. 143-215.1; 143-215.3(a); 143-215.3B(b);
Eff. February 1, 1976;
Amended Eff. August 1, 1988; October 1, 1987; February 1, 1986; January 1, 1984.

.0206 SUBMISSION OF PERMIT APPLICATIONS

(a) Permit applications, supporting information, and processing fee for permits issued by the division shall be filed with the Director, Division of Environmental Management, Department of Natural Resources and Community Development, Post Office Box 27687, Raleigh, North Carolina, 27611. Applications for permits from local sewer system programs shall be submitted directly to the local program

director. The division shall not require permit processing fees for permits issued by local sewer system programs.

(b) Permit applications shall be signed as follows:

(1) in the case of corporations, by a principal executive officer of at least the level of vice-president, or his duly authorized representative;

(2) in the case of a partnership, by a general partner and in the case of a limited partnership, by a general partner;

(3) in the case of a sole proprietorship, by the proprietor;

(4) in the case of a municipal, state, or other public entity by either a principal executive officer, ranking elected official or other duly authorized employee.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.1;
Eff. February 1, 1976;
Amended Eff. October 1, 1987; February 1, 1986; January 1, 1984; November 1, 1978.

.0207 SUBMISSION OF PERMIT APPLICATION

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.1(d); 143-215.3(a)(4);
Eff. February 1, 1976;
Repealed Eff. February 1, 1986.

.0208 STAFF REVIEW AND PERMIT PREPARATION

(a) The staff of the permitting agency shall conduct a review of plans, specifications and other project data accompanying the application and shall determine if the application and required information are complete. The staff shall acknowledge receipt of a complete application. The local government unit or units having jurisdiction over specific residential projects shall be notified of permit applications in accordance with N.C.G.S. 143-215.1 (d1).

(b) If the application is not complete with all required information, the staff shall advise the applicant by mail:

(1) how the application or accompanying supporting information may be modified to make them acceptable or complete;

(2) that the 90 day processing period required in G.S. 143-215.1 and Rule .0209 of this Section begins upon receipt of corrected or complete application with required supporting information;

(3) that, if complete plans with all required information are not resubmitted within 60 days, the application packet will be returned to the applicant as "incomplete".

(c) Pursuant to G.S. 143-215.67(a), the staff of the division shall determine for sewer system construction or sewer system extensions, whether the treatment works or the sewer system to which the proposed system will discharge is adequate to receive waste which will be discharged from the proposed system.

(d) For treatment works and disposal systems, the staff shall make a site-specific evaluation to determine the potential impacts of the proposed project on surface and ground water quality.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.1(b); 143-215.1(d);
143-215.3(a)(4);
Eff. February 1, 1976;
Amended Eff. August 1, 1988; October 1, 1987; February 1, 1986; November 1, 1978.

.0209 FINAL ACTION ON PERMIT APPLICATIONS TO THE DIVISION

(a) The director shall take final action on all applications not later than 90 days following receipt of a complete application and with required information. All permits or renewals of permits and decisions denying permits or renewals shall be in writing.

(b) The director is authorized to:

(1) issue a permit containing such conditions as are necessary to effectuate the purposes of Article 21, Chapter 143, N.C. General Statutes;

(2) issue permit containing time schedules for achieving compliance with applicable effluent standards and limitations, water quality standards and other legally applicable requirements;

(3) deny a permit application where necessary to effectuate:

(A) the purposes of Article 21, Chapter 143;

(B) the purposes of N.C.G.S. 143-215.67(a);
(C) rules on coastal waste treatment. disposal. found in Section .0400 of this Subchapter;
(D) rules on "subsurface disposal systems," found in Section .0300 of this Subchapter;
(E) rules on groundwater quality standards found in Subchapter 2L of this Chapter.

(c) If a permit is denied, the letter of denial shall state the reason(s) for denial and any reasonable measures which the applicant may take to make the application approvable.

(d) The director shall submit to the commission at its regular meetings a report which contains the action taken with respect to any permit application since the last commission meeting.

(e) Permits shall be issued or renewed for a period of time deemed reasonable by the director.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.1(a); 143-215.1(b); 143-215.1(d); Eff. February 1, 1976; Amended Eff. October 1, 1987.

.0210 NOTIFICATION OF APPLICANTS

History Note: Statutory Authority G.S. 143-215.1(a); 143-215.3(a)(4); Eff. February 1, 1976; Repealed Eff. October 1, 1987.

.0211 PERMIT RENEWALS

Requests for permit renewals are to be submitted to the director six months prior to expiration unless revoked in accordance with Rule .0213 of this Section. Such requests must be submitted with a processing fee of one hundred dollars ($100.00) in the form of a check or money order made payable to the N. C. Department of Natural Resources and Community Development. All applications are incomplete until required processing fees are received. and may be returned to the applicant. The processing fee shall not apply to any farmer who submits an application which pertains to his farming operation.

History Note: Statutory Authority G.S. 143-215.3(e)(1); Eff. February 1, 1976; Amended Eff. October 1, 1987; January 1, 1984.

.0212 ADMINISTRATIVE HEARINGS

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.4; 143-215.1(e); Eff. February 1, 1976; Amended Eff. October 1, 1987; Repealed Eff. August 1, 1988.

.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 Natural Resources and Community Development 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. 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;
(3) modification of a permit.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4);
Eff. February 1, 1976;
Amended Eff. 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 POLICY

(a) Treatment works and disposal systems which serve facilities raising and feeding animals and do not discharge to surface waters are deemed to be permitted pursuant to G.S. 143-215.1(d).

(b) Treatment works and disposal systems in the form of solid waste disposal sites approved in accordance with the rules of the Commission for Health Services are deemed to be permitted pursuant to G.S. 143-215.1(d) if the Commission for Health Services has received the written concurrence of the director. It shall not be necessary for the commission or the division to issue another permit for such works or systems. The term solid waste is used as defined in G.S. 130A-290 and includes hazardous waste.

(c) Nothing in this policy 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 policy 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. 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 Natural Resources and Community Development, Post Office Box 27687, Raleigh, North Carolina, 27611.
(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 the permit and plans for 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.
(9) A quarterly report shall be submitted to the director listing for each local permit issued during the quarter the name of the person receiving the permit, the permit number, the treatment plant 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.

(e) Modification of a Local Program. After a local sewer system program has been approved by the commission, any modification of the program procedures or requirements specified in Paragraph (a) of this Rule must be approved by the commission to assure that the procedures and requirements remain at least as stringent as the state-wide requirements of the commission.

(f) Appeal of Local Decisions. Appeal of individual permit denials or issuance with conditions the permit applicant finds unacceptable shall be made to the local program authority or to an appropriate judicial level. The commission will not consider individual permit denials or issuance with conditions to which the permittee objects. This Paragraph does not alter the enforcement authority of the commission as specified in G.S. 143-215.1(f).

(g) The division shall maintain a list of all local units of government with approved local sewer system programs and make copies of the list available to the public upon request and payment of any reasonable costs for reproduction. The list can be obtained from: Permitting and Engineering Unit Supervisor, Division of Environmental Management, Water Quality Section, P. O. Box 27687, Raleigh, North Carolina, 27611.

History Note: Statutory Authority G.S. 143-215.1; 143-215.3(a)(1);
Eff. February 1, 1986;
Amended Eff. October 1, 1987.

.0219 MINIMUM DESIGN REQUIREMENTS

(a) All facilities requiring a permit pursuant to this Section shall be designed following good engineering practice and shall not result in nuisance conditions. The plans and specifications must be sealed by a Professional Engineer.

(b) Waste, including treated waste, shall not be placed directly into, or in contact with, GA classified groundwater unless such placement will not result in a contravention of GA groundwater standards, as demonstrated by predictive calculations or modeling methods acceptable to the director.

(c) Impoundments, trenches or other excavations made for the purpose of storing or treating waste will not be excavated into bedrock unless the placement of waste into such excavations will not result in a contravention of assigned standards, as demonstrated by predictive calculations or modeling methods acceptable to the director.

(d) The bottoms of earthen impoundments, trenches or other similar excavations with the exception of nitrification fields, infiltration systems, and sewer line excavations shall be at least four feet above the bedrock surface, except that the bottom of excavations which are less than four feet above bedrock shall have a liner with a hydraulic conductivity no greater than 1 x 10-7 centimeters per second. Liner thickness will be that thickness necessary to achieve a leakage rate consistent with the sensitivity of classified groundwaters. Separation distances or liner requirements may be reduced if it can be demonstrated by predictive calculations or modeling methods acceptable to the director, that construction and use of these treatment and disposal units will not result in contravention of assigned standards.

(e) Industrial waste shall not be applied or discharged onto or below the land surface when the vertical separation between the waste and the seasonal high water table is less than one foot. If the area to be utilized has a separation of less than three feet, and in other areas as designated by the director, a demonstration must be made using predictive calculations or modeling methods, acceptable to the director, that such placement will not result in contravention of classified groundwater standards.

(f) Treatment works and disposal systems utilizing earthen basins, lagoons, ponds or trenches, excluding nitrification fields, infiltration systems, and holding ponds containing treated effluent prior to spray irrigation, for treatment, storage or disposal shall have either a liner of natural material at least one foot in thickness and having a hydraulic conductivity of no greater than 1 x 10-6 centimeters per second when compacted, or a synthetic liner of sufficient thickness to exhibit structural integrity and an effective hydraulic conductivity no greater than that of the natural material liner.

(g) Except as otherwise provided by these requirements or by terms of a permit, all waste treatment, storage and disposal facilities must maintain and operate a groundwater monitoring system as approved by the division. The monitoring system must be designed to assess the impact of any discharge on the quality of the underlying groundwaters and must be based on the results of the hydrogeologic investigation.

(h) For pumping stations:

(1) no by-pass or overflow lines;

(2) multiple pumps shall be provided capable of pumping at a rate of 2.5 times the average daily flow rate with any one pump out of service. Pump-on Pump-off elevations shall be set such that 2-8 pumping cycles per hour may be achieved in the pump station at average flow. If extended detention times are necessary due to phased development, the need for odor and corrosion control must be evaluated by the applicant;

(3) where waters classified as WS, SA, B or SB could be impacted by a power failure, at least one of the following shall be required:

(A) dual source or standby power supply on site or;

(B) telemetry systems with sufficient numbers of standby generators and personnel for distribution or;

(C) approval by the director that the pump station:

(i) serves a private water distribution system which has automatic shut-off at power failure and no elevated water storage tanks, and

(ii) has sufficient storage capacity that no potential for overflow exists, and

(iii) is connected to facilities that can tolerate septic wastewater due to prolonged detention;

(4) The need for screened vents must be evaluated for all wet wells;

(5) high water alarms;

(6) protection from a 100 year flood;

(7) restricted access to the site and equipment.

(8) all-weather roadway to the site;

(i) For sewer systems and sewer system extensions:

(1) All building drains and building sewers which are approved by the local building inspector in accordance with the North Carolina Building Code are deemed to be permitted by the Environmental Management Commission;

(2) All sewers shall be designed based upon at least minimum standards which include:

(A) wastewater flow rate at design loading should result in the sewer flowing approximately half full. The sewer must also be evaluated as to its ability to carry peak loadings;
(B) a velocity of two feet per second;
(C) construction and operation shall not result in water pollution;
(D) infiltration rate limited to 200 gallons per day per inch of pipe diameter per mile of pipe;
(E) construction and operation consistent with all applicable local ordinances;
(F) for public sewers, a minimum eight inch diameter pipe;
(G) minimum separations:

(i)	Storm sewers (vertical)	12 inches
(ii)	Water mains (vertical- water over sewer) or (horizontal)	18 inches 10 feet
(iii)	In benched trenches (vertical)	18 inches
(iv)	Any private or public water supply source, including any WS-I waters or Class I or Class II impounded reservoirs used as a source of drinking water	100 feet
(v)	Waters classified WS-I, WS-II, WS-III, B, SA, or SB [from normal high water (or tide elevation)]	50 feet
(vi)	Any other stream, lake or impoundment	10 feet
(vii)	Any building foundation	5 feet
(viii)	Any basement	10 feet
(ix)	Top slope of embankment or cuts of 2 feet or more vertical height	10 feet
(x)	Drainage systems	
	(I) Interceptor drains	5 feet
	(II) Ground water lowering and surface drainage ditches	10 feet
(xi)	Any swimming pool	10 feet

(xii) Ferrous sewer pipe with joints equivalent to water main standards, shall be used where these minimum separations cannot be maintained. The minimum separation shall however not be less than 25 feet from a private well or 50 ft from a public water supply well.
(H) Three feet minimum cover shall be provided for all sewers unless ferrous material pipe is specified. Ferrous material pipe or other pipe with proper bedding to develop design supporting strength shall be provided where sewers are subject to traffic bearing loads;
(I) The maximum separation between manholes shall be 425 feet unless written documentation is submitted with the application that the owner/authority has the capability to perform routine cleaning and maintenance on the sewer at the specified manhole separation;
(J) Drop manholes shall be provided where invert separations exceed 2.5 feet;
(K) Manholes shall be designed for 100-year flood protection;
(L) The need for air relief valves shall be evaluated at all high points along force mains;
(M) Odor and corrosion control must be evaluated by the applicant for all sewers and force mains with extended travel times.
(j) For treatment works and disposal systems:
(1) no by-pass or overflow lines;
(2) multiple pumps if pumps are used;

(3) where waters classified as WS-I, WS-II, WS-III, B, SA, or SB could be impacted by a power failure, at least one of the following:

(A) dual or standby power supply on site, capable of powering all essential treatment components under design conditions, or

(B) approval by the director that the facility:

(i) serves a private water distribution system which has automatic shut-off at power failure and no elevated water storage tanks, and

(ii) has sufficient storage capacity that no potential for overflow exists, and

(iii) can tolerate septic wastewater due to prolonged detention;

(4) protection from 100 year flood;

(5) buffer zones of at least the following distances, and greater where necessary to comply with Section 2H .0400 of this Subchapter or to address particular site or waste characteristics:

(A) Any habitable residence or place of public assembly under separate ownership or which are to be sold:

(i) for spray irrigation systems not covered by 2H .0219(k)	400 feet
(ii) for surface sludge application	400 feet
(iii) for subsurface sludge injection	200 feet
(iv) for facultative lagoons	400 feet
(v) for activated sludge plants or surface sand filters	100 feet
(B) Any private or public water supply source	100 feet
(C) Streams classified as WS-I, WS-II, WS-III or B:	
(i) for subsurface disposal	50 feet
(ii) for non-discharge surface disposal	100 feet
(D) Waters classified SA or SB	100 feet from normal high water
(E) Any other stream, canal, marsh, or coastal waters	
(i) for subsurface disposal	50 feet
(ii) for non-discharge surface disposal	100 feet
(F) Any Class I or Class II impounded reservoir used as a source of drinking water	100 feet from normal high water:
(G) Any other lake or impoundment:	
(i) for subsurface disposal	50 feet
(ii) for surface disposal	100 feet
(H) Any building foundation except treatment facilities:	
(i) for subsurface disposal	10 feet
(ii) for surface disposal	15 feet
(I) Any basement	
(i) for subsurface disposal	15 feet
(ii) for surface disposal	15 feet
(J) Any property line	
(i) for spray irrigation	150 feet
(ii) for other surface disposal systems	100 feet
(iii) for subsurface sludge injection	100 feet
(iv) for other surface treatment systems	50 feet
(v) for other subsurface systems	50 feet
(K) Top of slope of embankments or cuts or two feet or more in vertical height	
(i) for systems other than rapid infiltration systems	15 feet
(ii) for rapid infiltration systems	100 feet
(L) Any water line from a disposal system	10 feet

(M) Drainage systems	
(i) Interceptor drains and surface water diversions (upslope)	
(I) for subsurface disposal	10 feet
(II) for surface disposal other than spray irrigation systems and rapid infiltration systems	10 feet
(III) for spray irrigation systems	100 feet
(IV) for rapid infiltration systems	200 feet
(ii) Interceptor drains and surface water diversions (downslope)	
(I) for subsurface disposal	25 feet
(II) for surface disposal other than spray irrigation systems and rapid infiltration systems	25 feet
(III) for spray irrigation systems	100 feet
(IV) for rapid infiltration systems	200 feet
(iii) Groundwater lowering and surface drainage ditches	
(I) for subsurface disposal	25 feet
(II) for surface disposal other than spray irrigation and rapid infiltration systems	25 feet
(III) for spray irrigation systems	100 feet
(IV) for rapid infiltration systems	200 feet
(N) Any swimming pool	
(i) for subsurface disposal	15 feet
(ii) for surface disposal	100 feet
(O) Any other nitrification field (except repair area)	20 feet
(P) Any well with the exception of an approved groundwater monitoring well	100 feet
(Q) Public right-of-way surface disposal	50 feet

(6) adequate flow equalization for facilities with fluctuations in influent flow which may adversely affect the performance of the system;

(7) preparation of an operational management plan, including restricted access to the site and equipment, and, if appropriate, a crop management plan;

(8) except for facilities for single family residences or as approved by the director, appropriate monitoring wells designed to assess the impacts on the groundwater of any discharge and constructed in accordance with Section 2C .0100 of this Chapter.

(k) For Land Application of Domestic Wastewater on Golf Courses and Other Public Access Areas:

(1) Aerated flow equalization facilities with a capacity of at least 25 percent of the daily system design flow.

(2) All essential treatment and disposal units shall be provided in duplicate.

(3) The treatment process shall produce an effluent with a monthly average TSS of less than 5 mg/l and a daily maximum TSS of less than 10 mg/l and a maximum fecal coliform level of less than 1/100 ml, prior to discharge to a five-day detention pond.

(4) There must be no public access to the five-day detention pond.

(5) The size of the irrigation pond, that follows the five day holding pond, shall be justified using a mass water balance for worse case conditions of record.

(6) An automatically activated standby power source or other means to prevent improperly treated wastewater from entering the five-day detention pond shall be provided.

(7) Requirements for the lining of the five-day detention and irrigation ponds shall be site-specific.

(8) In the design of the sprinkler system, the piping shall be a separate system, with no cross-connections to a potable water supply (includes no spigots on the distribution system).

(9) The rate of application shall be site-specific but not exceeding 1 and 3/4 inches/week (as given in 2H .0404(g)(8).

(10) The time of spraying shall occur between 11:00 p.m. and three hours prior to the daily opening of the course.

(11) There shall be a 100 foot vegetative buffer zone between the edge of spray influence and the nearest dwelling.

(12) Signs shall be posted at the proshop stating that the course is irrigated with treated wastewater.

(13) There shall be a certified operator of a class equivalent to the class plant on call 24 hours/day.

(l) Wastewater Flow Rates:

(1) In determining the volume of sewage from dwelling units, the flow rate shall be 120 gallons per day per bedroom. The minimum volume of sewage from each dwelling unit shall be 240 gallons per day and each additional bedroom above two bedrooms will increase the volume by 120 gallons per day. Each bedroom or any other room or addition that can reasonably by expected to function as a bedroom shall be considered a bedroom for design purposes. When the occupancy of a dwelling unit exceeds two persons per bedroom, the volume of sewage shall be determined by the maximum occupancy at a rate of 60 gallons per person per day.

(2) The following table shall be used to determine the minimum allowable design daily flow of wastewater facilities. Design flow rates for establishments not identified below shall be determined using available flow data, water-using fixtures, occupancy or operation patterns, and other measured data.

Type of Establishments	Daily Flow For Design
Airports, also RR Stations, bus terminals. (not including food service facilities)	5 gal/passenger
Barber Shops	50 gal/chair
Bars, Cocktail Lounges (not including food services)	20 gal/seat
Beauty Shops	125 gal/booth or bowl
Bowling Alleys	50 gal/lane
Businesses (other than those listed in this table)	25 gal/employee
Camps	
Construction or work camps	60 gal/person
Summer camps	60 gal/person
Camp grounds Without water and sewer hookups	100 gal/campsite
Travel trailer/recreational vehicle park with water and sewer hookup	120 gal/campsite
Churches (not including food service, day care and camps)	3 gal/seat
Country Clubs - Resident Members	60 gal/person
Nonresident Members	20 gal/person
Day Care Facilities	15 gal/person
Factories (exclusive of industrial wastes) — per shift	25 gal/person
Add for showers — per shift	10 gal/person
Food Service Facilities Restaurants (including fast food)	40 gal/seat or 40 gal/15 ft^2 of dining area, whichever is greater
24-hour Restaurants	50 gal/seat
Single-Service (exclusive of fast food)	25 gal/seat
Food Stands	
(1) Per 100 square feet of total floor space	50 gal
(2) Add per employee	25 gal
Hospitals	300 gal/bed
Laundries (self-service)	500 gal/machine
Marinas	10 gal/boat slip
With bathhouse	30 gal/boat slip
Meat Markets	
(1) Per 100 square feet of total floor space	50 gal
(2) Add per employee	25 gal
Motels/Hotel	120 gal/room
with cooking facilities in room	175 gal/room
Nursing/Rest Homes — With laundry	120 gal/bed
Without laundry	60 gal/bed

Offices — per shift	25 gal/person
Residential Care Facilities	60 gal/person
Resort	200 gal/room
Restaurants	40 gal/seat or 40 gal/15 ft^2 of dining area (whichever is greater)
Schools	
Day Schools	
With cafeteria, gym, and showers	15 gal/student
With cafeteria only	12 gal/student
With neither cafeteria nor showers	10 gal/student
Boarding	60 gal/person
Service Stations	250 gal/water closet or urinal
Stadiums, Auditoriums, Theaters, Drive-ins	5 gal/seat or space
Stores, shopping centers and malls — Note: if food service is included, add 40 gal/seat	120 gal/1000 ft^2
Swimming Pools and Bathhouses	10 gal/person

(3) An adjusted daily sewage flow may be granted upon a showing that a sewage system is adequate to meet actual daily water consumption from a facility included in Subparagraph (1) or (2) of this Paragraph. Documented, representative data from that facility or a comparable facility shall be submitted, consisting of at least 12 consecutive monthly total water consumption readings and daily total water consumption readings for at least 30 consecutive days of water use. The daily readings shall be taken during a projected peak sewage flow month. The adjusted design daily sewage flow shall be determined by taking the numerical average of the daily readings that fall within the upper 10 percent of the daily readings when ranked in descending order.

(m) Additional requirements:

(1) distance between water supply wells and waste facilities in accordance with Rule 2C .0107(a) of this Chapter or, if a greater area may be impacted, a distance in accordance with the perimeter of compliance described in Rule 2L .0103(h) of this Chapter;

(2) compliance with the groundwater standards specified in Subchapter 2L of this Chapter;

(3) where applicable compliance with rules on "coastal waste treatment disposal" found in Section .0400 of this Subchapter; and

(4) For subsurface disposal systems, compliance with rules on subsurface disposal systems found in Section .0300 of this Subchapter.

(n) Alternative Design Criteria may be approved by the director. This approval will only be given in cases where the applicant can demonstrate that the Alternative Design Criteria will provide the following:

(1) Equal or better treatment of the waste; and

(2) Equal or better protection of the waters of the state; and

(3) No increased potential for nuisance conditions.

History Note: Statutory Authority G.S. 143-215.1; 143-215.3(a)(1);
Eff. October 1, 1987;
Amended Eff. August 1, 1988.

.0220 CERTIFICATION OF COMPLETION

Prior to the operation of any sewer system, treatment works or disposal system permitted in accordance with this Section, a certification must be received by the permitting agency from a professional engineer certifying that the sewer system, 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.

History Note: Statutory Authority G.S. 143-215.1;
Eff. October 1, 1987.

.0221 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.

.0222 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 spend.

(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.

APPENDIX E

APPLICABLE GENERAL STATUTES

(G.S. §143-215.1)

§ 143-215.1. Control of sources of water pollution; permits required.

(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 person shall have applied for and shall have received from the Commission a permit therefor and shall have complied with such conditions, if any, as are prescribed by such permit:

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

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

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

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

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

(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;

(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;

(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;

(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.

(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.

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 Department of Human Resources, 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.

(b) Commission's Power as to Permits. — The Commission shall act on all permits so as to prevent, so far as reasonably possible, considering relevant standards under State and federal laws, any significant increase in pollution of the waters of the State from any new or enlarged sources.

The Commission shall have the power:

(1) To grant a permit with such conditions attached as the Commission believes necessary to achieve the purposes of this Article;

(1a) To require that an applicant satisfy the Commission that the applicant, or any parent or subsidiary corporation if the applicant is a corporation:

a. Is financially qualified to carry out the activity for which the permit is required under subsection (a); and

b. Has substantially complied with the effluent standards and limitations and waste management treatment practices applicable to any activity in which the applicant has previously engaged, and has been in substantial compliance with other federal and state laws, regulations, and rules for the protection of the environment;

(2) Repealed by Session Laws 1975, c. 583, s. 4.

(3) To modify or revoke any permit upon not less than 60 days' written notice to any person affected.

No permit shall be denied and no condition shall be attached to the permit, except when the Commission finds such denial or such conditions necessary to effectuate the purposes of this Article.

(c) Applications for Permits and Renewals for Facilities Discharging to the Surface Waters. —

(1) All applications for permits and for renewal of existing permits for outlets and point sources and for treatment works and disposal systems discharging to the surface waters of the State shall be in writing, and the Commission may prescribe the form of such applications. All applications shall be filed with the Commission at least 180 days in advance of the date on which it is desired to commence the discharge of wastes or the date on which an existing per-

mit expires, as the case may be. The Commission shall act on a permit application as quickly as possible. The Commission may conduct any inquiry or investigation it considers necessary before acting on an application and may require an applicant to submit plans, specifications, and other information the Commission considers necessary to evaluate the application.

(2) a. The Department shall refer each application for permit, or renewal of an existing permit, for outlets and point sources and treatment works and disposal systems discharging to the surface waters of the State to its staff for written evaluation and proposed determination with regard to issuance or denial of the permit. If the Commission concurs in the proposed determination, it shall cause notice of the application and of the proposed determination, along with any other data that the Commission may determine appropriate, to be given to the appropriate State, interstate and federal agencies, to interested persons, and to the public. The Commission shall prescribe the form and content of the notice.

The notice required herein shall be given at least 45 days prior to any proposed final action granting or denying the permit. Public notice shall be given by publication of the notice one time in a newspaper having general circulation within the county.

b. Repealed by Session Laws 1987, c. 734, s. 1, effective August 6, 1987.

(3) If any person desires a public meeting on any application for permit or renewal of an existing permit provided for in this subsection, he shall so request in writing to the Commission within 30 days following date of the notice of application. The Commission shall consider all such requests for meeting, and if the Commission determines that there is a significant public interest in holding such meeting, at least 30 days' notice of such meeting shall be given to all persons to whom notice of application was sent and to any other person requesting notice. At least 30 days prior to the date of meeting, the Commission shall also cause a copy of the notice thereof to be published at least one time in a newspaper having general circulation in such county. The Commission shall prescribe the form and content of the notices.

The Commission shall prescribe the procedures to be followed in such meetings. If the meeting is not conducted by the Commission, detailed minutes of the meeting shall be kept and shall be submitted, along with any other written comments, exhibits or documents presented at the meeting, to the Commission for its consideration prior to final action granting or denying the permit.

(4) Not later than 60 days following notice of application or, if a public hearing is held, within 90 days following consideration of the matters and things presented at such hearing, the Commission shall grant or deny any application for issuance of a new permit or for renewal of an existing permit. All permits or renewals issued by the Commission

and all decisions denying application for permit or renewal shall be in writing.

(5) No permit issued pursuant to this subsection (c) shall be issued or renewed for a term exceeding five years.

(d) Applications and Permits for Sewer Systems, Sewer System Extensions and Pretreatment Facilities, and for Wastewater Treatment Facilities Not Discharging to the Surface Waters of the State. — All applications for new permits and for renewals of existing permits for sewer systems, sewer system extensions and for disposal systems or treatment works which do not discharge to the surface waters of the State, and all permits or renewals and decisions denying any application for permit or renewal shall be in writing. The Commission shall act on a permit application as quickly as possible. The Commission may conduct any inquiry or investigation it considers necessary before acting on an application and may require an applicant to submit plans, specifications, and other information the Commission considers necessary to evaluate the application. If the Commission fails to act on an application for a permit, including a renewal of a permit, within 90 days after the applicant submits all information required by the Commission, the application is considered to be approved. Permits and renewals issued in approving such facilities pursuant to this subsection (d) shall be effective until the date specified therein or until rescinded unless modified or revoked by the Commission. Local governmental units to whom pretreatment program authority has been delegated shall establish, maintain, and provide to the public, upon written request, a list of pretreatment applications received.

(d1) Each applicant under subsections (c) or (d) for a permit (or the renewal thereof) for the operation of a treatment works for a private multi-family or single family residential development, in which the owners of individual residential units are required to organize as a lawfully constituted and incorporated homeowners' association of a subdivision, condominium, planned unit development, or townhouse complex, shall be required to enter into an operational agreement with the Commission as a condition of any such permit granted. The agreement shall address, as necessary, construction, operation, maintenance, assurance of financial solvency, transfers of ownership and abandonment of the plant, systems, or works, and shall be modified as necessary to reflect any changed condition at the treatment plant or in the development. Where the Commission finds appropriate, it may require any other private residential subdivision, condominium, planned unit development or townhouse complex which is served by a private treatment works and does not have a lawfully constituted and incorporated homeowners' association, and for which an applicant applies for a permit or the renewal thereof under subsections (c) or (d), to incorporate as a lawfully constituted homeowners' association, and after such incorporation, to enter into an operational agreement with the Commission and the applicant as a condition of any permit granted under subsections (c) or (d). The local government unit or units having jurisdiction over the development shall receive notice of the application within an established comment period and prior to final decision.

(e) Administrative Review. — A permit applicant or permitttee who is dissatisfied with a decision of the Commission may commence a contested case by filing a petition under G.S. 150B-23

within 30 days after the Commission notifies the applicant or permittee of its decision. If the permit applicant or permittee does not file a petition within the required time, the Commission's decision is final and is not subject to review.

(f) Local Permit Programs for Sewer Extension. — Municipalities, counties, local boards or commissions, water and sewer authorities, or groups of municipalities and counties may establish and administer within their utility service areas their own general permit programs in lieu of State permit required in G.S. 143-215.1(a)(2), (3), and (8) above, for construction, operation, alteration, extension, change of proposed or existing sewer system, subject to the prior certification of the Commission. For purposes of this subsection, the service area of a municipality shall include only that area within the corporate limits of the municipality and that area outside a municipality in its extraterritorial jurisdiction where sewer service is already being provided by the municipality to the permit applicant or connection to the municipal sewer system is immediately available to the applicant; the service areas of counties and the other entities or groups shall include only those areas where sewer service is already being provided to the applicant by the permitting authority or connection to the permitting authority's system is immediately available. No later than the 180th day after the receipt of a program and statement submitted by any local government, commission, authority, or board the Commission shall certify any local program that:

(1) Provides by ordinance or local law for requirements compatible with those imposed by this Part and the rules implementing this Part;

(2) Provides that the Department receives notice and a copy of each application for a permit and that it receives copies of approved permits and plans;

(3) Provides that plans and specifications for all construction, extensions, alterations, and changes be prepared by or under the direct supervision of an engineer licensed to practice in this State;

(4) Provides for the adequate enforcement of the program requirements by appropriate administrative and judicial process;

(5) Provides for the adequate administrative organization, engineering staff, financial and other resources necessary to effectively carry out its plan review program;

(6) Provides that the system is capable of interconnection at an appropriate time with an expanding municipal, county, or regional system;

(7) Provides for the adequate arrangement for the continued operation, service, and maintenance of the sewer system; and

(8) Is approved by the Commission as adequate to meet the requirements of this Part and the rules implementing this Part.

The Commission may deny, suspend, or revoke certification of a local program upon a finding that a violation of the provisions in subsection (f) of this section has occurred. A denial, suspension, or revocation of a certification of a local program shall be made only after notice and a public hearing. If the failure of a local program to carry out this subsection creates an imminent hazard, the Commission may summarily revoke the certification of the local program. Chapter 150B of the General Statutes does not apply to proceedings under this subsection.

Notwithstanding any other provision of this subsection, if the Commission determines that a sewer system, treatment works, or disposal system is operating in violation of the provisions of this Article and that the appropriate local authorities have not acted to enforce those provisions, the Commission may, after written notice to the appropriate local government, take enforcement action in accordance with the provisions of this Article. (1951, c. 606; 1955, c. 1131, s. 1; 1959, c. 779, s. 8; 1967, c. 892, s. 1; 1971, c. 1167, s. 6; 1973, c. 476, s. 128; c. 821, s. 5; c. 1262, s. 23; 1975, c. 19, s. 51; c. 583, ss. 2-4; c. 655, ss. 1, 2; 1977, c. 771, s. 4; 1979, c. 633, s. 5; 1985 (Reg. Sess., 1986), c. 1023, ss. 1-5; 1987, c. 461, s. 1; c. 734, s. 1; c. 827, ss. 154, 159.)

APPENDIX F

HOUSE BILL 1304

(1st Edition)

(2nd Edition)

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1989

H **1**

HOUSE BILL 1304

Short Title: Agribusiness Plant Variances. (Public)

Sponsors: Representative Bowman.

Referred to: Infrastructure.

April 12, 1989

A BILL TO BE ENTITLED

AN ACT TO PROVIDE VARIANCES IN SOLID WASTE AND WASTE WATER DISPOSAL TO ENCOURAGE RECYCLING AND THE BENEFICIAL USE OF AGRIBUSINESS PROCESSING PLANT RESIDUES.

The General Assembly of North Carolina enacts:

Section 1. Article 9 of Chapter 130A of the General Statutes is amended by adding a new Part to read:

"Part 4. Variances for Agribusiness Processing Plant Residues.

"**§ 130A-310.15. Definitions.**

As used in this Part:

(1) 'Agribusiness' means food chain crops grown on farms.

(2) 'Food chain crops' means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(3) 'Farm' means the raising or harvesting of any agricultural, aquacultural, silvicultural or horticultural commodity through the cultivation of the soil, or the raising, shearing, feeding, caring for, training, or management of fish, trees, livestock, bees, poultry, fur-bearing animals, or wildlife.

(4) 'Food processing waste' means waste resulting solely from the processing of crops and related food products. Food processing waste includes, but is not limited to:

a. Vegetative residues that are recognizable as part of a plant, fruit or vegetable, such as corn husks, cabbage leaves, grape and apple pomace, bean snips, and carrot, tomato, and potato skins; or

b. Any solid, semi-solid or liquid food sludge or residue that is nonrecognizable but identifiable by analysis or is certified as solely a byproduct of plant, fruit, vegetable, aquaculture, seafood, meat, poultry or dairy processing, such as milk and cheese whey, brewery and winery waste, and byproducts from canned, frozen, or preserved fruit and vegetable processing operations.

(5) 'Food Processing' includes receiving, storage, and processing operations including the screening, separation, pretreatment and treatment of all product residue, peeling and wastewater streams prior to discharge to POTWs or the State's waters.

(6) 'POTW' means publicly owned treatment works.

(7) 'Agribusiness residues and byproducts' means the waste resulting solely from agribusiness processing that does not include any domestic sewerage.

"**§ 130A-310.16. Legislative findings.**

(a) The General Assembly finds:

(1) The residues from agribusiness processing plants are uniquely different than sewer sludges from municipal treatment plants and from any other industrial sources. Classification of agribusiness residues such as those from food processing activities as sewage sludges may prevent their use as food for animals, fertilizers and soil amendments, and other beneficial uses. These residues are bits and pieces of agricultural products that contain no domestic waste and are both safe and biodegradable.

(2) Agribusiness processing plant residues do not contain any domestic sewerage residues; therefore, the application of these agribusiness

residues is not addressed by any existing statutes or regulations issued to govern the disposal of sewerage sludge.

(3) North Carolina confronts a crisis in solid waste management due to the shortage of landfill space, stricter federal regulations, and the potential threat of landfills to the groundwaters of this State.

(4) North Carolina confronts a crisis in POTW management including nutrient sensitive designations for our surface waters, stricter federal regulations to protect all drinking water sources, and the requirement that Pretreatment Programs be implemented requiring more waste reductions by all industries. For industries to comply with these more stringent regulations, the implementation of waste reduction/recovery/reuse technologies including the recovery of residues and byproducts must be increased.

(5) The interests of the State are inextricably connected to the proper voluntary management of waste by industry, local governments and our citizens. It is in the best interests of the State to develop State policy and programs that assist in efforts to recycle and make the maximum beneficial use of all our resources.

"**§ 130A-310.17. Declaration of policy.**

The policy of the State is to promote alternative byproduct and residue management methods that reduce or eliminate landfill disposal or costly treatment alternatives for assisting local governments.

"**§ 130A-310.18. Variances regarding wastewater pretreatment and treatment facilities.**

The Department of Human Resources and the Department of Natural Resources and Community Development shall develop variances from current rules and regulations, including the rules regarding permitting wastewater pretreatment and treatment facilities, based on the unique differences that exist in these agribusiness processing plant residues. The following variances shall be made regarding agribusiness residues:

(1) Agribusiness plant byproducts and residues may be applied to the soil or injected into the soil.

(2) The applications may be made only if used as a fertilizer or soil conditioner, in normal farming operations, or in any land or forest

management operation requiring the use of fertilizer or soil conditioners.

(3) The applications must be made under the best agricultural, silvicultural, or maricultural management practices or controlled by the rules and regulations of North Carolina for feeds, fertilizers or soil.

(4) Agribusiness residues may also be used as animal feed or feed supplements where approved by the Department of Agriculture.

"**§ 130A-310.19. Required management practices.**

(a) Nonrecognizable agribusiness processing residues may be applied to the surface of the soil or injected into the soil, provided the following conditions are satisfied:

(1) The site is developed, operated, and maintained in a safe, nuisance-free manner;

(2) The residues are used in normal agricultural or horticultural operations and the land application is conducted according to the best agricultural management practices;

(3) Written notice is provided to the Department prior to applying the residue to the surface of the soil. The notice must include the location of all proposed application sites; the quantity of byproducts or residues expected to be applied to the land; and the anticipated rate of application in tons per acre based on dry weight. Notice for land application facilities must be made by the landowner, his delegated representative through a power of attorney, the generator of the residue, or the applicator of the residue;

(4) The residues must clearly benefit the soil or crop by providing a source of nutrients or by adjusting the pH level of the soil;

(5) The loading rates must be appropriate for the nutrient needs of the crops to be grown; and

(6) The residues must contain no domestic sewage, sewage sludge, or septage.

These agribusiness byproducts and residues may include, but are not limited to, food processing waste.

The actual loading rates for the site must be maintained by the farmer and applicator."

Sec. 2. This act shall become effective October 1, 1989.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1989

H 2

HOUSE BILL 1304
Committee Substitute Favorable 6/28/89

Short Title: Agribusiness Plant Variances. (Public)

Sponsors:

Referred to:

April 27, 1989

A BILL TO BE ENTITLED

AN ACT TO ESTABLISH A LEGISLATIVE RESEARCH COMMISSION STUDY ON THE BENEFICIAL USE OF AGRIBUSINESS PROCESSING PLANT RESIDUES.

The General Assembly of North Carolina enacts:

Section 1. The Legislative Research Commission may study methods of promoting the recycling, recovery, and beneficial use of agribusiness processing plant residues. The Commission shall report the results of its study to the General Assembly before April 1, 1990.

Sec. 2. There is appropriated from the General Fund to the General Assembly, Legislative Research Commission, $15,000 for the 1989-90 fiscal year for the Legislative Research Commission Study on the Beneficial Use of Agribusiness Processing Plant Residues.

Sec. 3. This act shall become effective July 1, 1989.