

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2021

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HOUSE BILL 916
PROPOSED COMMITTEE SUBSTITUTE H916-PCS40646-BRa-19

Short Title: Wastewater Advanced Treatment Units.

(Public)

Sponsors:

Referred to:

May 11, 2021

1 A BILL TO BE ENTITLED
2 AN ACT TO ESTABLISH STANDARDS FOR ADVANCED TREATMENT UNITS FOR
3 MUNICIPAL, COMMUNITY, OR PRIVATE WASTEWATER SYSTEMS.

4 The General Assembly of North Carolina enacts:

5 **SECTION 1.** G.S. 143-215 is amended by adding a new subsection to read:

6 "(f) The Commission shall adopt rules establishing standards for discharge to surface
7 waters and for spray irrigation of highly treated wastewater. For purposes of this subsection,
8 "highly treated wastewater" means liquids discharged from a wastewater system, as defined in
9 G.S. 130A-334, that is in compliance with all applicable regulatory requirements and that is
10 designed and operated to meet the following standards:

11 (1) With respect to biological oxygen demand, 10mg/L.

12 (2) With respect to NH₃, 10mg/L.

13 (3) With respect to total nitrogen, 10mg/L, or a minimum of sixty percent (60%)
14 reduction from the influent total Kjeldahl nitrogen.

15 (4) With respect to total phosphorus, 5mg/L, unless discharged into nutrient
16 sensitive waters.

17 (5) With respect to fecal coliforms, 10 colonies/100mL.

18 (6) Capture and removal of residual sludge and biogases."

19 **SECTION 2.(a)** There is appropriated from the General Fund to the Department of
20 Environmental Quality the sum of twenty million dollars (\$20,000,000) in nonrecurring funds
21 for the 2021-2022 fiscal year to be allocated to the Wastewater Reserve for the Innovative Highly
22 Treated Wastewater Pilot Program established by this section. The Department may use up to
23 one hundred fifty thousand dollars (\$150,000) of the funds appropriated by this subsection for
24 administrative costs. Funds appropriated by this section that are not spent or encumbered by June
25 30, 2023, shall revert to the General Fund.

26 **SECTION 2.(b)** With the funds appropriated by this section, the Department of
27 Environmental Quality shall establish the Innovative Highly Treated Wastewater Pilot Program
28 within the Division of Water Infrastructure. To implement the Program, the Department shall do
29 the following:

30 (1) Review and qualify wastewater systems meeting the standards set forth in
31 G.S. 143-215(f), as enacted by Section 1 of this act, either as a single unit or
32 as a combination of treatment devices. The Department shall require the
33 manufacturer of the wastewater system within five days of the qualification
34 under this subdivision to file with the Department a performance bond or other
35 surety with a minimum term of five years to be executed in favor of the
36 permittee in the amount sufficient to cover system replacement. Operation,



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1 maintenance, abuse, or change in hydraulic flows or wastewater
2 characteristics shall not be attached to the performance bond or surety.

- 3 (2) Identify local governments, sanitary districts, or public authorities considered
4 distressed, as defined by G.S. 159G-20, or that include residential or
5 commercial developments or subdivisions that are unable to be served by
6 existing wastewater systems.
7 (3) Work with the entities identified under subdivision (2) of this subsection to
8 select, permit, and install at least four highly treated wastewater systems.

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

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

- 15 (1) Applications for provisional wastewater systems, as defined in
16 G.S. 130A-343(a)(7), from manufacturers of wastewater systems with
17 certification and listing for one or more years from a nationally recognized
18 certification body, as defined in G.S. 130A-343(a)(6), shall be approved
19 within 45 days of receipt of a complete application. The proposed wastewater
20 system listed in the application shall be identical in design and features to the
21 wastewater system certified and listed by the nationally recognized
22 certification body.
23 (2) Applications for proposed wastewater systems without certification and
24 listing from a nationally recognized certification body, as defined in
25 G.S. 130A-343(a), shall be approved as provisional and shall allow the
26 issuance of a maximum of 200 improvement permits and authorizations for
27 wastewater system construction. A minimum of 50 sites shall be selected and
28 tested, as approved by the Department of Health and Human Services
29 (DHHS), and include a minimum of 200 data sets.
30 (3) Applications for Innovative status shall be approved (1) after two years of
31 certification and listing by a nationally recognized certification body and one
32 year of field data in this State or other states or countries approved by DHHS
33 or (2) if not listed by a nationally recognized body, after completion of
34 provisional status requirements in accordance with G.S. 130A-343(f).
35 Innovative systems shall be identical to the system certified and verified by
36 the nationally recognized certification body and identical to the systems
37 installed in this State and approved by DHHS or other states or countries.
38 (4) All wastewater systems and dispersal products shall demonstrate structural
39 integrity, including subjecting the trench system to axle load of 16,000 pounds
40 when covered with 12 inches of compacted soil and 4,000 pounds when
41 subjected to 6 inches of compacted soil without collapse, fracture, or
42 nonrecovering compression. Wastewater treatment devices with identifying
43 surface or above grade access for operation and maintenance shall be excluded
44 from load testing when backfilled in accordance with the rules or the product
45 approval.
46 (5) Systems approved by DHHS and holding certification and listing by a
47 nationally recognized body, such as National Sanitation Foundation Standard
48 350, or approved by DHHS with field demonstration over a two-year period
49 as meeting reclaimed water standards shall be approved for designs that
50 eliminate repair area rules in Type I soils. Elimination of repair areas shall be
51 considered for domestic strength wastewater only.

- 1 (6) All vertical and horizontal restrictions to property lines and limiting
2 conditions shall be reduced proportionally to the graduated increases in
3 wastewater quality.

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

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

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

10 **"§ 130A-39. Powers and duties of a local board of health.**

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

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

25"

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

27 **"§ 130A-335. Wastewater collection, treatment and disposal; rules.**

28 ...

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

- 31 (1) The local board of health, on its own motion, has requested the Department to
32 review its proposed rules concerning wastewater systems; and
33 (2) The local board of health has adopted by reference the wastewater system
34 rules adopted by the Commission, ~~with any more stringent modifications or~~
35 ~~additions deemed necessary by the local board of health to protect the public~~
36 ~~health. Local boards of health shall use historical experience to establish~~
37 ~~modifications or additions to rules established by the Commission; and~~
38 (3) The Department has found that the ~~rules, including modifications or additions~~
39 ~~to the Commission's rules, rules~~ of the local board of health concerning
40 wastewater collection, treatment and disposal systems are at least as stringent
41 as rules adopted by the Commission and are sufficient and necessary to
42 safeguard the public health.

43"

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