

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2007

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SENATE BILL 1465
Agriculture/Environment/Natural Resources Committee Substitute Adopted
4/17/07
Third Edition Engrossed 4/19/07
House Committee Substitute Favorable 7/18/07
House Committee Substitute #2 Favorable 7/19/07

Short Title: Swine Farm Env. Performance Standards.

(Public)

Sponsors:

Referred to:

March 26, 2007

A BILL TO BE ENTITLED

1 AN ACT TO (1) CODIFY AND MAKE PERMANENT THE SWINE FARM
2 ANIMAL WASTE MANAGEMENT SYSTEM PERFORMANCE STANDARDS
3 THAT THE GENERAL ASSEMBLY ENACTED IN 1998, (2) PROVIDE FOR
4 THE REPLACEMENT OF A LAGOON THAT IS AN IMMINENT HAZARD, (3)
5 ASSIST FARMERS TO VOLUNTARILY CONVERT TO INNOVATIVE
6 ANIMAL WASTE MANAGEMENT SYSTEMS, AND (4) ESTABLISH THE
7 SWINE FARM METHANE CAPTURE PILOT PROGRAM.
8

9 The General Assembly of North Carolina enacts:

10 **SECTION 1.(a)** Performance Standards. – Part 1A of Article 21 of Chapter
11 143 of the General Statutes is amended by adding a new section to read:

12 **"§ 143-215.10I. Performance standards for animal waste management systems**
13 **that serve swine farms; lagoon and sprayfield systems prohibited.**

14 (a) As used in this section:

15 (1) 'Anaerobic lagoon' means a lagoon that treats waste by converting it
16 into carbon dioxide, methane, ammonia, and other gaseous
17 compounds; organic acids; and cell tissue through an anaerobic
18 process.

19 (2) 'Anaerobic process' means a biological treatment process that occurs in
20 the absence of dissolved oxygen.

21 (3) 'Lagoon' has the same meaning as in G.S. 106-802.

22 (4) 'Swine farm' has the same meaning as in G.S. 106-802.

23 (b) The Commission shall not issue or modify a permit to authorize the
24 construction, operation, or expansion of an animal waste management system that
25 serves a swine farm that employs an anaerobic lagoon as the primary method of

1 treatment and land application of waste by means of a sprayfield as the primary method
2 of waste disposal. The Commission may issue a permit for the construction, operation,
3 or expansion of an animal waste management system that serves a swine farm under this
4 Article only if the Commission determines that the animal waste management system
5 will meet or exceed all of the following performance standards:

- 6 (1) Eliminate the discharge of animal waste to surface water and
7 groundwater through direct discharge, seepage, or runoff.
- 8 (2) Substantially eliminate atmospheric emission of ammonia.
- 9 (3) Substantially eliminate the emission of odor that is detectable beyond
10 the boundaries of the parcel or tract of land on which the swine farm is
11 located.
- 12 (4) Substantially eliminate the release of disease-transmitting vectors and
13 airborne pathogens.
- 14 (5) Substantially eliminate nutrient and heavy metal contamination of soil
15 and groundwater."

16 **SECTION 1.(b)** Continued Operation. – An animal waste management
17 system that serves a swine farm for which a permit was issued prior to 1 September
18 2007 and that does not meet the requirements of G.S. 143-215.10I, as enacted by
19 subsection (a) of this section, may continue to operate under, and shall operate in
20 compliance with, that permit, including any renewal of the permit.

21 **SECTION 1.(c)** Lagoon Replacement. – Notwithstanding G.S. 143-215.10I,
22 as enacted by subsection (a) of this section, the Environmental Management
23 Commission may modify a permit that was initially issued prior to 1 September 2007
24 for an animal waste management system that serves a swine farm to authorize the
25 replacement of a lagoon that is a component of the animal waste management system if
26 the Commission finds all of the following:

- 27 (1) The permit holder has operated and maintained the animal waste
28 management system in substantial compliance with the permit and all
29 applicable federal and State laws, regulations, and rules.
- 30 (2) The lagoon constitutes or will constitute an imminent hazard as
31 defined in G.S. 130A-2.
- 32 (3) Repair of the lagoon will not abate the imminent hazard.
- 33 (4) Replacement of the lagoon will abate the imminent hazard and allow
34 the permit holder to operate and maintain the replacement lagoon in
35 compliance with all applicable requirements of federal and State laws,
36 regulations, and rules.
- 37 (5) Design and construction of the replacement lagoon shall meet all
38 applicable requirements of federal and State laws, regulations, and
39 rules; comply with the most recent Conservation Practice Standard
40 published by the Natural Resources Conservation Service; and employ
41 the best available technology that is economically and technically
42 feasible. In determining best available technology and economic and
43 technical feasibility, the Commission may consult with the Animal and
44 Poultry Waste Management Center of North Carolina State University

1 and with other persons who have specialized training or experience
2 related to animal waste management systems.

3 (6) The replacement lagoon shall not be located in the 100-year
4 floodplain.

5 (7) All equipment associated with operation of the replacement lagoon and
6 with land application of waste from the lagoon shall be upgraded to
7 meet all applicable requirements of federal and State laws, regulations,
8 and rules and to comply with the most recent Conservation Practice
9 Standard published by the Natural Resources Conservation Service.

10 (8) The replacement will not result in an increase in the permitted
11 capacity, stated as steady state live weight, of the animal waste
12 management system.

13 (9) The lagoon to be replaced shall be closed in accordance with all
14 applicable requirements of federal and State laws, regulations, and
15 rules and with the most recent Conservation Practice Standard
16 published by the Natural Resources Conservation Service.

17 **SECTION 1.(d) Rule Making.** – The Environmental Management
18 Commission shall adopt rules to implement G.S. 143-215.10I, as enacted by subsection
19 (a) of this section. Until rules to implement G.S. 143-215.10I become effective, the
20 Commission, in implementing G.S. 143-215.10I, shall refer to the report entitled
21 "Development of Environmentally Superior Technologies – Phase 3 Report: for
22 Technology Determinations per Agreements Between the Attorney General of North
23 Carolina and Smithfield Foods, Premium Standard Farms, and Frontline Farmers" dated
24 8 March 2006. The Commission shall consult with the Animal and Poultry Waste
25 Management Center of North Carolina State University regarding the application and
26 modification of technical standards required to implement G.S. 143-215.10I.

27 **SECTION 2.(a) Definitions.** – The definitions set out in
28 G.S. 143-215.10I(a), as enacted by Section 1 of this act, apply to this section. As used
29 in this section, an "innovative animal waste management system" means an animal
30 waste management system that serves a swine farm that may be permitted under
31 G.S. 143-215.10I(b), as enacted by Section 1 of this act.

32 **SECTION 2.(b) Lagoon Conversion Program.** – The Lagoon Conversion
33 Program is hereby established. The Program shall provide grants to assist in the
34 conversion of animal waste management systems that serve swine farms in operation on
35 or before 1 September 2007 that employ anaerobic lagoons as the primary method of
36 treatment to innovative animal waste management systems. Grants under the Program
37 may also be used to:

38 (1) Assist in the closure of sprayfield and lagoon systems that are replaced
39 by innovative animal waste management systems if the closure is
40 performed in accordance with applicable federal and State laws,
41 regulations, and rules.

42 (2) Establish centralized waste collection and treatment systems that serve
43 innovative animal waste management systems.

1 **SECTION 2.(c)** Program Administration. – The Program shall be
2 administered by the Division of Soil and Water Conservation in the Department of
3 Environment and Natural Resources through the Agriculture Cost Share Program for
4 Nonpoint Source Pollution Control established pursuant to G.S. 143-215.74. The
5 Division shall administer the Program as provided in this section and Part 9 of Article
6 21 of Chapter 143 of the General Statutes.

7 **SECTION 2.(d)** Program Functions. – Under the Lagoon Conversion
8 Program, the Division of Soil and Water Conservation in the Department of
9 Environment and Natural Resources, through the Agriculture Cost Share Program for
10 Nonpoint Source Pollution Control, shall:

11 (1) Within funds available to the Swine Farm Waste Management System
12 Conversion Account established by Section 3 of this act, provide
13 grants subject to all of the following limitations and requirements:

14 a. For grants approved on or before 30 June 2012, State funding
15 shall be limited to:

16 1. Ninety percent (90%) of the average cost for each
17 practice with the assisted person providing ten percent
18 (10%) of the cost, which may include in-kind support of
19 the practice.

20 2. A maximum of five hundred thousand dollars (\$500,000)
21 per year to each applicant.

22 b. For grants approved on or after 1 July 2012 and on or before 30
23 June 2017, State funding shall be limited to:

24 1. Eighty percent (80%) of the average cost for each
25 practice with the assisted person providing twenty
26 percent (20%) of the cost, which may include in-kind
27 support of the practice.

28 2. A maximum of four hundred fifty thousand dollars
29 (\$450,000) per year to each applicant.

30 c. For grants approved on or after 1 July 2017, State funding shall
31 be limited to:

32 1. Seventy-five percent (75%) of the average cost for each
33 practice with the assisted person providing twenty-five
34 percent (25%) of the cost, which may include in-kind
35 support of the practice.

36 2. A maximum of four hundred thousand dollars
37 (\$400,000) per year to each applicant.

38 d. All other limitations and requirements set out in Part 9 of
39 Article 21 of Chapter 143 of the General Statutes, as modified
40 by this section.

41 (2) Establish criteria to prioritize the installation of innovative animal
42 waste management systems that serve swine farms. Priority shall be
43 given to systems that are affordable, easily maintained, produce
44 marketable by-products, reduce or eliminate the emission of ammonia

1 and greenhouse gases, and are capable of being connected to a
2 centralized waste collection and treatment.

- 3 (3) Establish criteria for the selection of applicants who are eligible for
4 participation in the Program. Priority shall be given to applicants
5 whose participation in the Program will result in the removal of animal
6 waste management systems from floodplains; who have substantially
7 complied with federal and State laws, regulations, and rules for the
8 protection of the environment, natural resources, and public health;
9 and who have a limited ability to pay for or finance an innovative
10 swine waste management system through private or cooperative credit
11 at reasonable rates and terms.
- 12 (4) Develop a process for soliciting and reviewing applications and for
13 selecting persons to participate in the Program.
- 14 (5) Investigate and pursue other funding sources to supplement State
15 funds, including federal, local, and private funding sources.
- 16 (6) Provide technical assistance to participating persons to assist with
17 modifications of waste management systems and facilitate the timely
18 transfer of technology among participating persons.

19 **SECTION 2.(e)** Advisory Committee. – The Director of the Division of Soil
20 and Water Conservation may establish an advisory committee to assist the Division with
21 the implementation of this act. If the Director establishes an advisory committee, the
22 Director may direct the advisory committee to evaluate:

- 23 (1) Markets for by-products derived from swine waste and make
24 recommendations for development of the markets, including
25 identification of regulatory obstacles.
- 26 (2) Methods to encourage growers, integrators, and electric power
27 suppliers to cooperate in the production and use of renewable energy
28 or other marketable by-products derived from swine waste, including
29 an examination of tax incentives, carbon sequestration credits, and
30 trading mechanisms.

31 **SECTION 2.(f)** Report. – No later than 1 October of each year, the Division
32 of Soil and Water Conservation in the Department of Environment and Natural
33 Resources shall prepare a comprehensive report on the implementation of Sections 1, 2,
34 and 3 of this act. The report shall be submitted to the Environmental Review
35 Commission as a part of the report required by G.S. 143-215.10M. The first report
36 required by this subsection shall be submitted to the Environmental Review
37 Commission no later than 1 October 2008.

38 **SECTION 3.** Account. – There is hereby established the Swine Farm Waste
39 Management System Conversion Account within the Division of Soil and Water
40 Conservation of the Department of Environment and Natural Resources. Funds in the
41 Account shall be used only as provided in subsection (b) of Section 2 of this act. The
42 Account shall consist of funds appropriated to the Account by the General Assembly;
43 any federal funds available for this purpose; and any grants, gifts, or contributions to the
44 State for this purpose. Funds in the Account shall not revert.

1 **SECTION 4.(a)** Definitions. – The definitions set out in G.S. 143-215.10B
2 and the following definitions apply to this section:

- 3 (1) "Commission" means the Utilities Commission.
4 (2) "Department" means the Department of Environment and Natural
5 Resources.
6 (3) "Electric public utility" means an investor-owned public utility as
7 defined in G.S. 62-3(23)a.1.
8 (4) "Permit holder" means a person who holds a permit issued under
9 Article 21 of Chapter 143 of the General Statutes by the
10 Environmental Management Commission for an animal waste
11 management system that serves a swine farm.
12 (5) "Public Staff" means the Public Staff of the North Carolina Utilities
13 Commission established pursuant to G.S. 62-15.
14 (6) "Swine farm" has the same meaning as in G.S. 106-802.

15 **SECTION 4.(b)** Program Established. – The Swine Farm Methane Capture
16 Pilot Program is hereby established as a voluntary program to be administered jointly by
17 the Department and the Commission.

18 **SECTION 4.(c)** Participant Selection. – An owner or operator of a swine
19 farm who wishes to participate in the Swine Farm Methane Capture Pilot Program shall
20 register with the Department and the Commission. From among those swine farms that
21 are registered, the Department and the Commission may select a total of up to 50 swine
22 farms for participation in the pilot program over the life of the program. The
23 Department and the Commission shall select swine farms for participation in the pilot
24 program so as to achieve as nearly as possible a representative sample of the types and
25 locations of swine farms in the areas served by electric public utilities in the State, types
26 of methane capture and electric power generating systems, and in the order in which
27 they register. In selecting swine farms for participation in the pilot program, the
28 Department and the Commission may also consider the ability of the methane capture
29 system to reduce the emissions of other pollutants, including ammonia. The Department
30 and the Commission may select a swine farm for participation only if the swine farm
31 meets or will meet all the following criteria:

- 32 (1) The permit holder has operated and maintained the animal waste
33 management system in substantial compliance with the permit and all
34 applicable federal and State laws, regulations, and rules.
35 (2) The lagoon is covered, partially covered, or otherwise modified in a
36 manner that captures a significant portion of the methane emitted by
37 the lagoon.
38 (3) The captured methane is used to generate electricity.
39 (4) The swine farm generates electric power that is available for purchase
40 by the electric public utility that serves the swine farm on or before 1
41 September 2010.
42 (5) The electricity generated by the swine farm can be supplied to the
43 distribution system of the electric public utility that serves the swine

1 farm through an interconnection that meets the standards established
2 by the Commission.

3 **SECTION 4.(d)** Implementation. – Each electric public utility that serves a
4 swine farm that is selected for participation in the pilot program is required to purchase
5 all electricity generated by the use of captured methane as a fuel by pilot program
6 participants for seven years. The total of all electric power purchases under the program
7 shall not exceed 25 megawatts at any point in time. The seven-year period begins on the
8 date the swine farm first sells electricity to the electric public utility and ends seven
9 years after the date on which the period begins. The Commission shall set a suggested
10 purchase price that would allow program participants to recover reasonably and
11 prudently incurred capital and operating costs and that would minimize the impact of
12 the pilot program on ratepayers. The price of power purchased under the program shall
13 be determined by agreement between each program participant and the electric public
14 utility. Each purchase price agreement shall take into account the extent to which any
15 capital or operating costs are paid to the program participant from any other source,
16 including grants. A purchase price agreement may be revised at any time by agreement
17 between the parties. In the event that a program participant and an electric public utility
18 cannot agree on a purchase price, the Commission, with the advice of the Public Staff,
19 shall set the purchase price. In no event, shall the suggested purchase price, an agreed
20 upon purchase price, or a purchase price set by the Commission in the event that a
21 program participant and an electric public utility cannot agree on a purchase price
22 exceed eighteen cents (18¢) per kilowatt hour. The Commission, with the advice of the
23 Public Staff, may review any agreement between a program participant and an electric
24 public utility. All costs incurred by an electric public utility to comply with the
25 provisions of this section may be recovered as costs of fuel pursuant to G.S. 62-133.2.

26 **SECTION 4.(e)** Adoption of Rules. – The Commission may adopt rules to
27 implement this section as provided in Chapter 62 of the General Statutes. The
28 Department may adopt rules to implement this section as provided in Chapter 150B of
29 the General Assembly.

30 **SECTION 4.(f)** Effect of Section. – It is the intent of the General Assembly
31 that this section applies only to the particular circumstances that are the subject of this
32 section. This section does not establish a precedent with respect to purchase or sale of
33 renewable energy.

34 **SECTION 4.(g)** Report. – The Department and the Commission shall jointly
35 report to the Environmental Review Commission and the Joint Legislative Utility
36 Review Committee on or before 1 January of each year on the implementation of this
37 section. The report shall include a program evaluation based on an assessment of the
38 costs and benefits of the program and any specific findings and recommendations,
39 including any legislative proposals, that the Department and the Commission determine
40 to be appropriate. The first report will be due 1 January 2009.

41 **SECTION 5.** Certain Agreements Not Affected. – This act shall not be
42 construed to alter the obligations of any party to any of the following agreements:

- 43 (1) The agreement among the Attorney General of North Carolina;
44 Smithfield Foods, Inc.; Brown's of North Carolina, Inc.; Carroll's

- 1 Foods, Inc.; Murphy Farms, Inc.; Carroll's Foods of Virginia, Inc.; and
2 Quarter M Farms, Inc., of 25 July 2000.
- 3 (2) The agreement between the Attorney General of North Carolina and
4 Smithfield Foods, Inc., of 30 September 2000.
- 5 (3) The agreement among the Attorney General of North Carolina and
6 Premium Standard Farms, Inc.; The Lundy Packing Company, Inc.;
7 Dogwood Farms, Inc.; Dogwood Farms II, LLC; L&S Farms, a
8 partnership; and L&H Farms, LLC, of 29 September 2000.
- 9 (4) The agreement between the Attorney General of North Carolina and
10 Frontline Farmers, Inc., of 13 March 2002.
- 11 (5) The agreement among North Carolina State University, the Attorney
12 General of North Carolina, and Smithfield Foods, Inc., of 30
13 September 2000, including an amendment of 12 February 2004.

14 **SECTION 6.** Effective Dates. – Section 3 of this act becomes effective 1
15 July 2007. All other sections of this act become effective 1 September 2007. Section 4
16 of this act expires 1 September 2017.