15A NCAC 02T .1308 EVALUATION AND APPROVAL OF SWINE WASTE MANAGEMENT SYSTEMS

(a) This Rule establishes requirements for the evaluation, approval and permitting of swine waste management systems that are required to meet the performance standards in Rule .1307 of this Section.

(b) APPLICATION: The applicant shall submit a permit application in writing to the Division showing that a swine waste management system meets the performance standards. The application shall include the following:

(1) operation and maintenance procedures, system classification, proposed management entity and system operator requirements;

(2) a description of the swine waste management system, including materials used in construction, and its proposed use;

(3) a summary of any literature, published research, and previous experience with and performance of a waste management system of similar waste characteristics;

(4) results of 12 months of testing, research or monitoring of pilot- or full-scale operational system(s); and shall identify whether the testing, research or monitoring provided was conducted by a third party research or testing organization;

(5) documentation of the protocol used to evaluate the performance of the swine waste management system;

(6) the identity and qualifications, if applicable, of any proposed research or testing organization and the principal investigators, and an affidavit certifying that the organization and principal investigators have no conflict of interest and do not stand to gain financially from the sale of the technology;

(7) an affidavit certifying that the swine waste management system submitted for approval is the same as the certified or listed product; or identify any modifications made to the submitted system;

(8) a procedure to address system malfunction and replacement;

(9) notification of any proprietary or trade secret information, system, component, or device;

(10) engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents. The following documents shall be provided to the Division by the applicant:

(A) engineering plans for the entire system, including treatment, storage, application, and disposal facilities and equipment except those previously permitted unless those previously permitted are directly tied into the new units or are critical to the understanding of the complete process;

(B) specifications describing materials to be used, methods of construction, and means for ensuring quality and integrity of the finished product including leakage testing; and

(C) engineering calculations including hydraulic and pollutant loading for each treatment unit, treatment unit sizing criteria, hydraulic profile of the treatment system, total dynamic head and system curve analysis for each pump, buoyancy calculations, and irrigation design;

(11) a complete permit application in accordance with Section .0100 of this Subchapter; and

(12) In lieu of the requirements of Subparagraphs (b)(3) through (b)(6), the applicant may submit data from a full-scale facility previously permitted by the Division.

(c) APPROVAL OF NEW OR EXPANDING SWINE WASTE MANAGEMENT SYSTEMS: The Division shall review all applications submitted in accordance with Rule .0107 of this Subchapter. The Division shall approve the swine waste management system in accordance with Rule .0108 of this Subchapter, when the applicant can show that the performance standards of Rule .1307 of this Section will be met.

(d) MONITORING REQUIREMENTS: Once the newly permitted system reaches full capacity or within six months, whichever comes sooner, the permittee shall monitor system performance for two years with quarterly sampling to assure that the treatment system is meeting performance standards. If, after two years the treatment system is compliant with Rule .1307 of this Section, the permittee shall monitor for compliance with the performance standards in Rule .1307 on the following schedule:

(1) Ammonia emissions monitoring from swine waste treatment and storage structures shall be as follows:

(A) Ammonia air emissions from open-air structures shall be directly sampled once per calendar year, with alternating years having sampling during the summer and winter seasons, or

(B) Liquid from open-air waste treatment and storage structures shall be sampled at a minimum of once per quarter.

(2) Monitoring of odor intensity shall be on an annual basis, with alternating years having sampling during the summer and winter seasons.

(3) Effluent monitoring shall be at a minimum of once per quarter.

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