

15A NCAC 02T .1307 SWINE WASTE MANAGEMENT SYSTEM PERFORMANCE STANDARDS

(a) This Rule applies to animal waste management systems subject to regulation pursuant to G.S. 143-215.10I and S.L. 2015-263.

(b) An animal waste management system that serves a swine farm subject to regulation pursuant to G.S. 143-215.10I shall meet all of the following performance standards:

- (1) Eliminate the discharge of animal waste to surface waters and groundwater through direct discharge, seepage, or runoff. To meet this standard:
 - (A) earthen structures shall be designed and constructed with synthetic liners to eliminate seepage;
 - (B) solids storage structures shall meet applicable engineering practices and NRCS design standards;
 - (C) the Certified Animal Waste Management Plan (CAWMP) shall include all components listed in G.S. 143-215.10C(e), meet current North Carolina NRCS 590 Nutrient Management Conservation Practice Standard requirements, and comply with the NRCS national policy for Comprehensive Nutrient Management Plans (CNMP) as defined in the NRCS General Manual, Title 190, Part 405, which are incorporated by reference, including subsequent additions or amendments. The General Manual may be downloaded at no cost from the NRCS website: <https://www.nrcs.usda.gov/>;
 - (D) swine waste treatment structures that automatically convey swine waste using pumps shall have audible and visible high water alarms with an auto dialer device set to contact the farm owner or farm manager; a gravity overflow to a basin that can contain the flow rate of the largest pump in the system for the maximum amount of time that an operator will not be on-site; or a secondary containment structure designed, constructed, and operated to contain the volume of the largest animal waste treatment structure and the flow rate of the largest pump in the system for the maximum amount of time that an operator will not be on-site; and
 - (E) no more than the equivalent volume of one month of design flow of untreated swine waste shall be accumulated and stored prior to the initiation of treatment;
- (2) Substantially eliminate atmospheric emission of ammonia. To meet this standard:
 - (A) Combined ammonia emissions from swine waste treatment and storage structures shall not exceed an annual average of 0.2 kg NH₃-N/wk/1,000 kg of steady-state live weight;
 - (B) Ammonia emissions from land application sites shall not exceed an annual average of 0.2 kg NH₃-N/wk/1,000 kg of steady-state live weight; and
 - (C) Ammonia emissions from the swine farm shall not exceed an annual average of 0.9 kg NH₃-N/wk/1,000 kg of steady-state live weight;
- (3) Substantially eliminate the emission of odor that is detectable beyond the boundaries of the parcel or tract of land on which the swine farm is located. To meet this standard, swine waste management systems shall reduce odor levels, frequency, and duration from the whole farm, such that the requirements of 15A NCAC 02D .1808 are met at the property boundary;
- (4) Substantially eliminate the release of disease-transmitting vectors and airborne pathogens. To meet this standard:
 - (A) Swine waste management systems shall meet the vector attraction reduction requirements of Rule .1107 of this Subchapter for the land application of separated solids and animal waste residuals for operations subject to this Rule;
 - (B) Swine waste management systems shall meet the pathogen reduction requirements of Rule .1106(a) of this Subchapter for Class A biosolids that are to be applied to a lawn, home garden, or public contact use site; sold or given away in a bag or container for land application or meet the pathogen reduction requirements of Rule .1106(b) for Class B biosolids that are to be otherwise applied to land; and
 - (C) Fecal coliform concentrations in the final liquid effluent shall not exceed an annual average of 7,000 Most Probable Number/100mL;
- (5) Substantially eliminate nutrient and heavy metal contamination of soil and groundwater. To meet this standard, swine waste management systems that land apply effluent shall:
 - (A) Meet the current North Carolina NRCS 590 Nutrient Management Conservation Practice Standard requirements and comply with the NRCS national policy for Comprehensive

Nutrient Management Plans (CNMP) as defined by NRCS General Manual, Title 190, Part 405; and

- (B) Demonstrate through predictive calculations or modeling that land application of swine waste at the proposed rate will not cause or contribute to a violation of groundwater standards set forth in 15A NCAC 02L.

History Note: Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10C; 143-215.10I; S.L. 2015-263; Eff. January 1, 2009;
Readopted Eff. September 1, 2018.