GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2021  

HOUSE BILL 916  
Committee Substitute Favorable 6/29/21  

Short Title: Wastewater Advanced Treatment Units.  

Sponsors:  

Referred to:  

May 11, 2021  

A BILL TO BE ENTITLED  
AN ACT TO ESTABLISH STANDARDS FOR ADVANCED TREATMENT UNITS FOR MUNICIPAL, COMMUNITY, OR PRIVATE WASTEWATER SYSTEMS.  
The General Assembly of North Carolina enacts:  

SECTION 1. G.S. 143-215 is amended by adding a new subsection to read:  
"(f) The Commission shall adopt rules establishing standards for discharge to surface waters and for spray irrigation of highly treated wastewater. For purposes of this subsection, "highly treated wastewater" means liquids discharged from a wastewater system, as defined in G.S. 130A-334, that is in compliance with all applicable regulatory requirements and that is designed and operated to meet the following standards:  
(1) With respect to biological oxygen demand, 10mg/L.  
(2) With respect to NH₃, 10mg/L.  
(3) With respect to total nitrogen, 10mg/L, or a minimum of sixty percent (60%) reduction from the influent total Kjeldahl nitrogen.  
(4) With respect to total phosphorus, 5mg/L, unless discharged into nutrient sensitive waters.  
(5) With respect to fecal coliforms, 10 colonies/100mL.  
(6) Capture and removal of residual sludge and biogases."  

SECTION 2.(a) There is appropriated from the General Fund to the Department of Environmental Quality the sum of twenty million dollars ($20,000,000) in nonrecurring funds for the 2021-2022 fiscal year to be allocated to the Wastewater Reserve for the Innovative Highly Treated Wastewater Pilot Program established by this section. The Department may use up to one hundred fifty thousand dollars ($150,000) of the funds appropriated by this subsection for administrative costs. Funds appropriated by this section that are not spent or encumbered by June 30, 2023, shall revert to the General Fund.  

SECTION 2.(b) With the funds appropriated by this section, the Department of Environmental Quality shall establish the Innovative Highly Treated Wastewater Pilot Program within the Division of Water Infrastructure. To implement the Program, the Department shall do the following:  
(1) Review and qualify wastewater systems meeting the standards set forth in G.S. 143-215(f), as enacted by Section 1 of this act, either as a single unit or as a combination of treatment devices. The Department shall require the manufacturer of the wastewater system within five days of the qualification under this subdivision to file with the Department a performance bond or other surety with a minimum term of five years to be executed in favor of the permittee in the amount sufficient to cover system replacement. Operation,
maintenance, abuse, or change in hydraulic flows or wastewater characteristics shall not be attached to the performance bond or surety.

(2) Identify local governments, sanitary districts, or public authorities considered distressed, as defined by G.S. 159G-20, or that include residential or commercial developments or subdivisions that are unable to be served by existing wastewater systems.

(3) Work with the entities identified under subdivision (2) of this subsection to select, permit, and install at least four highly treated wastewater systems.

SECTION 2.(c) This section becomes effective August 1, 2021.

SECTION 3.(a) For purposes of this section, "highly treated wastewater system" includes individual and multisite systems that meet residential or high strength treatment standards. The Commission for Public Health shall adopt rules to establish standards for highly treated wastewater systems under Article 11 of Chapter 130A of the General Statutes. These rules shall include, at a minimum, the following:

(1) Applications for provisional wastewater systems, as defined in G.S. 130A-343(a)(7), from manufacturers of wastewater systems with certification and listing for one or more years from a nationally recognized certification body, as defined in G.S. 130A-343(a)(6), shall be approved within 45 days of receipt of a complete application. The proposed wastewater system listed in the application shall be identical in design and features to the wastewater system certified and listed by the nationally recognized certification body.

(2) Applications for proposed wastewater systems without certification and listing from a nationally recognized certification body, as defined in G.S. 130A-343(a), shall be approved as provisional and shall allow the issuance of a maximum of 200 improvement permits and authorizations for wastewater system construction. A minimum of 50 sites shall be selected and tested, as approved by the Department of Health and Human Services (DHHS), and include a minimum of 200 data sets.

(3) Applications for Innovative status shall be approved (1) after two years of certification and listing by a nationally recognized certification body and one year of field data in this State or other states or countries approved by DHHS or (2) if not listed by a nationally recognized body, after completion of provisional status requirements in accordance with G.S. 130A-343(f). Innovative systems shall be identical to the system certified and verified by the nationally recognized certification body and identical to the systems installed in this State and approved by DHHS or other states or countries.

(4) All wastewater systems and dispersal products shall demonstrate structural integrity, including subjecting the trench system to axle load of 16,000 pounds when covered with 12 inches of compacted soil and 4,000 pounds when subjected to 6 inches of compacted soil without collapse, fracture, or nonrecovering compression. Wastewater treatment devices with identifying surface or above grade access for operation and maintenance shall be excluded from load testing when backfilled in accordance with the rules or the product approval.

(5) Systems approved by DHHS and holding certification and listing by a nationally recognized body, such as National Sanitation Foundation Standard 350, or approved by DHHS with field demonstration over a two-year period as meeting reclaimed water standards shall be approved for designs that eliminate repair area rules in Type I soils. Elimination of repair areas shall be considered for domestic strength wastewater only.
(6) All vertical and horizontal restrictions to property lines and limiting conditions shall be reduced proportionally to the graduated increases in wastewater quality.

**SECTION 3.(b)** The Commission for Public Health and the Department of Health and Human Services shall report quarterly on their implementation of this section beginning no later than May 1, 2022, and shall continue until rulemaking activities required by this section have been completed.

**SECTION 3.(c)** Subsection (a) of this section becomes effective January 1, 2022.

**SECTION 4.(a)** G.S. 130A-39 reads as rewritten:


(a) A local board of health shall have the responsibility to protect and promote the public health. The board shall have the authority to adopt rules necessary for that purpose.

(b) A local board of health may adopt a more stringent rule in an area regulated by the Commission for Public Health or the Environmental Management Commission where, in the opinion of the local board of health, a more stringent rule is required to protect the public health; otherwise, the rules of the Commission for Public Health or the rules of the Environmental Management Commission shall prevail over local board of health rules. However, a local board of health may not adopt a rule concerning the grading, operating, and permitting of food and lodging facilities as listed in Part 6 of Article 8 of this Chapter and as defined in G.S. 130A-247(1), and a local board of health may adopt rules concerning wastewater collection, treatment and disposal systems which are not designed to discharge effluent to the land surface or surface waters only in accordance with G.S. 130A-335(c) or a rule concerning wastewater systems, as listed in Article 11 of this Chapter and defined in G.S. 130A-334, more stringent than rules adopted by the Commission for Public Health.

..."

**SECTION 4.(b)** G.S. 130A-335 reads as rewritten:

"§ 130A-335. Wastewater collection, treatment and disposal; rules.

..."

(c) A wastewater system subject to approval under rules of the Commission shall be reviewed and approved under rules of a local board of health in the following circumstances:

(1) The local board of health, on its own motion, has requested the Department to review its proposed rules concerning wastewater systems; and

(2) The local board of health has adopted by reference the wastewater system rules adopted by the Commission, with any more stringent modifications or additions deemed necessary by the local board of health to protect the public health. Local boards of health shall use historical experience to establish modifications or additions to rules established by the Commission; and

(3) The Department has found that the rules, including modifications or additions to the Commission's rules, rules of the local board of health concerning wastewater collection, treatment and disposal systems are at least as stringent as rules adopted by the Commission and are sufficient and necessary to safeguard the public health.

..."

**SECTION 5.** Except as otherwise specified, this act is effective when it becomes law.