

15A NCAC 18E .1706 APPROVAL CRITERIA FOR ACCEPTED SYSTEMS

(a) The Commission shall designate a wastewater dispersal system as an Accepted System when it finds based on the information provided in accordance with this Rule that the standards set forth by G.S. 130A-343(a)(1) and G.S. 130A-343(h) have been met.

(b) The following information shall be provided by the petitioner and reviewed by the Commission prior to granting Accepted System status:

- (1) documentation of a minimum of 300 systems installed statewide and in use for more than five years as an approved Innovative System or a wastewater dispersal system identified in the rules of this Subchapter;
- (2) data and findings of all prior evaluations of the system performance as provided by the manufacturer;
- (3) results of prior performance surveys of the systems in use in North Carolina for at least the five-year period immediately preceding the petition, including any information available to the manufacturer pertinent to the accuracy and validity of performance surveys not completed under their control;
- (4) review(s) of records on system use and performance reported by LHDs, authorized designers, installers, and Management Entities documenting the experiences with performance of the system in North Carolina, including information collected and reported in accordance with Rules .1711 and .1713 of this Section. The Department, in consultation with the manufacturer, shall evaluate the accuracy and validity of performance data and surveys considered for inclusion in the review. LHDs and other stakeholders shall be invited to participate in the discussion; and
- (5) the results of a statistically valid survey of system performance in North Carolina in accordance with Paragraphs (d) or (g) of this Rule.

(c) The manufacturer shall propose a plan for the statistically valid survey for review and approval by the Department prior to the survey being performed. The Department shall approve a statistically valid survey plan when it meets the requirements of Paragraphs (d) or (g) of this Rule and includes the following information:

- (1) number of systems to be evaluated;
- (2) period of evaluation;
- (3) method to randomly select systems to be evaluated;
- (4) methods of field and data evaluation; and
- (5) proposed survey team members, including proposed cooperative arrangements to be made with Department and LHD staff.

(d) The proposed survey shall meet one of the following survey protocols:

- (1) a field survey of test and control systems that compares the failure rates between the systems. Statistical analysis of the survey results using a one-sided test shall document at the 95 percent confidence level that there is a five percent or less chance that a difference in failure rates of five percentage points or more would occur by chance. The field survey shall meet the following criteria:
 - (A) a minimum of 250 randomly selected test and control systems that have been in operation for at least two years and are currently in use, for a total of at least 500 systems that are surveyed;
 - (B) a minimum of 40 percent of both test and control systems shall have been in operation for at least five years;
 - (C) systems surveyed shall be distributed among the Soil Groups in the Coastal, Piedmont, and Mountain regions of the State in approximate proportion to their use across the State;
 - (D) systems shall be evaluated from February 1 through April 15; and
 - (E) similar numbers of test and control systems of similar ages shall be surveyed during similar time periods across the State; or
- (2) a field survey of test systems only. The failure rate determined by the field survey shall not exceed seven percent at the 95 percent confidence level. The field survey for test systems only shall meet the following criteria:
 - (A) the system is identified in the rules of this Subchapter and the manufacturer provides documentation that there have been at least 3,000 operational systems installed in the state in more than one county. The systems shall have been installed over at least an eight-year period with a total reported failure rate statewide of less than two percent. The

statewide failure rate is based on records provided by the manufacturer and monthly activity reports from the LHD;

(B) a minimum of 250 randomly selected systems that are currently in operation are surveyed; and

(C) the survey criteria in Subparagraph (d)(1) of this Rule are met.

(e) The Department shall facilitate LHD participation with any performance review or survey to identify sites and systems for evaluation based on the LHD's permit records.

(f) The Department shall utilize the Division of Public Health's State Center for Health Statistics for assistance in evaluating the statistical validity of the proposed evaluation protocols.

(g) Alternative survey protocols, which evaluate different numbers of test and control systems or test systems only, may be submitted by the petitioner to the Department for approval. The alternative survey protocol shall be approved by the Department when the survey protocol is designed to verify equal or superior performance of the test system when compared to the control system under actual field conditions in North Carolina and when the alternative survey protocol has comparable statistical validity as described in Subparagraph (d) of this Rule. The Department's review and approval of proposed alternative survey protocols shall be subject to review and concurrence by the Commission, which shall use the same approval criteria as the Department as set forth in in this Paragraph.

(h) The Commission shall impose any use, design, installation, operation, maintenance, monitoring, and management conditions in accordance with G.S. 130A-343 and the rules of this Subchapter.

(i) If there is a conflict between approvals or between an approval and the Rules of this Subchapter, then an Accepted System approval shall take precedence, followed by an Innovative System Approval, and then the Rules of this Subchapter.

History Note: Authority G.S. 130A-335(e) and (f); 130A-343; S.L. 2014-120, s. 47; S.L. 2019-151, s. 13; Eff. January 1, 2024.