15A NCAC 18A .1971 ENGINEERED OPTION PERMIT

(a) An Engineered Option Permit (EOP) on-site wastewater system, as defined by G.S. 130A-334(1g), is available to an owner that provides an alternative process for the siting, design, construction, approval, and operation of the system without requiring the direct oversight or approval of the local health department. An owner choosing to use the EOP shall employ the services of a registered professional engineer licensed pursuant to G.S. 89C to prepare signed and sealed drawings, specifications, plans, and reports for the design, construction, operation, and maintenance of the wastewater system in accordance with G.S. 130A-336.1 and this Rule. Except as provided for in G.S. 130A-336.1 and in this Rule, an EOP system is subject to all applicable requirements of Article 11 of Chapter 130A of the General Statutes and all rules of this Section. Nothing in this Rule shall be construed as allowing any 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 as provided for pursuant to G.S. 130A-336.1 and the applicable statutes for their respective profession.

(b) SITE EVALUATION: Prior to the preparation and submittal of a Notice of Intent to Construct an EOP system, pursuant to G.S. 130A-336.1(b), the owner shall employ a licensed soil scientist pursuant to G.S. 89F to conduct an evaluation of soil conditions and site features in the proposed initial and repair drainfield areas for the EOP system, pursuant to G.S. 130A-335(a1) and G.S. 130A-336.1(e)(2). The owner shall employ a licensed soil scientist or a licensed geologist pursuant to G.S. 89E to evaluate geologic or hydro-geologic features as may be appropriate for the proposed site. This evaluation and documenting report shall be in accordance with the rules of this Section, and adhere to accepted standards of practice applicable to the type and size of the EOP system.

(c) NOTICE OF INTENT TO CONSTRUCT: The Notice of Intent to Construct an EOP System to be submitted by the owner or a registered professional engineer authorized as the legal representative of the owner to the local health department in the county where the facility is located shall be on the common form provided by the Department. It shall include all of the information specified in G.S. 130A-336.1(b) and the following:

- (1) Information required in Rules .1937(d) and .1937(e) of this Section for Improvement Permit and Construction Authorization applications;
- (2) Identification and location on the site plan of existing or proposed potable water supplies, geothermal heating and cooling wells, groundwater monitoring wells, and sampling wells for the facility. The registered professional engineer shall specifically reference any existing permit issued for a private drinking water supply, public water supply, or a wastewater system on both the subject and adjoining properties to provide documentation of compliance with setback requirements in Rule.1950 of this Section;
- (3) Documentation that the proposed wastewater system complies with all applicable federal, State, and local laws, regulations, rules and ordinances in accordance with G.S. 130A-336.1(e)(6);
- (4) Documentation shall be provided that the ownership and control requirements of Rule .1938(j) of this Section and the requirements for a multi-party agreement in Rule .1937(h) of this Section shall be met, as applicable; and
- (5) Proof of insurance for the registered professional engineer, licensed soil scientist, licensed geologist, and on-site wastewater contractor, as applicable.

(d) LOCAL HEALTH DEPARTMENT NOTICE OF INTENT COMPLETENESS REVIEW: The completeness review shall be performed by the authorized agent of the local health department pursuant to G.S. 130A-336.1(c). The local health department shall provide written confirmation of the completeness determination on the common form provided by the Department.

(e) DESIGN PLANS AND SPECIFICATIONS: The registered professional engineer design, plans, and specifications for the EOP System shall be in accordance with the rules of this Section and with adherence to accepted standards of practice applicable to the type and size of the EOP system. The registered professional engineer design shall incorporate findings and recommendations on soil and site conditions, limitations, and any site modifications specified by the licensed soil scientist or licensed geologist, as applicable. When the registered professional engineer chooses to employ pretreatment technologies not yet approved in this State, pursuant to G.S. 130A-336.1(e)(1), the engineering report shall specify the proposed technology, and the associated siting, installation, operation, maintenance, and monitoring requirements, including manufacturers endorsements associated with its proposed use.

(f) CONSTRUCTION OF WASTEWATER SYSTEM: No building permit for construction, location, or relocation shall be issued until after a decision of completeness of the Notice of Intent is made by the local health department pursuant to G.S. 130A-336.1(c). Construction of the wastewater system shall not commence until the system design, plans, and specifications have been provided to the on-site wastewater system contractor and the signed and dated statement by the contractor is provided to the owner, pursuant to G.S. 130A-336.1(e)(4)(b). The owner is

responsible for assuring no modifications or alterations to the site for the wastewater system or the system repair area are made as a result of any construction activities for the facility before or after construction of the wastewater system, unless specifically approved by the design professional engineer, licensed soil scientist, or licensed geologist, as applicable.

(g) POST CONSTRUCTION CONFERENCE: Attendance of the Post-Construction Conference required pursuant G.S. 130A-336.1(j) by the authorized agent of the local health department and by the Department (for systems designed for the collection, treatment, and disposal of industrial process wastewater or to treat greater than 3,000 gallons per day) is for the purpose of observing the location of the system and start-up conditions.

(h) AUTHORIZATION TO OPERATE: Prior to providing written confirmation for Authorization to Operate, the local health department shall receive the following:

- (1) Documentation that all reporting requirements identified in G.S. 130A-336.1(l) have been met;
- (2) Information set forth in Rule .1938(h) of this Section;
- (3) System start-up documentation, including applicable baseline operating parameters for all components;
- (4) Documentation by the owner or their legal representative that all necessary legal agreements, including easements, encroachments, multi-party agreements, and other documents have been properly prepared, executed and recorded in accordance with Rules .1937(h) and .1938(j) of this Section; and
- (5) Record drawings.

The local health department shall use the State-approved form for written confirmation.

(i) OPERATION: The owner of the wastewater system approved pursuant to the EOP is responsible for maintaining the wastewater system in accordance with the written operation and management program required in G.S. 130A-336.1(i)(1) and .1961 of this Section.

- (1) The operation and management program shall identify the system classification in accordance with Table V(a) of Rule .1961 of this Section.
- (2) The operator required pursuant to G.S. 130A-336.1(i)(2) shall inspect the system and submit reports in accordance with Rule .1961(f) of this Section and the written operations and management program provided by the design professional engineer.
- (3) The owner shall notify the local health department and the registered professional engineer who designed and certified the system permitted under this Rule of any site changes, changes in the operator or operator' duties, or any changes in ownership.

(j) SYSTEM MALFUNCTION: For systems permitted under this Rule, the owner shall contact the design professional engineer, project licensed soil scientist, licensed geologist, and contractor, as appropriate, for determination of the cause of system malfunction in accordance with Rule.1961(a) of this Section. For repair of a malfunctioning EOP system, this Rule shall be followed in conjunction with Rule .1961(l) of this Section. The operator shall notify the local health department within 48 hours of the system malfunction in accordance with Rule .1961(f) of this Section.

(k) LOCAL HEALTH DEPARTMENT RESPONSIBILITIES: The local health department is responsible for the following activities related to the EOP system:

- (1) Perform a completeness review of the Notice of Intent to Construct to verify inclusion of information required by this Rule and indicate written verification of completeness determination;
- (2) Attend the post-construction conference to observe location of system components and start-up conditions;
- (3) Provide written confirmation of Authorization to Operate upon receipt of complete information required by this Rule;
- (4) File all EOP documentation consistent with current permit filing procedures at the local health department;
- (5) Submit a copy of the final Notice of Intent common form and written confirmation of Authorization to Operate to the Department;
- (6) Review the performance and operation reports submitted in accordance with Table V(b) of Rule .1961 of this Section;
- (7) Perform on-site compliance inspections of the wastewater system in accordance with Table V(a) of Rule .1961 of this Section;
- (8) Investigate EOP system complaints;
- (9) Issue a notice of violation for systems determined to be malfunctioning in accordance with Rule.1961(a) of this Section. The LHD shall direct the owner to contact the design professional

engineer, project licensed soil scientist, licensed geologist, and contractor, as appropriate, for determination of the reason of the malfunction and development of a Notice of Intent to Construct for repairs; and

(10) Require an owner receiving a notice of violation to pump and haul sewage in accordance with Rule .1961(m) of this Section.

(1) CHANGE IN PROFESSIONAL ENGINEER: The Owner may contract with another registered professional engineer to complete an EOP project. An updated Notice of Intent shall be submitted to the local health department.

History Note: Authority G.S. 130A-335; 130A-336.1; Temporary Adoption Eff July 1, 2016.