

15A NCAC 02D .1802 CONTROL OF ODORS FROM ANIMAL OPERATIONS USING LIQUID ANIMAL WASTE MANAGEMENT SYSTEMS

(a) Purpose. The purpose of this Rule is to control objectionable odors from animal operations beyond the boundaries of animal operations.

(b) Applicability. This Rule shall apply to all animal operations using liquid animal waste management systems.

(c) Required management practices. All animal operations shall be required to implement applicable management practices for the control of odors as follows:

- (1) the carcasses of dead animals shall be disposed in accordance with G.S. 106-403 and 02 NCAC 52C .0102. The Rule 02 NCAC 52C .0102 is hereby incorporated by reference and includes subsequent amendments or editions;
- (2) waste from animal wastewater application spray systems shall be applied in such a manner and pursuant to such conditions to prevent drift from the irrigation field of the wastewater spray beyond the boundary of the animal operation, except waste from application spray systems may be applied in an emergency to maintain safe lagoon freeboard if the owner or operator notifies the Department and resolves the emergency with the Department as written in the Swine Waste Operation General Permit;
- (3) animal wastewater application spray system intakes shall be located near the liquid surface of the animal wastewater lagoon;
- (4) ventilation fans shall be maintained according to the manufacturer's specifications; and
- (5) animal feed storage containers located outside of animal containment buildings shall be covered except when removing or adding feed. This Subparagraph shall not apply to the storage of silage or hay or to commodity boxes with roofs.

(d) Odor management plan (OMP) for existing animal operations for swine. Animal operations for swine that meet the criteria in the table in this Paragraph shall submit an odor management plan to the Director. The animal operation shall be required to submit its odor management plan only once. The odor management plan shall:

- (1) identify the name, location, and owner of the animal operation;
- (2) identify the name, title, address, and telephone number of the owner or operator filing the plan;
- (3) identify the sources of odor within the animal operation;
- (4) describe how odor will be controlled from:
 - (A) the animal houses;
 - (B) the animal wastewater lagoon, if used;
 - (C) the animal wastewater application lands, if used;
 - (D) waste conveyances and temporary accumulation points; and
 - (E) other possible sources of odor within the animal operation;
- (5) contain a diagram showing all structures and lagoons at the animal operation, forced air directions, and approximate distances to structures or groups of structures within 3,000 feet of the property line of the animal operation; an aerial photograph may be provided instead of a diagram provided the items required by this Subparagraph are shown;
- (6) for existing animal operations, contain a schedule not to exceed six months by which the plan will be implemented;
- (7) describe how the plan will be implemented, including training of personnel;
- (8) describe inspection and maintenance procedures;
- (9) describe methods of monitoring and recordkeeping to verify compliance with the plan; and
- (10) describe how odors are currently being controlled and how these odors will be controlled in the future.

100 pounds steady state live weight of swine		Distance in feet to the boundary of the nearest neighboring occupied property with an inhabitable structure, business, school, hospital, church, outdoor recreational facility, national park, State Park, historic property, or child care center
at least	but less than	
10,000	20,000	less than or equal to 3,000
20,000	40,000	less than or equal to 4,000
40,000		less than or equal to 5,000

For the purposes of this Rule, the distance shall be measured from the edge of the barn or lagoon, whichever is closer, to the boundary of the neighboring occupied property with an inhabitable structure, business, school, hospital, church, outdoor recreational facility, national park, State Park, historic property, or child care center. All animal operations for swine that are of the capacity in the table in this Paragraph shall submit either an odor management plan or documentation that no neighboring occupied property with an inhabitable structure, business, school, hospital, church, outdoor recreational facility, national park, State Park, historic property, or child care center is within the distances specified in the table. The Director may require existing animal operations for swine with a steady state live weight of swine between 100,000 to 1,000,000 pounds steady state live weight to submit an odor management plan if the Director determines pursuant to Paragraph (g) of this Rule that these animal operations cause or contribute to an objectionable odor. The Director may require an existing animal operation to submit a best management plan pursuant to 15A NCAC 02D .1803, then submit the best management plan pursuant to Paragraph (h) of this Rule if the existing animal operation fails to submit an odor management plan.

(e) Location of objectionable odor determinations.

- (1) For an existing animal operation that does not meet the following siting requirements:
 - (A) at least 1,500 feet from any occupied residence not owned by the owner of the animal operation;
 - (B) at least 2,500 feet from any school, hospital, church, outdoor recreation Facility, national park, State Park, historic property, or child care center; and
 - (C) at least 500 feet from any property boundary;objectionable odors shall be determined at neighboring occupied property not owned by the owner of the animal operation, such as businesses, schools, hospitals, churches, outdoor recreation facilities, national parks, State Parks, historic properties, or child care centers that are affected.
- (2) For a new animal operation or existing animal operation that meets the siting requirements in Subparagraph (1) of this Paragraph, objectionable odors shall be determined beyond the boundary of the animal operation.

(f) Complaints. The Director shall respond to complaints about objectionable odors from animal operations as follows:

- (1) Complaints shall be investigated;
- (2) Complaints may be used to assist in determination of a best management plan failure or a control technology failure;
- (3) The Director shall respond to complaints within 30 days of receipt of the complaint;
- (4) Complaint response shall include the Director's evaluation of the complaint;
- (5) The investigation of a complaint shall be completed as expeditiously as possible considering the meteorology, activities at the animal operation, and other conditions occurring at the time of the complaint.

(g) Determination of the existence of an objectionable odor. In determining if an animal operation is causing or contributing to an objectionable odor, the factors the Director may consider include:

- (1) the nature, intensity, frequency, pervasiveness, and duration of the odors from the animal operation;
- (2) complaints received about objectionable odors from the animal operation;
- (3) emissions from the animal operation of known odor causing compounds, such as ammonia, total volatile organics, hydrogen sulfide, or other sulfur compounds at levels that could cause or contribute to an objectionable odor;
- (4) any epidemiological studies associating health problems with odors from the animal operation or documented health problems associated with odors from the animal operation provided by the State Health Director; or
- (5) any other evidence, including records maintained by neighbors, that show that the animal operation is causing or contributing to an objectionable odor.

(h) Requirements for a best management plan for control of odors from existing animal operations. If the Director determines that an existing animal operation is causing or contributing to an objectionable odor, the owner or operator of the animal operation shall:

- (1) submit to the Director as soon as practical, but not to exceed 90 days after receipt of written notification from the Director that the animal operation is causing or contributing to an objectionable odor, a best management plan for odor control as described in 15A NCAC 02D .1803; and

- (2) comply with the terms of the best management plan within 30 days after the Director approves the best management plan, or the Director may approve an alternate compliance schedule based upon the complexity of the best management plan (approved compliance schedule is an alternate schedule to 30 days).
- (i) Requirement for amendment to the best management plan. No later than 60 days from completion of a compliance schedule in an approved best management plan or if the best management plan contains no compliance schedule, no later than 60 days from the implementation date of the best management plan, the Director shall determine whether the plan has been implemented. If the Director determines at any time that a plan submitted pursuant to Paragraph (h) of this Rule does not control objectionable odors from the animal operation, the Director shall require the owner or operator of the animal operation to amend the plan to incorporate additional or alternative measures to control objectionable odors from the animal operation. The owner or operator shall:
 - (1) submit a revised best management plan to the Director as soon as practical but not later than 60 days after receipt of written notification from the Director that the plan is inadequate; and
 - (2) comply with the revised best management plan within 30 days after the Director approves the revisions to the best management plan (approved compliance schedule is an alternate schedule to 30 days).
- (j) Requirements for control technology. After the best management plan has been implemented and revised no more than one time excluding voluntary revisions and revisions made pursuant to 15A NCAC 02D .1803(c), a plan failure shall constitute a finding by the Director, using the criteria pursuant to Paragraph (g) of this Rule. If a plan failure occurs, the Director shall require the owner or operator of the animal operation to install control technology to control odor from the animal operation. Within 90 days from receipt of written notification from the Director of a plan failure, the owner or operator shall submit a permit application for control technology and an installation schedule. If the owner or operator demonstrates to the Director that a permit application cannot be submitted within 90 days, the Director shall extend the time for submittal up to an additional 90 days if the owner or operator demonstrates the delay in submitting the application was beyond his or her control. Control technology shall be determined according to Subparagraph (1) of this Paragraph. The installation schedule shall contain the increments of progress described in Subparagraph (2) of this Paragraph. The owner or operator may at any time request adjustments in the installation schedule and shall in his or her request explain why the schedule cannot be met. If the Director finds the request to be accurate, the Director shall revise the installation schedule as requested; however, the Director shall not extend the final compliance date beyond 24 months from the date that the permit was first issued for the control technology. The owner or operator shall certify to the Director within five days after the deadline for each increment of progress described in Subparagraph (2) of this Paragraph whether the required increment of progress has been met.
 - (1) Control technology. The owner or operator of an animal operation shall identify control technologies that are technologically feasible for his or her animal operation and shall select the control technology or control technologies that results in the greatest reduction of odors considering human health, energy, environmental, and economic impacts and other costs. The owner or operator shall explain the reasons for selecting the control technology or control technologies. If the Director finds that the selected control technology or control technologies will control objectionable odors following the procedures in 15A NCAC 02Q .0300 or .0500, he or she shall approve the installation of the control technology or control technologies for this animal operation upon permit issuance. The owner or operator of the animal operation shall comply with all terms and conditions in the permit.
 - (2) Installation schedule. The installation schedule for control technology shall contain the following increments of progress:
 - (A) a date by which contracts for odor control technology shall be awarded or orders shall be issued for purchase of component parts or materials;
 - (B) a date by which on-site construction or installation of the odor control technology shall begin;
 - (C) a date by which on-site construction or installation of the odor control technology shall be completed; and
 - (D) a date by which final compliance shall be achieved.Control technology shall be in place and operating as soon as practical but not to exceed 12 months from the date that the permit is issued for control technology.
- (k) The following requirements shall apply to new or modified animal operations:

- (1) Before beginning construction, the owner or operator of a new or modified animal operation raising or producing swine shall submit and have an approved best management plan and shall meet the following setbacks. A house or lagoon that is a component of an animal operation shall be constructed:
 - (A) at least 1,500 feet from any occupied residence not owned by the owner of the animal operation;
 - (B) at least 2,500 feet from any school, hospital, church, outdoor recreation facility, national park, State Park, historic property, or child care center; and
 - (C) at least 500 feet from any property boundary;
- (2) Before beginning construction, the owner or operator of a new or modified animal operation other than swine shall submit and have an approved best management plan.
- (3) For new or modified animal operations raising or producing swine, the outer perimeter of the land area onto which waste is applied that is a component of an animal operation shall be:
 - (A) at least 75 feet from any boundary of property on which an occupied residence not owned by the owner of the animal operation is located; and
 - (B) at least 200 feet from any occupied residence not owned by the owner of the animal operation.
- (4) The Director shall either approve or disapprove the best management plan submitted pursuant to this Paragraph within 90 days after receipt of the plan. If the Director disapproves the plan, he or she shall identify the plan's deficiency.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(11); 143-215.108(a); 150B-21.6; Temporary Adoption Eff. April 27, 1999; March 1, 1999; Eff. July 1, 2000; Readopted Eff. September 1, 2019.