

ADOPTED



NORTH CAROLINA GENERAL ASSEMBLY
AMENDMENT
Senate Bill 802

AMENDMENT NO. A1
(to be filled in by
Principal Clerk)

S802-ARI-99 [v.1]

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Amends Title [NO]
Third Edition

Date _____, 2024

Representative Arp

1 moves to amend the bill on page 9, lines 18 and 19,
2 by inserting between those lines:

3
4
5 **"MODERNIZE WASTEWATER PERMITTING TO SUPPORT ENVIRONMENTALLY**
6 **SOUND ECONOMIC DEVELOPMENT**

7 **SECTION 5.1.(a)** The General Assembly finds all of the following:

- 8 (1) Residents of the State should be assured enjoyment of, and access to, proven
9 and reasonable methods of treating and disposing of wastewater that embrace
10 new technologies.
- 11 (2) As the State continues to grow and attract businesses, it is critical that
12 wastewater treatment and disposal facilities are provided for those businesses;
13 and adequate and affordable housing that is proximate to those businesses
14 must be available to assure the success of those businesses.
- 15 (3) Residents of the State should be assured treatment in an equitable manner to
16 their counterparts within other states comprising the United States
17 Environmental Protection Agency's (USEPA) Region 4 where permits are
18 authorized and issued for the discharge of treated wastewater from
19 municipalities, businesses, and developments to, for example, receiving
20 waters "in which natural flow is intermittent, or under certain circumstances
21 non-existent" (Alabama Admin. Code r. 335-6-10-.09).
- 22 (4) The discharge of treated wastewater to low flow or zero flow receiving waters
23 is of low risk to the environment, protects and improves water quality, and
24 provides the most prudent use of ratepayer funds.
- 25 (5) For all these reasons, it is necessary to establish methodologies and rules for
26 the discharge of treated domestic wastewaters with low risk following site
27 specific criteria to surface waters of the State, including wetlands, perennial
28 streams, and unnamed tributaries of named and classified streams and
29 intermittent streams or drainage courses where the 7Q10 flow or 30Q2 flow
30 of the receiving waters is estimated to be low flow or zero flow, as determined
31 by the United States Geological Survey (USGS).



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1 (6) This act preserves and maintains the authority of the Department of
2 Environmental Quality (Department) for appropriate review, including
3 opportunities for public comment, and requires the Department and the
4 Environmental Management Commission (Commission) to seek necessary
5 approvals from USEPA to adopt temporary and permanent rules to authorize
6 discharges of wastewater to such receiving waters.

7 **SECTION 5.1.(b)** G.S. 143-215.1(c8) is repealed.

8 **SECTION 5.1.(c)** Section 12.9 of S.L. 2023-134 is repealed.

9 **SECTION 5.1.(d)** No later than August 1, 2024, the Department of Environmental
10 Quality (Department) and the Environmental Management Commission (Commission) shall
11 develop and submit to the United States Environmental Protection Agency for USEPA's approval
12 draft rules that establish methodologies and permitting requirements for the discharge of treated
13 domestic wastewaters with low risk following site-specific criteria to surface waters of the State,
14 including wetlands, perennial streams, and unnamed tributaries of named and classified streams
15 and intermittent streams or drainage courses where the 7Q10 flow or 30Q2 flow of the receiving
16 water is estimated to be low flow or zero flow, or under certain conditions non-existent, as
17 determined by the United States Geological Survey (USGS). Within 20 days of the date USEPA
18 approves the draft rules submitted pursuant to this subsection, the Commission shall initiate the
19 process for temporary and permanent rules pursuant to Chapter 150B of the General Statutes.
20 The draft rules submitted to USEPA for approval shall include all of the following:

21 (1) Defined terms. –

22 a. "Treated domestic wastewater" shall mean sewage and wastewater
23 comprised of waste and wastewater from household, commercial or
24 light industrial operations (e.g., homes, restaurants, car washes,
25 laundromats servicing only domestic laundry) excluding any industrial
26 process wastewater regulated by USEPA under the Categorical
27 Pretreatment Standards.

28 b. "Low-risk discharges" means discharges of 2 million gallons per day
29 or less of treated domestic wastewater when the dissolved oxygen
30 content (DO) of the effluent is significantly higher (1.5 mg/l or greater)
31 than the DO of the receiving water during low flow periods and the
32 biological oxygen demand content (BOD) of the effluent is
33 significantly lower (1.5 mg/l or more) than the DO of the effluent.

34 c. "Sag" means a reduction in the existing DO in the background surface
35 receiving water to which treated wastewater will be discharged. Sag is
36 typically related to nutrient elements within treated wastewater, which
37 may promote the growth of oxygen-consuming micro-organisms,
38 increasing the BOD, which at elevated levels may reduce DO in the
39 background surface water body.

40 (2) Criteria for permitting. –

41 a. Applicants shall be required to demonstrate, through an analysis
42 comparing the limits of the NPDES permit to the characteristics of the
43 receiving water, that a proposed discharge meets criteria for a low-risk

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- 1 discharge as defined in this subsection. When a discharge is
2 determined to be low-risk, the applicant shall demonstrate using
3 simple modeling of the applicant's choosing, provided that the model
4 chosen is utilized elsewhere in USEPA Region 4, such as the
5 Streeter-Phelps model used in the State of Alabama, to show that the
6 Sag, if any, in the DO of the receiving water will not exceed 0.1mg/l.
7 b. Discharges to low flow or zero flow receiving waters shall be subject
8 to the following conditions:
9 1. The receiving waters fall within any of the following
10 categories:
11 I. The 7Q10 or 32Q2 flow statistics are estimated to be
12 zero by the USGS.
13 II. The drainage area of the discharge point is less than 5
14 square miles as specified by the USGS on-line tools or
15 other methodology that meets the standard of care for
16 such work.
17 III. The 7Q10 flow is estimated to be less than 1 cubic foot
18 per second by the USGS.
19 2. The proposed flow for any wastewater discharge shall be the
20 lesser of the following:
21 I. No more than one-tenth of the flow generated by the
22 one-year, 24-hour storm event given the drainage area
23 and calculated using the rational method. The rational
24 method shall be used to calculate the peak runoff for
25 the one-year, 24-hour precipitation event in cubic feet
26 per second. The peak runoff shall then be divided by 10
27 and multiplied by 646,272 to convert the result to
28 gallons per day of allowable discharge at the point
29 studied.
30 II. Two million gallons per day.
31 3. All discharges shall be directed to buffer systems that utilize
32 low-energy methodologies to function as a buffer between the
33 discharge and the receiving waters. Buffer systems shall
34 consist of one of the following:
35 I. High-rate infiltration basins that may include
36 engineered materials to achieve high rates of
37 infiltration, which engineered materials shall have an
38 ASTM gradation of a fine to coarse grain sand, and
39 angular to maintain structural integrity of the slope.
40 II. Constructed free-surface wetlands having a hydraulic
41 residence time of 14 days.

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- III. Other suitable technologies that provide a physical or hydraulic residence time buffer, or both, between the discharge and the receiving waters.
- 4. Discharge to areas that are 50 feet upland of the receiving waters or wetlands at a non-erosive velocity equal to or less than 2 feet per second through an appropriately designed energy dissipater, or other applicable designs, that meet the standard of practice for professional engineers for such devices.
- 5. Utilize more than one outfall to the receiving stream so that no one outfall exceeds 1 cubic foot per second based on the average daily flow of the discharge. Discharges from buffer systems shall be allowed to be placed at increments along a stream or receiving waters at no less than 50 linear feet.
- 6. No discharge shall be permitted to classified shellfish waters (SA), tidal waters (SC), water supply waters (WS), or outstanding resource waters (ORW). Discharges to unnamed tributaries of classified shellfish waters, however, shall be authorized in compliance with requirements of this section and only when a low-risk situation is present. Discharges to nutrient sensitive waters (NSW) may require additional modeling and allocation of flow and will be at the discretion of the Department.
- 7. The following effluent limits shall generally apply except where (i) the applicant and Department agree to more stringent limits or (ii) complex modeling conducted pursuant to sub-sub-subdivision 8. of this sub-subdivision demonstrates that Sag in the DO content of the receiving water of 0.1 mg/l or less will occur and water quality standards are protected:
 - I. Biological oxygen demand (BOD₅) shall not exceed 5.0 mg/l monthly average.
 - II. NH₃, 0.5 mg/l monthly average, 1.0 mg/l daily maximum.
 - III. Total nitrogen shall not exceed 4.0 mg/l monthly average.
 - IV. Total phosphorus, 1.0 mg/l monthly average, 2.0 mg/l daily maximum.
 - V. Fecal coliforms, 14 colonies/100ml or less.
 - VI. Dissolved oxygen, 7.0 mg/l or greater.
 - VII. Total suspended solids, 5.0 mg/l monthly average, 8mg/l daily maximum.
 - VIII. Nitrate, 1.0 mg/l monthly average, 2.0 mg/l daily maximum.

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- 8. If an applicant proposes less stringent effluent limits than those set forth in sub-sub-subdivision 7. of this sub-subdivision, the applicant shall conduct more complex modeling using any model accepted elsewhere in USEPA Region 4 that the applicant elects to use to confirm that a Sag in the DO content of the receiving water of 0.1 mg/l or less will occur and water quality standards are protected.
- 9. The Department shall not require an applicant to obtain mapping data from the USGS as part of an application. In lieu, an engineer of record licensed in the State of North Carolina may prepare required mapping utilizing either USGS maps or other maps approved by the Department.
- 10. Within 30 days of the filing of an application for a wastewater discharge subject to this section, the Department shall (i) determine whether or not the application is complete and notify the applicant accordingly and (ii) if the Department determines an application is incomplete, specify all such deficiencies in the notice to the applicant. The applicant may file an amended application or supplemental information to cure the deficiencies identified by the Department for the Department's review. If the Department fails to issue a notice as to whether or not the application is complete within the requisite 30-day period, the application shall be deemed complete. Within 180 days of the filing of a completed application, the Commission shall either grant or deny the permit. If the Commission fails to act in the requisite time frame, ten percent (10%) of the application fee shall be returned to the applicant for each working day beyond the 180-day period.

SECTION 5.1.(e) No later than September 1, 2024, the Department in conjunction with the North Carolina Collaboratory at the University of North Carolina at Chapel Hill (Collaboratory) shall convene a Wastewater General Permit Working Group (Working Group) consisting of Department and Collaboratory staff and a maximum of five consulting experts appointed by the Director of the Collaboratory in the fields of environmental regulation, wastewater regulation, water quality regulation, and wastewater treatment regulation, to develop the draft rules for the implementation of a Wastewater Treatment and Discharge General Permit process for the State. The Working Group shall report its findings to the Environmental Review Commission no later than March 15, 2025. Following consideration by the Environmental Review Commission, and after making any changes required by the Environmental Review Commission, the Department shall develop and submit proposed rules to USEPA for its approval. Within 20 days of the date USEPA approves the draft rules submitted pursuant to this subsection, the Commission shall initiate the process for temporary and permanent rules pursuant to Chapter 150B of the General Statutes.

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1 **SECTION 5.1.(f)** Beginning September 1, 2024, and quarterly thereafter until such
2 times as permanent rules as required by subsections (d) and (e) of this section have become
3 effective, the Department and the Environmental Management Commission shall report on their
4 activities to implement subsections (d) and (e) of this section to the Environmental Review
5 Commission, the Joint Legislative Oversight Committee on Agriculture and Natural and
6 Economic Resources, the Senate Appropriations Committee on Agriculture, Natural and
7 Economic Resources, and the House of Representatives Appropriations Committee on
8 Agriculture and Natural and Economic Resources of the General Assembly.

9 **SECTION 5.1.(g)** This section is effective when it becomes law."
10

SIGNED _____
Amendment Sponsor

SIGNED _____
Committee Chair if Senate Committee Amendment

ADOPTED _____ FAILED _____ TABLED _____

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and vote information, is available in the
House Principal Clerk's Office**