

15A NCAC 18E .0303 LICENSED OR CERTIFIED PROFESSIONALS

(a) Any wastewater system that meets one or more of the following conditions shall be designed by a PE if required in G.S. 89C:

- (1) the system has a DDF greater than 3,000 gpd, as determined in Section .0400 of this Subchapter, except where the system is limited to an individual wastewater system serving an individual dwelling unit or multiple individual wastewater systems, each serving an individual dwelling unit;
- (2) the system requires advanced pretreatment or drip dispersal and is not a system approved under Sections .1500, .1600, or .1700 of this Subchapter;
- (3) pressure dispersal systems that require pumping more than 500 feet horizontally or more than 50 feet of net elevation head;
- (4) pressure dosed gravity distribution systems that require pumping more than 1,000 feet horizontally or more than 100 feet of net elevation head;
- (5) dosing systems or force mains that have one or more intermediate high points greater than five feet;
- (6) the system requires pumping downhill to a pressure dosed gravity or pressure dispersal field where the volume of the supply line that could drain to the dispersal field between doses exceeds 25 percent of the required dose volume;
- (7) pressure dispersal systems and pressure dosed gravity systems with a DDF greater than 600 gpd serving a single design unit;
- (8) pressure dispersal systems where there is more than 15 percent variation in line length. The 15 percent variation shall be measured by comparing the longest line length to the shortest line length in any dispersal field;
- (9) two or more septic tanks or advanced pretreatment units, each serving a separate design unit, and served by a common dosing tank;
- (10) a STEP system with a pressure sewer or other pressure sewer system receiving effluent from two or more pump tanks;
- (11) an adjusted DDF is proposed based on the use of low-flow fixtures or low-flow technologies in accordance with Rule .0403(e) of this Subchapter;
- (12) the system requires use of sewage pumps prior to the septic tank or other pretreatment system, except for systems governed by the North Carolina Plumbing Code or which consist of grinder pumps and associated pump basins that are approved and listed in accordance with standards adopted by NSF International;
- (13) an individual system is required to use more than one pump or siphon in a single pump tank. Examples include dual pumps as set forth in Rule .1101(b) of this Subchapter;
- (14) the system includes a collection sewer prior to the septic tank or other pretreatment system serving two or more design units, except for systems governed by the North Carolina Plumbing Code;
- (15) the wastewater system includes structures that have not been pre-engineered;
- (16) the proposed pump model is not listed by a third-party electrical testing and listing agency;
- (17) the system is designed for the collection, treatment, and dispersal of IPWW, except under the following circumstances:
 - (A) the Department has determined that the wastewater generated by the proposed facility has a pollutant strength that is lower than or equal to DSE and does not require specialized treatment or management. This determination shall be made based on a review of the wastewater generating process, wastewater characteristic data, and material safety data sheets, as compared to DSE; or
 - (B) the Department has approved a treatment system or process and management method proposed by the facility owner that generates effluent with a pollutant strength which is lower than or equal to DSE. This approval shall be based on a review of documentation provided in conjunction with prior project specific reviews or a PIA approval. This approval shall be based on data from other facilities, management practices, and other information provided by the owner;
- (18) the wastewater system is designed for RCW;
- (19) any wastewater system designed by a licensed professional that has been determined to be within the practice of engineering in accordance with G.S. 89C-3(6) by the North Carolina Board of Examiners for Engineers and Surveyors;

- (20) any wastewater system approved in accordance with Sections .1500, .1600, and .1700 of this Subchapter that requires in the RWTS or PIA Approval that the system be designed by a PE;
 - (21) any system or system component where the Rules of this Subchapter provide for an engineer to propose alternative materials, capacity determination, or performance requirements; and
 - (22) any other system so specified by the LHD, based on wastewater system complexity and LHD's experience with the proposed system type.
- (b) A PE, in accordance with G.S. 89C, may propose an alternative design for a facility projected to generate HSE in accordance with Rule .0401(h) of this Subchapter. The alternative design shall include supporting documentation showing that the proposed system design will meet DSE in Table III of Rule .0402(a) of this Subchapter. The alternative design shall be reviewed and approved by the Department unless the system has been approved in accordance with Section .1700 of this Subchapter.
- (c) Plans and specifications for the use of a groundwater lowering system to comply with the vertical separation to a SWC shall be prepared by a licensed professional if required in G.S. 89C, 89E, or 89F. Prior to the issuance of an IP or CA, the plans and specifications shall be reviewed and approved by the authorized agent if the plans and specifications meet the requirements of Rules .0504 and .0910 of this Subchapter and accepted design practices.
- (d) An installer shall construct, install, or repair wastewater systems as required by G.S. 90A, Article 5. The installer shall be responsible for the following:
- (1) certification at the required level according to the system design specifications as required by G.S. 90A, Article 5;
 - (2) notification to the LHD upon completion of the system installation and each stage requiring inspection as conditioned on a CA;
 - (3) participation in a preconstruction conference when specified in the CA or by the RWTS or PIA Approval;
 - (4) participation during the inspection of the wastewater system by the authorized agent;
 - (5) participation during the post-construction conference and all other requirements when the wastewater system is permitted in accordance with Rule .0207 of this Subchapter and G.S. 130A-336.1 or G.S. 130A-336.2; and
 - (6) final cover of the system after LHD approval. The wastewater system shall be in the same condition when covered as when approved.
- (e) The Management Entity, or its employees, shall hold a valid and current certificate or certifications as required for the system from the Water Pollution Control Systems Operators Certification Commission. Nothing in this Subchapter shall preclude any requirements for system Management Entities in accordance with G.S. 90A, Article 3.
- (f) Nothing in this Rule shall be construed as allowing any licensed professional to provide services for which he or she has neither the educational background, expertise, or license to perform, or is beyond his or her scope of work and the applicable statutes for their respective professions.
- (g) The PE, AOWE, or authorized designer shall provide a written statement to the owner specifying that construction is complete and in accordance with approved plans, specifications, and modifications. This statement shall be based on periodic observations of construction and a final inspection for design compliance. Record drawings shall be provided to the owner and LHD when any change has been made to the wastewater system installation from the approved plans.

History Note: Authority G.S. 89C; 89E; 89F; 90A; 130A-335;
Eff. January 1, 2024.