

**§ 130A-336.1. Alternative process for wastewater system approvals.**

(a) **Engineered Option Permit Authorized.** - A professional engineer licensed under Chapter 89C of the General Statutes may, at the direction of the owner of a proposed wastewater system who wishes to utilize the engineered option permit, prepare signed and sealed drawings, specifications, plans, and reports for the design, construction, operation, and maintenance of the wastewater system in accordance with this section and rules adopted thereunder.

(b) **Notice of Intent to Construct.** - Prior to commencing or assisting in the construction, siting, or relocation of a wastewater system, the owner of a proposed wastewater system who wishes to utilize the engineered option permit, or a professional engineer authorized as the legal representative of the owner, shall submit to the local health department with jurisdiction over the location of the proposed wastewater system a notice of intent to construct a wastewater system utilizing the engineered permit option. The Department shall develop a common form for use as the notice of intent to construct that includes all of the following:

- (1) The owner's name, address, e-mail address, and telephone number.
- (2) The professional engineer's name, license number, address, e-mail address, and telephone number.
- (3) For the professional engineer, the licensed soil scientist, the licensed geologist, and any on-site wastewater contractors, proof of errors and omissions insurance coverage or other appropriate liability insurance.
- (4) A description of the facility the proposed site is to serve and any factors that would affect the wastewater load.
- (5) The type of proposed wastewater system and its location.
- (6) The design wastewater flow and characteristics.
- (7) Any proposed landscape, site, drainage, or soil modifications.
- (8) A soil evaluation that is conducted and signed and sealed by either a licensed soil scientist or licensed geologist.
- (9) A plat, as defined in G.S. 130A-334(7a).

(c) **Completeness Review for Notice of Intent to Construct.** - The local health department shall determine whether a notice of intent to construct, as required pursuant subsection (b) of this section, is complete within 15 business days after the local health department receives the notice of intent to construct. A determination of completeness means that the notice of intent to construct includes all of the required components. If the local health department determines that the notice of intent to construct is incomplete, the department shall notify the owner or the professional engineer of the components needed to complete the notice. The owner or professional engineer may submit additional information to the department to cure the deficiencies in the notice. The local health department shall make a final determination as to whether the notice of intent to construct is complete within 10 business days after the department receives the additional information from the owner or professional engineer. If the department fails to act within any time period set out in this subsection, the owner or professional engineer may treat the failure to act as a determination of completeness.

(d) **Submission of Notice of Intent to Construct to Department for Certain Systems.** - Prior to commencing in the construction, siting, or relocation of a wastewater system designed (i) for the collection, treatment, and disposal of industrial process wastewater or (ii) to treat greater than 3,000 gallons per day, the owner of a proposed wastewater system who wishes to utilize the engineered option permit, or a professional engineer authorized as the legal representative of the owner, shall provide to the Department a duplicate copy of the notice of intent to construct submitted to the local health department required pursuant to subsection (b) of this section.

(e) **Site Design, Construction, and Activities.**

- (1) The professional engineer designing the proposed wastewater system shall use recognized principles and practices of engineering and applicable rules of the Commission in the calculations and design of the wastewater system. The investigations and findings of the professional engineer shall include, at a minimum, the information required in rules adopted by the Commission pursuant to G.S. 130A-335(e). The professional engineer may, at the engineer's discretion, employ pretreatment technologies not yet approved in this State.
- (2) Notwithstanding G.S. 130A-335(a1), the owner of the proposed wastewater system shall employ either a licensed soil scientist or a geologist, licensed pursuant to Chapter 89E of the General Statutes and who has applicable professional experience, to evaluate soil conditions and site features.
- (3) The professional engineer designing the proposed wastewater system:
  - a. Shall be responsible for the engineer's scope of work, including all aspects of the design and any drawings, specifications, plans, or reports that are signed and sealed by the professional engineer.

- b. Shall prepare a signed and sealed statement of special inspections that includes the following items:
    - 1. The materials, systems, components, and work subject to special inspection or testing.
    - 2. The type and extent of each special inspection and each test.
    - 3. The frequency of each type of special inspection. For purposes of this sub-sub-division, frequency of special inspections shall be required on either a continuous or periodic basis. Continuous special inspections mean the full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is performed. Periodic special inspections mean the part-time or intermittent observation of work requiring a special inspection by an approved special inspector who is present in the area where the work is or has been performed and at the completion of the work.
  - c. May assist the owner of the proposed wastewater system with the selection of an on-site wastewater system contractor certified pursuant to Article 5 of Chapter 90A of the General Statutes.
- (4) An on-site wastewater system contractor, licensed pursuant to Article 5 of Chapter 90A of the General Statutes, who is employed by the owner of the wastewater system, shall:
- a. Be responsible for all aspects of the construction and installation of the wastewater system or components of the wastewater system, including adherence to the design, specifications, and any special inspections that are prepared, signed, and sealed by the professional engineer in accordance with all the applicable provisions of this section.
  - b. Submit a signed and dated statement of responsibility to the owner of the wastewater system, prior to the commencement of work, that contains acknowledgement and awareness of the requirements in the professional engineer's statement of special inspections.
- (5) Where the professional engineer's designs, plans, and specifications call for the installation of a conventional wastewater system, such designs, plans, and specifications shall allow for the installation of an accepted system in lieu of a conventional system in accordance with the accepted system approval.
- (6) In addition to the requirements of this section, the owner, the professional engineer designing the proposed wastewater system, and any on-site wastewater system contractors employed to construct or install the wastewater system shall comply with applicable federal, State, and local laws, regulations, rules, and ordinances.
- (f) **No Public Liability.** - The Department, the Department's authorized agents, or local health departments shall have no liability for wastewater systems designed, constructed, and installed pursuant to a engineered option permit.
- (g) **Inspections, Construction Observations, and Reports.** -
- (1) **Site visits.** - The local health department may, at any time, conduct a site visit of the wastewater system.
  - (2) **Construction observations.** - The professional engineer who designed the wastewater system shall make periodic visits to the site, at intervals appropriate to the stage of construction, to observe the progress and quality of the construction and to determine, generally, if the construction is proceeding in accordance with the engineer's plans and specifications.
  - (3) **Special inspections.** - The owner of the proposed wastewater system shall employ one or more approved special inspectors to conduct special inspections during the construction of the wastewater system. The professional engineer who designed the wastewater system, or the engineer's personnel, may function as an approved agency to conduct special inspections required by this subdivision. The professional engineer's personnel shall only operate as an approved agency for special inspections if the personnel can demonstrate competence and relevant experience or training. For purposes of this subdivision, experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of special inspection activities for projects of similar complexity and material qualities.
  - (4) **Inspection reports.** - Approved special inspectors shall maintain and furnish all inspection records to the professional engineer who designed the wastewater system. The records shall

indicate whether the work inspected was completed in conformance with the engineer's design and specifications. Any discrepancies identified between the completed work and the engineer's design shall be brought to the immediate attention of the on-site wastewater system contractor for correction. If discrepancies are not corrected, they shall be brought to the attention of the professional engineer who designed the wastewater system prior to completion of work. A final inspection report documenting the required special inspections and the correction of any identified discrepancies shall be provided to the professional engineer and the owner of the wastewater system for review at the post-construction conference required pursuant to subsection (j) of this section.

(h) **Local Authority.** - This section shall not relieve the owner or operator of a wastewater system from complying with any and all modifications or additions to rules adopted by a local health department to protect public health pursuant to G.S. 130A-335(c) that are required at the time the owner or operator submits the notice of intent to construct pursuant to G.S. 130A-336.1(b). The local health department shall notify the owner or operator of the wastewater system of any issues of compliance related to such modifications or additions.

(i) **Operations and Management.** -

- (1) The professional engineer designing the wastewater system shall establish a written operations and management program based on the size and complexity of the wastewater system and shall provide the program to the owner.
- (2) The owner shall enter into a contract with a water pollution control system operator certified pursuant to Part 1 of Article 3 of Chapter 90A of the General Statutes and who is selected from the list of certified operators maintained by the Division of Water Resources in the Department of Environment and Natural Resources for operation and maintenance of the wastewater system in accordance with rules adopted by the Commission.
- (3) The owner of the wastewater system shall be responsible for the continued adherence to the operations and management program established by the professional engineer pursuant to subdivision (1) of this subsection.

(j) **Post-Construction Conference.** - The professional engineer designing the wastewater system shall hold a post-construction conference with the owner of the wastewater system; the licensed soil scientist or licensed geologist who performed the soils evaluation for the wastewater system; the on-site wastewater system contractor, certified pursuant to Article 5 of Chapter 90A of the General Statutes, who installed the wastewater system; the certified operator of the wastewater system, if any; and representatives from the local health department and, as applicable, the Department. The post-construction conference shall include start-up of the wastewater system and any required verification of system design or system components.

(k) **Required Documentation.** -

- (1) At the completion of the post-construction conference conducted pursuant to subsection (j) of this section, the professional engineer who designed the wastewater system shall deliver to the owner signed, sealed, and dated copies of the engineer's report, which, for purposes of this subsection, shall include the following:
  - a. The evaluation of soil conditions and site features as prepared by either the licensed soil scientist or licensed geologist.
  - b. The drawings, specifications, plans, and reports of the wastewater system, including the statement of special inspections required pursuant to G.S. 130A-336.1(e)(3); the on-site wastewater system contractor's signed statement of responsibility required pursuant to G.S. 130A-336.1(e)(4); records of all special inspections; and the final inspection report documenting the correction of any identified discrepancies required pursuant to subsection (g) of this section.
  - c. The operator's management program manual that includes a copy of the contract with the certified water pollution control system operator required pursuant to subsection (i) of this section.
  - d. Any reports and findings related to the design and installation of the wastewater system.
- (2) Upon reviewing the professional engineer's report, the owner of the wastewater system shall sign and notarize the report as having been received.

(l) **Reporting Requirements.** -

- (1) The owner of the wastewater system shall submit the following to the local health department:
  - a. A copy of the professional engineer's report required pursuant to G.S. 130A-336.1(k)(1).
  - b. A copy of the operations and management program.

- c. The fee required pursuant to subsection (n) of this section.
  - d. A notarized letter that documents the owner's acceptance of the system from the professional engineer.
- (2) The owner of any wastewater system that is subject to subsection (d) of this section shall deliver to the Department copies of the engineer's report, as described G.S. 130A-336.1(k)(1).
- (m) Authorization to Operate. - Within 15 business days of receipt of the documents and fees required pursuant to G.S. 130A-336.1(l)(1), the local health department shall issue the owner a letter of confirmation that states the documents and information contained therein have been received and that the wastewater system may operate in accordance with rules adopted by the Commission.
  - (n) Fees. - The local health department may assess a fee for the engineered option permit of up to thirty percent (30%) of the cumulative total of the fees the department has established to obtain an improvement permit, an authorization to construct, and an operations permit for wastewater systems under its jurisdiction. The fee shall only be used by the department in support of its work pursuant to this section to conduct site inspections; support the department's staff participation at post-construction conference meetings; and archive the engineered permit with the county register of deeds or other recordation of the wastewater system as required.
  - (o) Change in System Ownership. - A wastewater system authorized pursuant to this section shall not be affected by change in ownership of the site for the wastewater system, provided both the site for the wastewater system and the facility the system serves are unchanged and remain under the ownership or control of the person owning the facility.
  - (p) Remedies. - Notwithstanding any other provision of this section or any other provision of law, owners; operators; professional engineers who utilize the engineered option permit, who prepare drawings, specifications, plans, and reports; licensed soil scientists; licensed geologists; and on-site wastewater system contractors employed for the construction or installation of the wastewater system shall be subject to the provisions and remedies provided to the Department and local health departments pursuant to Article 1 of this Chapter.
  - (q) Rule Making. - The Commission shall adopt rules to implement the provisions of this section.
  - (r) Reports. - The Department shall report to the Environmental Review Commission and the Joint Legislative Oversight Committee on Health and Human Services on or before January 1, 2017, and annually thereafter, on the implementation and effectiveness of this section. For the report due on or before January 1, 2017, the Department shall specifically study (i) whether the engineered option permit resulted in a reduction in the length of time improvement permits or authorizations to construct are pending; (ii) whether the engineered option permit resulted in increased system failures or other adverse impacts; (iii) if the engineered option permit resulted in new or increased environmental or public health impacts; (iv) an amount of errors and omissions insurance or other liability sufficient for covering professional engineers, licensed soil scientists, licensed geologists, and contractors who employ the engineered option permit; and (v) the fees charged by local health departments to administer the engineered option permit pursuant to subsection (n) of this section. The Department may include recommendations, including any legislative proposals, in its reports to the Commission and Committee. (2015-286, s. 4.14(c).)

### **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.

(l) 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.*