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

(a) This Rule applies to animal waste management systems subject to regulation under G.S. 143-215.10I.

(b) An animal waste management system that serves a swine farm subject to regulation under 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 must 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) must meet current NRCS standards for a Comprehensive Nutrient Management Plan (CNMP) as defined by Part 600, Subpart E of the NRCS National Planning Procedures Handbook, which are hereby incorporated by reference, including any subsequent additions or amendments. The handbook may be downloaded at no cost from the NRCS website: http://www.nrcs.usda.gov/technical/afo/cnmp_guide_index.html

(D) Swine waste treatment structures that automatically convey swine waste using pumps must 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.

(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 may not exceed an annual average of 0.2 kg NH_3-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 NH_3-N/wk/1,000 kg of steady-state live weight; and

(C) Ammonia emissions from the swine farm must not exceed an annual average of 0.9 kg NH_3-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 must 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 in Rule .1107 of this Subchapter for the land application of separated solids and biological residuals.

(B) Swine waste management systems shall meet the pathogen reduction requirements in Rule .1106 of this Subchapter for Class A biosolids that are to be land applied pursuant to Rule .1106(a)(1) or for Class B biosolids that are to be otherwise applied to land.

(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 NRCS requirements for a Comprehensive Nutrient Management Plan (CNMP) as defined by Part 600, Subpart E of the NRCS National Planning Procedures Handbook; 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 under 15A NCAC 02L.

History Note: *Authority G.S. 143-215.1; 143-215.3(a); 143-215.10A; 143-215.10I; Eff. January 1, 2009.*