

15A NCAC 18E .1704 APPROVAL CRITERIA FOR PROVISIONAL SYSTEMS

(a) A dispersal system shall be approved for use as a Provisional System when the following criteria have been met:

- (1) documentation of one of the following is provided:
 - (A) a minimum of 50 installations that have been in use for a minimum of 12 months, with available information indicating comparable hydraulic performance and rate of malfunction to a conventional trench system;
 - (B) the system's design is functionally similar to another approved system described elsewhere in this Subchapter, or to a PIA System approved in accordance with this Section. The system's design and functional similarity shall be equal or superior to the approved comparable system for the following: material physical properties and chemical durability; field installed permeable sidewall area and bottom infiltrative area; method and manner of function for conveyance and application of effluent; structural integrity; and field installed storage volume;
 - (C) the system has been certified and listed by a nationally recognized certification body, as defined by G.S. 130A-343(a)(6), for a period that exceeds one year; or
 - (D) the system has complied with a comparable evaluation protocol used for system approval in other states. The comparable evaluation protocol shall include information on relevant conditions such as wastewater system design, soil and site conditions, climate, and hydrology and be reviewed by the Department;
- (2) documentation of load testing is provided that demonstrates the structural integrity to be comparable to a conventional trench system, including subjecting the trench system to the following without collapsing, fracturing, or breaking when installed in a trench with the proposed product configuration and width:
 - (A) an axle load of 16,000 pounds when covered with 12 inches of compacted soil; and
 - (B) an axle load of 4,000 pounds when covered with six inches of compacted soil; and
- (3) a proposed evaluation protocol to be overseen by a third-party evaluator is submitted to the Department for review. The evaluation protocol shall ensure that all information necessary to satisfy the criteria to achieve Innovative Approval, as specified in G.S. 130A-343(f) and Rule .1705 of this Section, is collected. The protocol shall include the following:
 - (A) a minimum of 100 installations operational and in use for a minimum of 12 months; and
 - (B) sufficient information collected to evaluate the system's hydraulic performance, structural integrity and rate of malfunction compared with a conventional trench system.

(b) Advanced pretreatment systems shall be approved for use as a Provisional System when the following criteria have been met:

- (1) documentation of one of the following is provided for designs complying with TS-I, TS-II, or RCW effluent standards:
 - (A) a minimum of 50 complete third-party field verification data sets from a minimum of 15 sites that have been in use for six months, including all constituents necessary to verify compliance with the applicable effluent standard. Two to five data sets may be from the same site if collected a minimum of three months apart, with no data excluded from the field sampling sites. The data sets shall demonstrate compliance with TS-I, TS-II, or RCW effluent standards in accordance with Rule .1710 of this Section;
 - (B) the system's design is functionally similar to another approved system described elsewhere in this Subchapter, or to a Provisional or Innovative System approved in accordance with this Section. The system's design and functional similarity shall be equal or superior to the comparable system for all of the following: material physical properties and chemical durability; structural integrity; biological, chemical, or physical treatment processes; method and manner of function for conveyance and application of effluent through the system; and number and size of system compartments;
 - (C) the system has been certified and listed by a nationally recognized certification body, as defined by G.S. 130A-343(a)(6), for a period that exceeds one year; or
 - (D) the system has complied with a comparable evaluation protocol used for system approval in other states. The comparable evaluation protocol shall include information on relevant conditions such as wastewater system design, soil types, climate, and hydrology and be reviewed by the Department; and

- (2) a proposed evaluation protocol to be overseen by a third-party evaluator is submitted to the Department for review. The evaluation protocol shall ensure that all information necessary to satisfy the criteria to achieve Innovative Approval, as specified in G.S. 130A-343(f) and Rule .1705 of this Section, is collected. The protocol shall include one of the following:
- (A) for a system that has been certified and listed by a nationally recognized certification body, as defined by G.S. 130A-343(a)(6) for a period that exceeds two consecutive years, a minimum of 50 complete third-party field verification data sets from a minimum of 15 sites in operation for a minimum of six months, including all constituents necessary to verify compliance with the applicable effluent standard. Two to five data sets may be from the same site if collected a minimum of three months apart, with no data excluded from the field sampling sites. The data may be collected from systems in-state or out-of-state. The data sets shall show compliance with TS-I, TS-II, or RCW effluent standards in accordance with Rule .1710 of this Subchapter, as applicable; or
 - (B) a minimum of 150 complete third-party field verification data sets from a minimum of 50 sites in operation for a minimum of six months, including all constituents necessary to verify compliance with the applicable effluent standard. Two to five data sets may be from the same site if collected a minimum of three months apart, with no data excluded from the field sampling sites. The data may be collected from systems in-state or out-of-state. The data sets shall demonstrate compliance with TS-I, TS-II, or RCW effluent standards in accordance with Rule .1710 of this Section, as applicable.
- (c) Manufacturers requesting Provisional Approval as both an advanced pretreatment and dispersal system shall meet the requirements for advanced pretreatment and dispersal as described in this Rule.

History Note: Authority G.S. 130A-335(e) and (f); 130A-343;
Eff. January 1, 2024.